Los Angeles Unified School District

Roosevelt High School Comprehensive Modernization Project SCH # 2017101037

Volume II Appendices



Prepared by:

IMPACT SCIENCES
28 N. Marengo Ave
Pasadena, CA 91101

Prepared for:

Los Angeles Unified School District
Attn: Edward Paek, AICP
333 South Beaudry Avenue, 21st Floor
Los Angeles, CA 90017

February 2018

APPENDIX 1.0

Notice of Preparation (NOP), Initial Study, and Comments on the NOP

NOTICE OF PREPARATION OF A DRAFT ENVIRONMENTAL IMPACT REPORT AND NOTICE OF PUBLIC COMMENT PERIOD FOR A REMOVAL ACTION WORKPLAN

TO: Agencies, Organizations and Interested Parties

PROJECT TITLE: Roosevelt High School Comprehensive Modernization Project

SUBJECT: Notice of Preparation of a Draft Environmental Impact Report in Compliance with Title 14, Section 15082(a), 15103, and 15375 of the California Code of Regulations and Notice of Public Comment Period for Removal Action Workplan

NOTICE IS HEREBY GIVEN that the Los Angeles Unified School District (LAUSD) is the Lead Agency under the California Environmental Quality Act (CEQA) in the preparation of the Environmental Impact Report (EIR) for the project identified below. The Lead Agency has prepared this Notice of Preparation (NOP) for the EIR and Remedial Action Workplan (RAW) in order to provide the widest exposure and opportunity for input from public agencies, stakeholders, organizations, and individuals on the scope of the environmental analysis addressing the potential effects of the proposed project.

PROJECT LOCATION: The 22.7 acre Project site is located at 456 S. Mathews Street in the Boyle Heights community of the City of Los Angeles. The Project site is not on any list of sites enumerated under Section 65962.5 of the Government Code (Cortese List).

PROJECT DESCRIPTION: The proposed Project encompasses most of the Roosevelt High School (HS) campus and consists of the comprehensive modernization of the campus with new classrooms, a gymnasium, a lunch shelter, and an auditorium. Other improvements include campus-wide infrastructure, including domestic water, fire, irrigation, gas, sewer, low voltage (fire, telephone, data), electrical and storm drainage, Americans with Disabilities Act (ADA) compliance, landscape, hardscape, and exterior paint. The proposed Project is designed to address the most critical physical concerns of the building and grounds at the campus while upgrading, renovating, modernizing, and reconfiguring the campus to provide facilities that are safe, secure, and better aligned with the current instructional program.

Prior to construction of the new facilities, the District proposes to remove approximately 7,000 cubic yards of soil with elevated concentrations of arsenic and/or lead from the campus and dispose of it off-site in accordance with the conditions that are presented in the RAW.

POTENTIAL ENVIRONMENTAL EFFECTS: Pursuant to CEQA Guidelines Section 15060(d), and based on the environmental analysis in the Initial Study, the District has determined that an EIR is the appropriate level of environmental documentation for the Project. Environmental factors that will be analyzed in the EIR are: Air Quality, Cultural Resources, Hazards and Hazardous Materials, Noise, Pedestrian Safety, and Transportation and Traffic.

The RAW presents the findings of the environmental investigations performed for this Project and outlines the proposed process for the removal and off-site disposal of the impacted soil.

PUBLIC REVIEW PERIOD: LAUSD will make this NOP and the Initial Study (pursuant to California Code of Regulations, Title 14, Section 15082(b)) and RAW available for public review and comment from **October 18, 2017** and **November 16, 2017**.

RESPONSES AND COMMENTS: Please indicate a contact person for your agency or organization and send your comments to:

CEQA Questions and Comments
Los Angeles Unified School District
Office of Environmental Health and Safety
Attention: Mr. Edward Paek, CEQA Project Manager
333 South Beaudry Avenue, 21st Floor
Los Angeles, CA 90017
Email: CEQA-comments@lausd.net
Please include "Roosevelt Comp Mod" in the subject line

RAW Questions and Comments
Los Angeles Unified School District
Office of Environmental Health and Safety
Attention: Mr. Dane Robinson, Site Assessment Project Manager
333 South Beaudry Avenue, 21st Floor
Los Angeles, CA 90017
Email: dane.robinson@lausd.net
Phone: (213) 241-4122

SCOPING MEETING: LAUSD will hold a scoping meeting on **Wednesday, November 1, 2016** at **6:00 PM** in the cafeteria at Roosevelt High School, located at 456 S. Mathews Street in Los Angeles, California. All agencies, organizations, and interested parties are encouraged to attend.

DOCUMENT AVAILABILITY: The Initial Study and RAW are available for public review during regular business hours at the locations listed below.

- LAUSD Office of Environmental Health and Safety, 333 South Beaudry Avenue, 21st Los Angeles, CA 90017
- Roosevelt High School Library, 456 S. Mathews Street, Los Angeles, California 90033
- Benjamin Franklin Public Library, 2200 E 1st St, Los Angeles, CA 90033
- Office of Environmental Health and Safety Website:
  - CEQA Initial Study http://achieve.lausd.net/CEQA
  - RAW http://achieve.lausd.net/siteassessment

AVISO DE PREPARACIÓN DE UN REPORTE DE IMPACTO AL MEDIO AMBIENTE Y AVISO DEL PERIODO DE COMENTARIOS DEL PÚBLICO PARA EL PLAN DE ACCIÓN DE REMOCIÓN

PARA: Agencias, Organizaciones y Partidos Interesados

TÍTULO DEL PROYECTO: Proyecto de Modernización Integral de la Escuala Preparatoria de Roosevelt

TEMA: Aviso de Preparación para un Reporte de Impacto al Medio Ambiente en cumplimiento con el Título 14, Sección 15082(a), 15103 y 15375 del Código de Reglamentos de California y Aviso De Comentario Público Para el Plan de Acción de Remoción

SE DA AVISO POR LA PRESENTE que El Distrito Escolar Unificado de Los Ángeles (Distrito o LAUSD, por sus siglas en inglés) como entidad principal para el proyecto, bajo la Ley de Calidad Ambiental de California (CEQA, por sus siglas en inglés) en la preparación del Informe del Impacto Ambiental (EIR, por sus siglas en inglés) para el proyecto de Modernización Integral de la Escuala Preparatoria de Roosevelt. El Distrito ha preparado este Aviso de Preparación (NOP, por sus siglas en inglés) del Impacto del Ambiente y el Plan de Trabajo de Acción Correctiva (RAW, por sus siglas en inglés) a fin de proporcionar la mayor publicidad y oportunidad para las aportaciones de las agencias públicas, partidos interesados, organizaciones e individuos sobre el alcance de el análisis ambiental abordando los efectos potenciales del proyecto.

UBICACIÓN DEL PROYECTO: El sitio tiene un tamaño de 22.7 acres y se encuentra ubicado en 456 S. Mathews Street, en Boyle Heights. El sitio del proyecto no está en ninguna lista enumerados bajo la Sección 65962.5 del código de gobierno (es decir Lista de Cortese).

DESCRIPCIÓN DEL PROYECTO: El proyecto propuesto abarca la mayor parte de la propiedad de la Escuela Preparatoria Roosevelt y se realizarían mejoramientos extensos del sitio, incluyendo nuevas aulas, gimnasio, un patio/zona de almuerzo, y un auditorio. Otros mejoramientos incluyen la infraestructura del sitio, incluyendo: agua potable, irrigación, plomería, electricidad, gas natural, sistemas de bajo voltaje (alarma contra fuego, voz y datos) y drenaje, construcción de instalaciones adecuadas bajo la Ley de Americanos con Discapacidad (ADA, por sus siglas en ingles), ajardinados como áreas pavimentadas, y pintura para fachadas exteriores. El proyecto propuesto está diseñado para resolver las más críticas preocupaciones concernientes al estado físico del edificio y del terreno mientras se renueva, modernizan y configura el plantel para proporcionar instalaciones seguras, y conforme con el actual programa de instrucción.

Antes de la construcción de las nuevas instalaciones, el Distrito propone retirar aproximadamente 7,000 yardas cúbicas de suelo con elevadas concentraciones de arsénico y/o plomo del lugar y desecharlo fuera del sitio, en conformidad con las condiciones presentadas en el RAW.

EFECTOS AMBIENTALES POSIBLES: En base a ley CEQA Sección 15060(d), y en base en el análisis ambiental en el Estudio Inicia, el Distrito ha determinado que el EIR es el nivel apropiado de estudio ambiental para el proyecto. El enfoque del EIR será sobre los potenciales efectos significativos del proyecto relacionados con la Calidad del Aire, Recursos Culturales, Materiales Tóxicos y Peligrosos, Ruido, Seguridad de Peatones y Transporte/Trafico.

El plan RAW presenta los hallazgos de las investigaciones ambientales realizadas para este proyecto y describe el proceso propuesto para la remoción y eliminación fuera del sitio del suelo afectado.

PERIODO DE REVISIÓN PÚBLICA: El Distrito hará que este NOP y el Estudio Inicial (de conformidad con el Código de Regulaciones de California, Título 14, Sección 15082[b]) y RAW estén disponibles para revisión y comentarios públicos entre el **18 de octubre del 2017 al 16 de noviembre del 2017**.

RESPUESTAS Y COMENTARIOS: Por favor indique una persona de contacto para su agencia u organización y envie sus comentarios a:

Preguntas y Comentarios sobre CEQA
Los Angeles Unified School District
Office of Environmental Health and Safety
Atención: Mr. Edward Paek, CEQA Project Manager
333 South Beaudry Avenue, 21st Floor
Los Angeles, CA 90017
Email: CEQA-comments@lausd.net
Por favor incluya "Roosevelt Comp Mod" en el encabezado

Preguntas y Comentarios sobre el RAW
Los Angeles Unified School District
Office of Environmental Health and Safety
Atención: Mr. Dane Robinson, Site Assessment Project Manager
333 South Beaudry Avenue, 21st Floor
Los Angeles, CA 90017
Email: dane.robinson@lausd.net
Teléfono: (213) 241-4122

REUNIÓN INFORMATIVA: El Distrito llevará a cabo una reunión pública el **miércoles 1 de noviembre del 2017 a las 6:00 p.m.** en la Cafetería de Roosevelt High School, ubicada en 456 S. Mathews Street, Los Ángeles, California 90033.. Todas las agencias, organizaciones y partidos interesados están invitados a asistir.

DISPONIBILIDAD DE DOCUMENTOS: El Estudio Inicial y RAW está disponible para revisión en las siguientes ubicaciones:

- LAUSD Office of Environmental Health and Safety, 333 South Beaudry Avenue, 21st Los Angeles, CA 90017
- Roosevelt High School Library, 456 S. Mathews Street, Los Angeles, California 90033
- Benjamin Franklin Public Library, 2200 E 1st St, Los Angeles, CA 90033
- Office of Environmental Health and Safety Website:
  - CEQA Estudio Inicial http://achieve.lausd.net/CEQA
  - RAW http://achieve.lausd.net/siteassessment

Roosevelt High School Comprehensive Modernization Project
Initial Study

Lead Agency:

Los Angeles Unified School District (LAUSD)
333 South Beaudry Avenue
Los Angeles, California 90017

Prepared by:

Impact Sciences, Inc.
28 N. Marengo Ave.
Pasadena, California 91101

October 2017

CALIFORNIA ENVIRONMENTAL QUALITY ACT
INITIAL STUDY
CHECKLIST

LEAD AGENCY Los Angeles Unified School District (LAUSD)		**DATE** October 2017
LEAD AGENCY CONTACT Edward Paek, AICP CEQA Project Manager LAUSD Office of Environmental Health & Safety 333 S. Beaudry Avenue, 21st Floor Los Angeles, CA 90017	**PHONE NUMBER** (213) 241-4676	
SCHOOL SITE Roosevelt High School	**SCHOOL SITE ADDRESS** 456 South Mathews Street Los Angeles, CA 90033	
PROJECT TITLE Roosevelt High School Comprehensive Modernization Project	**LAUSD LOCAL DISTRICT** Central	**LAUSD COLIN ID** 10366803
EXISTING ZONING PF (Public Facilities)	**EXISTING LAND USE DESIGNATION** Boyle Heights Community Plan Area	☒ **REQUIRES STATE FUNDING**

PROJECT DESCRIPTION

The proposed Project consists of the modernization of Roosevelt Senior High School with new classrooms, a gymnasium, a lunch shelter, and an auditorium. The proposed Project is designed to address the most critical physical concerns of the buildings and grounds at the campus while upgrading, renovating, modernizing, and reconfiguring the campus to provide facilities that are safe, secure, and better aligned with the current instructional program.

SURROUNDING LAND USES AND SETTING

The land uses surrounding the Project site are primarily single and multi-family residential, with some institutional (e.g., school, hospital and church), commercial, and recreational uses. Immediately south of the site, across East 6th St. is Hollenbeck Middle School. Several small parks, recreation centers, and libraries are located in the surrounding area, including Hollenbeck Park 0.32 miles to the west, Boyle Heights Sports Center Facility 0.3 miles to the south, Evergreen Recreation Center approximately 0.25 miles to the northeast, and Benjamin Franklin Library 0.5 miles to the northwest.

OTHER PUBLIC AGENCY APPROVALS

Reviewing Agencies

- City of Los Angeles, Public Works Department. Permit for curb, gutter, and other offsite improvements, and approval of haul route
- City of Los Angeles Park Fire Department. Approval of plans for emergency access and emergency evacuation
- California Department of Toxic Substances Control (DTSC). Approval of Phase I Environmental Site Assessment (Phase I ESA); Preliminary Environmental Assessment Equivalent (PEA-E); and Removal Action Workplan (RAW)
- California Department of General Services, Division of State Architect (DSA). Plan review and construction oversight, including structural safety, fire and life safety, and access compliance
- California Department of Education, School Facilities Planning Division (CDE). If LAUSD is requesting modernization funds from the State Allocation Board (SAB) they must have the plans reviewed and approved by the CDE (Education Code Section 17070.50) prior to submitting a funding request. Approval of design for educational appropriateness
- California Department of Transportation. Transportation permit for oversized vehicles on State highways

- California Office of Historic Preservation (OHP). Review of historic building preservation and renovation plans
- State Water Resources Control Board (SWRCB). Review of Notice of Intent (NOI) to obtain permit coverage; issuance of general permit for discharges of stormwater associated with construction activity; review of Storm Water Pollution Prevention Plan (SWPPP)
- Los Angeles Regional Water Quality Control Board (LARWQCB). Issue National Pollution Discharge Elimination System (NPDES) permit; Clean Water Act Section 401 Water Quality Certification

HAVE CALIFORNIA NATIVE AMERICAN TRIBES TRADITIONALLY AND CULTURALLY AFFILIATED WITH THE PROJECT AREA REQUESTED CONSULTATION PURSUANT TO PUBLIC RESOURCES CODE SECTION 21080.3.1?

No Native American Tribes have requested notification or consultation through the PRC Section 21080.3.1 process.

Note: Conducting consultation early in the CEQA process allows tribal governments, lead agencies, and project proponents to discuss the level of environmental review, identify and address potential adverse impacts to tribal cultural resources, and reduce the potential for delay and conflict in the environmental review process (see PRC Section 21083.3.2). Information may also be available from the California Native American Heritage Commission's Sacred Lands File per PRC Section 5097.94 and the California Historical Resources Information System administered by the California Office of Historic Preservation. Please also note that PRC Section 21082.3(c) contains provisions specific to confidentiality.[1]

Project Overview

The Los Angeles Unified School District (LAUSD or District) is proposing a comprehensive modernization of Theodore Roosevelt Senior High School (Roosevelt HS, Roosevelt High), located at 456 South Mathews Street, Los Angeles, CA 90033 (Project or proposed Project). The proposed Project is designed to address the most critical physical concerns of the buildings and grounds at the campus while upgrading, renovating, modernizing, and reconfiguring the campus to provide facilities that are safe, secure, and better aligned with the current instructional program.[2] **Figure 4, Conceptual Site Plan**, shows the footprint and layout of the proposed Project. A detailed description of the proposed Project's components and design is provided below. The proposed Project is required to undergo an environmental review pursuant to the California Environmental Quality Act (CEQA). This Initial Study provides a preliminary evaluation of the potential environmental consequences associated with the Project.

1 Final text for tribal cultural resources update to Appendix G: Environmental Checklist Form. 2016, September 29. The AB 52 regulations adopted by the California Natural Resources Agency were approved by the Office of Administrative Law, and will appear in the California Code of Regulations. Copies of the rulemaking materials can be found at: http://resources.ca.gov/ceqa/.

2 LAUSD Board of Education Report. December 8, 2015. Report Number 182-15/16. Subject: Amendment to the Facilities Services Division Strategic Execution Plan to Approve Project Definitions for Six Comprehensive Modernization Projects and Cancel Two Critical School Repair and Safety Projects.

Existing Facilities

Roosevelt HS campus currently consists of 23 permanent buildings (including the gazebo, arcade, and bleachers) and 23 portable buildings, some of which serve a part of the Boyle Heights Continuation High School, the Roosevelt Adult School, and the Roosevelt Infant/Early Education Center. As of 2010, portable buildings contained 31 classrooms and the permanent buildings held 143 classrooms (both standard classrooms and small classrooms). There are also 8,495 square feet of sheltered lunch area, 7.1 acres of playground, and 268 parking spaces on the Project site.[3]

Table 1, Summary of Existing Facilities and **Figure 1, Existing Campus Site Plan**, show existing campus facilities.

Table 1
Summary of Existing Facilities

Building ID[a]	Building Number	Building Name	Classrooms[b]	Building Square Footage	Building Type	Year Built
21585	1	Auditorium & Classroom Bldg.	48	108,270	permanent	1922
15158	2	Cafeteria Bldg.	--	12,586	permanent	1977
24018	3	Classroom Bldg.	8	8,896	permanent	1977
21641	4	Music Bldg.	2	3,630	permanent	1977
23689	5	Administration & Classroom Bldg.	19	57,709	permanent	1972
24215	6	Industrial Arts Bldg.	7	25,546	permanent	1968
17199	7	Classroom Bldg.	17	26,097	permanent	1937
21890	8	Instrumental Music Bldg.	1	1,800	permanent	1959
17742	9	Garage Bldg.	--	889	permanent	1972
22718	10	Flammable Storage Bldg.	--	60	permanent	1953
25799	11	Field Sanitary Bldg.	--	562	permanent	1958
25770	12	Equipment Field Storage	--	528	permanent	1941
18415	13	Gazebo	--	466	permanent	1977
NIA	14	Home Bleachers – West (new)	--	5,600	permanent	2008
NIA	15	Visitor Bleachers – East (new)	--	NIA	permanent	2008
20549	16	Field Light Controls	--	72	permanent	1949
23829	17	Classroom Bldg.	4	3,940	permanent	1964
21628	18	Class room Bldg.	4	3,940	permanent	1964
20906	19	Physical Education Bldg.	--	38,799	permanent	1968
23892	20	Utility Bldg.	--	2,537	permanent	1968
15815	21	Auto Service Bldg.	--	900	permanent	1975
36022	22	Arcade	--	36	permanent	1977
20796	23	Library & Classroom Bldg.	11	35,120	permanent	1990

3 Johnson Favaro, 2010.

Building ID[a]	Building Number	Building Name	Classrooms[b]	Building Square Footage	Building Type	Year Built
20955	24	Two/Three Unit Relocatable	2	1,920	portable	1971
20958	25	Two/Three Unit Relocatable	2	1,920	portable	1971
22262	26	Two/Three Unit Relocatable	2	1,792	portable	1959
21332	27	Two/Three Unit Relocatable	2	1,824	portable	1950
21330	28	Two/Three Unit Relocatable	2	1,824	portable	1954
21319	29	Two/Three Unit Relocatable	2	1,792	portable	1960
21691	30	Two/Three Unit Relocatable	2	1,792	portable	1966
21098	31	Two/Three Unit Relocatable	3	2,688	portable	1961
20171	32	Two/Three Unit Relocatable	1	864	portable	1950
21634	33	Sanitary Relocatable Bldg.	--	320	portable	1975
21914	34	Two/Three Unit Relocatable	2	1,728	portable	1950
21629	35	Single Unit Relocatable	2	896	portable	1966
20329	36	Single Unit Relocatable	1	1,728	portable	1950
21251	37	Single Unit Relocatable	2	896	portable	1966
21373	38	Single Unit Relocatable	1	896	portable	1966
22228	39	Single Unit Relocatable	1	896	portable	1966
21682	40	Single Unit Relocatable	1	896	portable	1967
18330	41	Single Unit Relocatable	--	1,456	portable	1972
23828	42	Two/Three Unit Relocatable	1	1,792	portable	1967
34750	43	2 Classroom Relo-DOH/Parent Center	2	1,440	portable	NIA
		Approximate campus building space		**367,343**		

a As listed in section 5.4 Building Condition Analysis (FCI Report) of the Roosevelt High School Comprehensive Modernization Project document, dated January 19, 2016.

b As listed in section 2.0 Existing Site Survey and Investigation of the Roosevelt High School Comprehensive Modernization Project document, dated January 19, 2016.

NIA – no information available

Roosevelt HS opened to students in 1923 with one main building—the auditorium/classroom building (Building 1) — fronting Fickett Street.[4] This building, plus three others: Industrial Arts (Building 6), auto service shed (Building 21), and the gymnasium (Building 19) are on the Assembly Bill (AB 300) (Corbett) Seismic Safety Inventory of California Public Schools, Department of General Services Building List. The AB 300 list identifies those school buildings that are of concrete tilt-up construction and those with non-wood frame walls that do not meet the minimum requirements of the 1976 Uniform Building Code (UBC). AB 300 identified 269 of the LAUSD's nearly 13,000 buildings for seismic evaluation. In 2006, upon further analysis by LAUSD staff, including site visits and field investigations, a total of 667 buildings were identified for seismic evaluation based upon AB 300 criteria and LAUSD's higher standards.[5] Since that time, seismic evaluations have been performed on school buildings identified to be

4 ASM Affiliates, "Draft Supplemental Historic Resource Evaluation Report for Roosevelt Senior High School, Los Angeles, Los Angeles County, California", (June 20, 2017).

5 LAUSD. AB-300 Criteria Building List. Web. <http://www.laschools.org/new-site/ab300/LAUSD-AB300-CRITERIA-BUILDING-LIST.pdf>

the most seismically vulnerable, and projects have been developed to address the buildings determined to be in the greatest need of structural upgrades.[6]

Currently, the campus has capacity to serve 2,755 students, in 9th through 12th grades. Roosevelt HS is a member of the Partnership for Los Angeles Schools (PLAS), which is a non-profit "in-district public school transformation organization"[7] that manages a portfolio of some of LAUSD's historically underserved public schools located in Boyle Heights, Watts, and South Los Angeles. In addition to the traditional curriculum, the campus houses the Math, Science and Technology Magnet Academy and the Science, Technology, Engineering and Math (STEM) Academy of Boyle Heights.

Project Location and Surrounding Uses

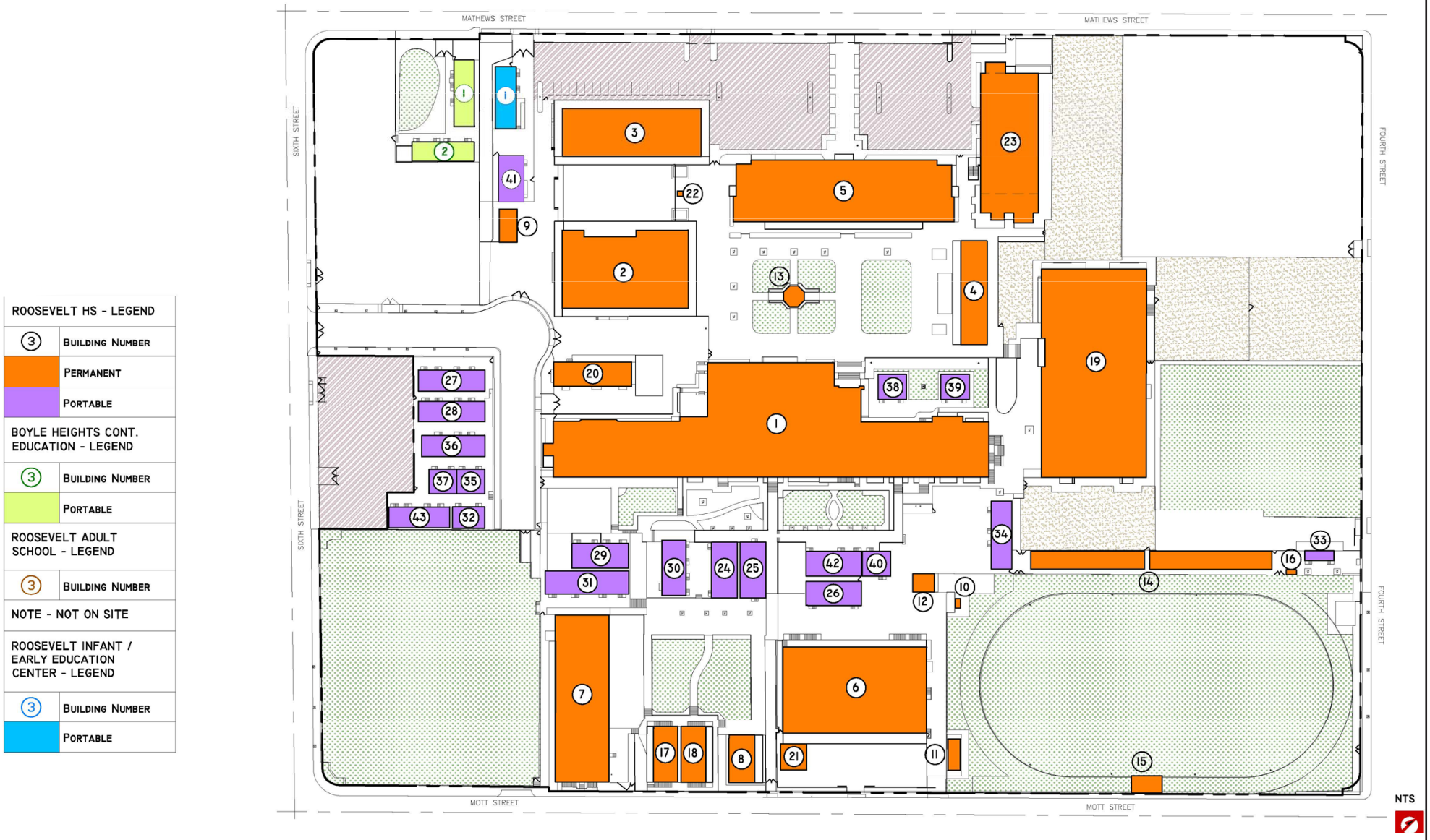
The Project site is located at 456 South Mathews Street in the Boyle Heights Community Plan Area (CPA) of the City of Los Angeles. The Project site is 22.7 acres and bounded by East 4th Street to the north, South Mathews Street to the west, South Mott Street to the east, and East 6th St. to the south (**Figure 2, Regional Location).** To the southwest of the Project site lies the intersection of I-5, I-10, U.S. Highway 101, and State Route 60. Regional access to the Project site is provided by any of these roads from the junction, as well as from I-10 and I-5 from the west, 101 from the north, and State Route 60 from the south. Local access is provided via East 4th Street along the northern boundary of the site and S. Soto Street to the northwest.

The land uses surrounding the Project site are primarily single and multi-family residential, with some institutional (e.g., school, hospital and church), commercial, and recreational uses. Immediately south of the site, across East 6th St. is Hollenbeck Middle School. Approximately 0.1 miles west of the Project site is Promise Hospital of East L.A. and 0.4 miles to the east is the Our Lady of Talpa School and the affiliated church. Approximately 0.3 miles northeast of the Project site is the Evergreen Recreation Center and a grocery store (Food 4 Less). Hollenbeck Park is approximately 0.32 miles to the west. Other commercial facilities in the vicinity include a bank, a beauty supply store, and a fast food restaurant (Carl's Jr). At the north end of the Project site, 0.1 miles across South Mathews Street, is a small market (La Princesa Tortilleria).

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6 LAUSD. Seismic Safety of School Buildings. Web. <http://www.laschools.org/new-site/ab300/?keyword=roosevelt&destination=ab300>

7 Partnership for Los Angeles Schools (PLAS). Web. <https://partnershipla.org/>.



SOURCE: LAUSD, 2017

FIGURE 1

Existing Campus Site Plan

IMPACT SCIENCES

0695.016•10/17

Campus History

Roosevelt HS was constructed in 1922 and began operation a year later in 1923. The school was developed to help curb over-crowding at Los Angeles public schools. The campus quickly expanded, adding shop classrooms, a cafeteria, a gymnasium and tennis courts by 1925. By 1926, the growth of Roosevelt HS necessitated the demolition of all remaining residential structures on the property, which were replaced with a playground, an athletic field, and a new classroom building. The campus was retrofitted after the Long Beach Earthquake in 1933 and in the 1960's the school expanded to incorporate the entire city block.[8]

In March 1968, Roosevelt HS, along with four other LAUSD high schools (Lincoln, Garfield, Belmont, and Wilson), was the site of mass student walkouts, also known as "Blowouts". The Blowouts were associated with community activism under the growing Chicano Civil Rights Movement, also known as "El Movimiento" or "The Movement."[9]

In 1970, Roosevelt HS was subject to arson and small bombing events by the Chicano Liberation Front on three separate occasions. Although no one was injured, damage to two main buildings required repairs. In the following years, new buildings were constructed for early-childhood education, music, general classrooms, and a cafeteria. The school would continue to be developed with the addition of contemporary buildings, athletic fields, and an outdoor swimming pool.[10]

Project Need

The proposed Project has been developed under the LAUSD's School Upgrade Program (SUP) to improve student health, safety, and education through the modernization of school facilities. Roosevelt HS was identified as one of 11 schools in the District most in need of an upgrade due to the physical condition of the facilities. Based on an assessment of the following conditions, the 11 proposed school sites were identified as having a multitude of critical physical conditions

8 Environmental Science Associates (ESA). 2016. *Landscape and Cultural Analysis for Theodore Roosevelt Senior High School*. October.

9 ASM Affiliates, *Draft Supplemental Historic Resource Evaluation Report for Roosevelt Senior High School, Los Angeles, Los Angeles County, California, June 20, 2017.*

10 ESA, 2016.

that may pose a health and safety risk or negatively impact a school's ability to deliver the instructional program and/or operate:[11]

- The physical condition of a school's buildings and grounds/outdoor areas identified by the 10-year Facilities Condition Index (FCI), a comparative indicator of the relative condition of a school's facilities in relation to the current replacement value. Where applicable, the FCI score is adjusted to reflect projects underway and the improved conditions that will be provided.

- The seismic risk factor identified using the Federal Emergency Management Agency's (FEMA) Hazus-MH model for determining the probability of failure based on the predicted earthquake magnitude generated by specific faults, year of construction, type of construction, number of stories, and code and construction quality at the time of construction.

- Size of food service facility, multi-purpose room/auditorium, and library determined by an assessment of the difference between the size of the core facility and the design standard for a new facility.

- Size of play space determined by an assessment of the difference between the size of a school's play area and the size recommended under the Rodriguez Consent Decree.

- Percentage of classrooms in portable buildings calculated based on the number of classrooms in portable buildings versus the number of classrooms in permanent buildings.

- Adequacy of controlled public access point based on an assessment of whether a campus has a secured single point of entry, an intercom/camera system that controls visitor access to the school site, or neither.

- Site density determined by an analysis of the amount of square footage per student at a school site.

On December 10, 2013, the District refined the SUP to reflect the intent and objectives of Measure Q as well as the updated needs of District school facilities and educational goals.[12]

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11 Los Angeles Unified School District (LAUSD). 2015a. *Board of Education Report 373-14/15* . March.

Between July 2013 and November 2015, the SUP Program Environmental Impact Report (Program EIR) was analyzed under CEQA criteria.[13] On November 10, 2015, the BOE certified the Program EIR.[14]

In December 2010, Johnson Favaro performed a site evaluation of Roosevelt HS to serve as a pre-planning survey for impending developments. The study found much of the campus to be in some sort of disrepair, from exposed piping in the Auditorium and Classroom building to the football field's failure to meet District standards. Findings included bungalows that are not Division of State Architect (DSA)-approved and noncompliance with American with Disabilities (ADA) legislation. Many of the classrooms on the campus do not meet current California Department of Education (CDE) standards (educational specifications for classroom size, layout, amenities, etc.) and the auditorium does not meet current District standards. School administrators identified inadequate classroom facilities and safety and supervision issues campus-wide.[15]

On March 10, 2015, the BOE approved pre-design and due diligence activities necessary to define the proposed Project.[16] On December 8, 2015, the BOE approved the project definition for the Roosevelt HS Comprehensive Modernization Project, along with five other schools. The proposed Project is designed to address the most critical physical concerns of the building and grounds at the campus while upgrading, renovating, modernizing, and reconfiguring the campus to provide facilities that are safe, secure, and better aligned with the current instructional program.[17] Assessments of the school facilities, educational programming, and infrastructure were performed by industry professionals, as well as seismic and historic evaluations. The findings, coupled with input from community members, school users and stakeholders, called for improvements with an anticipated cost of over $100 million. To

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12 LAUSD Board of Education Report. December 10, 2013. Report Number 143 – 13/14. Subject: School Upgrade Program.

13 LAUSD OEHS. "School Upgrade Program Final Environmental Impact Report." http://achieve.lausd.net/ceqa. Adopted by the Board of Education on November 10, 2015.

14 LAUSD Regular Meeting Stamped Order Of Business. 333 South Beaudry Avenue, Board Room, 1 p.m., Tuesday, November 10, 2015 (Board of Education Report No. 159 – 15/16).

15 Johnson Favaro, 2010.

16 LAUSD Board of Education Report. March 10, 2015. Report Number 373 – 14/15. Subject: Identification of 11 School Sites for the Development of Comprehensive Modernization Projects.

17 LAUSD Board of Education Report. December 8, 2015. Report Number 182-15/16. Subject: Amendment to the Facilities Services Division Strategic Execution Plan to Approve Project Definitions for Six Comprehensive Modernization Projects and Cancel Two Critical School Repair and Safety Projects.

maximize the cost efficiency, the proposed Project suggests the demolition and rebuilding of certain campus buildings as outlined in the Project Description.[18]

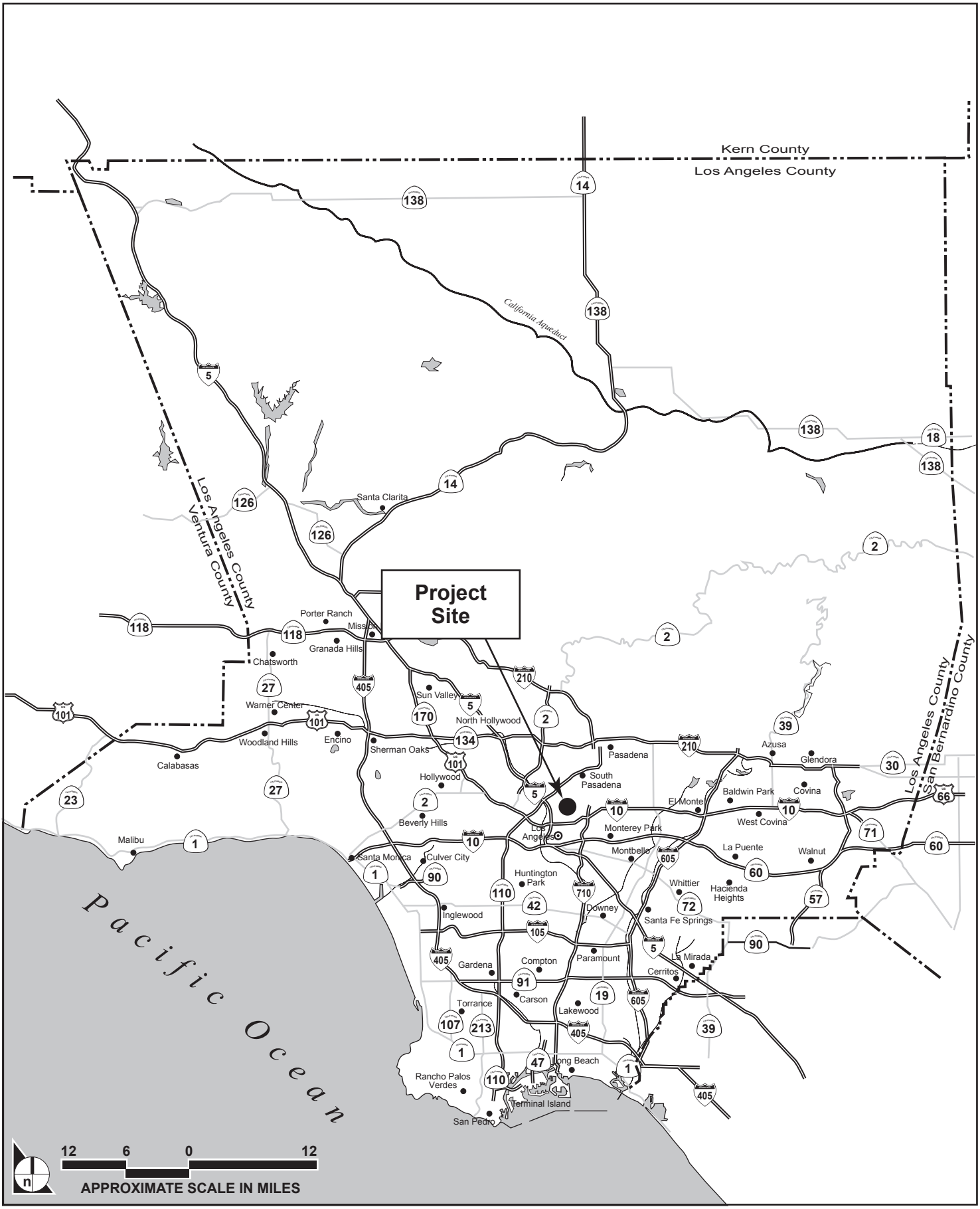
Project Description

The proposed Project encompasses most of the 22.7-acre Roosevelt HS campus and consists of the comprehensive modernization of the campus. The proposed Project would modernize Roosevelt HS to facilitate a safe and secure campus that better aligns with the current instructional program and meets current DSA educational specifications. When completed, the proposed Project will provide the capacity for 2,600 students in 111 classrooms, which is a reduction of 21 classrooms from the current count of 132 classrooms.

Portions of the campus that will not be affected by the Project include the administrative, classroom, cafeteria, and library buildings located in the northern portion of the campus along Mathews Street, as well as the facilities for the Boyle Heights Continuation High School and Roosevelt Infant/Early Education Center. Recreation areas such as the pool, football field, and baseball/softball fields are also outside the scope of the proposed Project.

The proposed Project consists of the demolition and removal of existing permanent and relocatable buildings, construction of new buildings, and landscape and access improvements throughout the campus. Specifically, the proposed Project would include the following components, as discussed in detail below and shown in **Figure 4, Conceptual Site Plan**.

18 LAUSD 2015a.



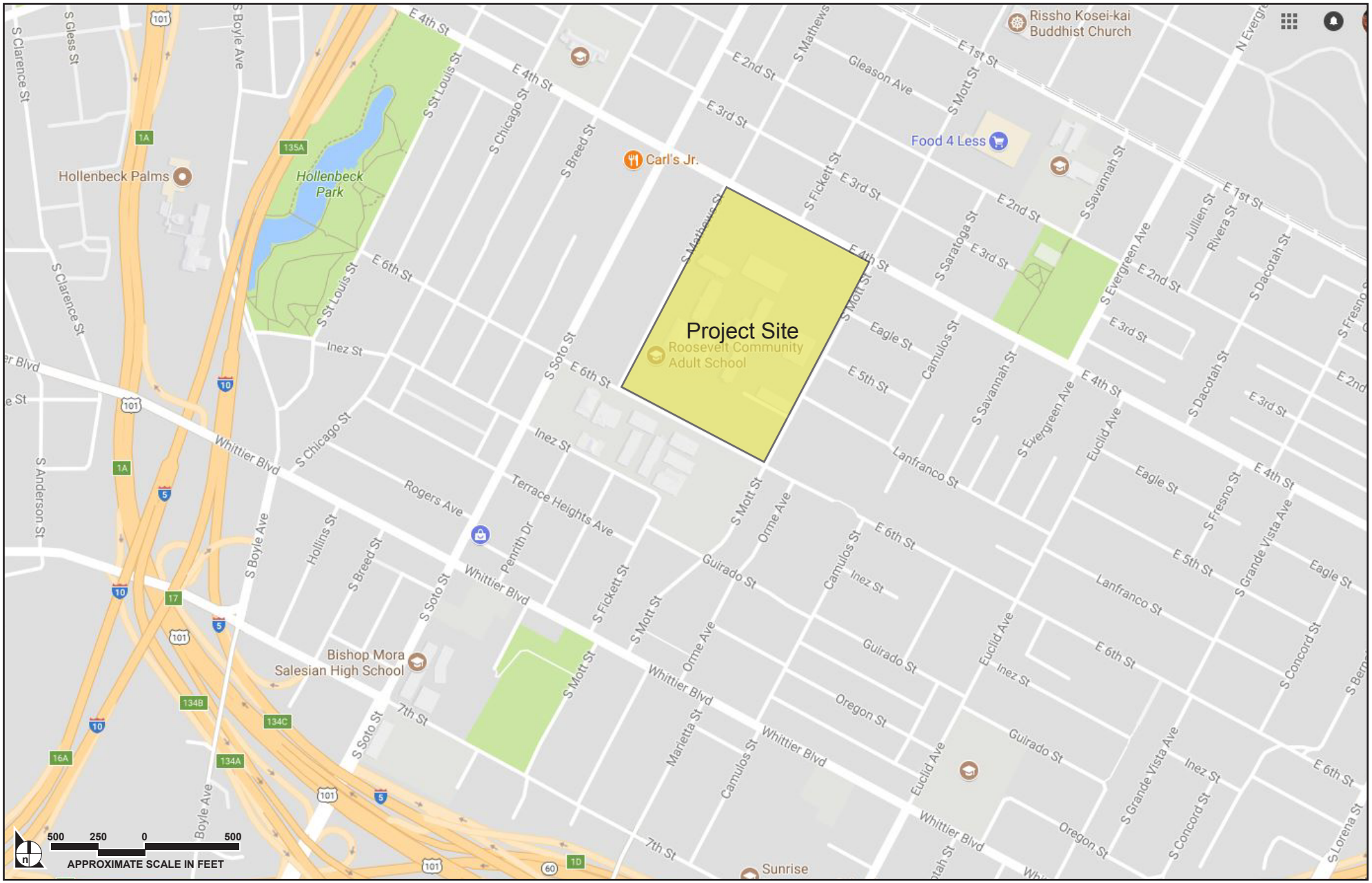
SOURCE: Impact Sciences, Inc., 2017

FIGURE **2**

IMPACT SCIENCES

Regional Location

0695.016•07/17



SOURCE: Google Maps, 2017

FIGURE **3**

IMPACT SCIENCES

Project Vicinity

0695.016•06/17



SOURCE: LAUSD, 2017

FIGURE **4**

IMPACT SCIENCES

Conceptual Site Plan

Demolition and Removal

The proposed Project would include the demolition of temporary buildings that would be replaced by permanent structures and permanent buildings that have been determined to be structurally compromised beyond repair and/or aging; deteriorating; and which do not meet current educational requirements::

- Auditorium/classroom (Building #1)
- Music building (Building #4)
- Industrial arts building (Building #6)
- Two-story classroom building (Building #7)
- Instrumental music building (Building #8)
- Classroom building (Building #17)
- Classroom building (Building #18)
- Gymnasium building (Building #19)
- Utility building (Building #20)
- Auto Shop building (Building #21)
- Lunch shelter/arcade (Building #22)
- Approximately thirty-one classrooms in 17 portable buildings

New Construction

The proposed Project would include the construction of the following new permanent structures to replace those that would be demolished or removed:

- Classroom/Administration Building North: This new 3-story approximately 70,000 square foot (sf) building would have general and specialty classrooms and administrative spaces and would act as the primary main entrance for campus visitors. This building would generally be located on the site of the existing tennis courts and gymnasium (Building #19).
- Auditorium and Performing Arts Building: This new 1-story approximately 35,000 sf building would have the auditorium and classroom spaces specifically designed for

performing arts, including music, dance, drama, and choral arts, etc. This building would generally be located on the site of the existing athletic field on 4th Street and the gymnasium (Building #19)

- Classroom Building South: This new 3-story approximately 75,000 sf building would have general and specialty classrooms and support spaces, including flexible engineering labs, computer labs and science laboratory classrooms. This building would be generally located on the site of the existing auditorium and classroom building (Building #1).

- Gymnasium Building: The 2-story, approximately 43,000 sf Gymnasium Building would have competition and practice gymnasium floors, locker rooms (restrooms, showers, and dressing area), coaches' offices, and physical education support spaces along with support spaces for athletic storage and mechanical equipment. The gym would have approximately 800 bleacher seats. This building would generally be located on the site of the existing auditorium and classroom building (Building #1) and utility buildings (Buildings #20 and #47).

- Lunch Shelter: The new approximately 7,000 sf lunch shelter would be located at or near the location of the existing lunch shelter.

- Wellness Clinic: An approximately 6,000 sf wellness clinic would provide services to both students and the community. The clinic would be located near the Classroom/Administration Building, library building, and pool.

Site Upgrades

Site upgrades that would be implemented under the proposed Project include the following:

- Major Site-wide infrastructure, including domestic water; irrigation; gas; sewer; fire, telephone, and data systems; electrical; storm drainage.
- Site-wide programmatic access upgrades to comply with the ADA.
- Major Site-wide revamp of the campus landscaping and hardscaping, including relocation of the existing Japanese Garden. Existing trees removed by the Project would be reused to the extent feasible or replaced by an appropriate size and species selected from the LAUSD Approved Plant List.[19]
- Application of fresh paint to the exterior of the remaining Roosevelt HS buildings

The Project will be subject to local, state, and/or federal facilities requirements of the ADA, DSA, and CDE, as well as all District Standards and Specifications; such as those provided in LAUSD's Program EIR.[20] Any needed improvements to ensure compliance with such legislation will be incorporated within the Project.[21]

Access and Circulation

The primary pedestrian access to the Project site would be provided along 4th Street. Access to staff parking would remain on Mathews Street. Approximately 8-10 parking stalls would be provided on 4th Street for visitors, staff, and accessible parking near the administration building.

Excavation and Off-Site Disposal

As a part of the construction activities, the District would implement a Removal Action Workplan (RAW) for the proposed Project. As identified in the Preliminary Environmental Assessment Equivalent (PEA-E) Report prepared for the Project, approximately 7,019 cubic yards of soil containing the chemicals of concern (COCs); specifically, arsenic, lead, petroleum

19 LAUSD, LAUSD Approved Plants List, 2012, http://www.laschools.org/documents/download/sustainability%2Fwater_conservation%2FCopy_of_Updated_Plant_List_2012.pdf

20 LAUSD. 2015. School Upgrade Program Final Environmental Impact Report, http://achieve.lausd.net/ceqa. Adopted by the Board of Education on November 10, 2015.

21 LAUSD, 2015a.

hydrocarbons, at levels that exceed the District's cleanup goals, would be removed from areas located throughout the Project site.[22] The excavation would be performed using heavy equipment consisting of, but not limited to, an excavator, backhoe, loader, and dump truck. Ancillary facilities (i.e., wastewater holding tank) would also be used during the removal action. Excavation operations may generate fugitive dust emissions. Suppressant foam, water spray, and other forms of vapor and dust control may be required during excavation, and workers may be required to use personal protective equipment to reduce exposure to the COCs. The depth of excavations may be limited due to physical constraints associated with the Project site. Sloping excavation sidewalls and slot-cutting may result in increased volume of soil requiring excavation. Confirmation soil sampling and analysis would be conducted to verify soil impact concentrations at the excavation bottom and sidewalls.

Excavated soil would be either directly-loaded into waiting dump trucks or temporarily stockpiled within an on-site "holding area" using a rubber-tire backhoe or similar equipment (such as wheel loader). Any temporary soil stockpiles would be properly secured and protected until ready for loading for off-site transportation and disposal to an appropriate facility. Truck loading would take place concurrently with excavation operations associated with the Project. Clean, imported soil or other fill material would be brought to the site to backfill areas where impacted soil was removed. Imported soil and/or other fill material would be accompanied by certificates, analytical data, and/or other supporting documents that indicate the import material is in conformance with cleanup criteria.

Construction Schedule

Construction activities are anticipated to begin in Q3-2018 and will be substantially completed in Q4-2022.

The entire demolition, construction, and modernization activities are expected to take approximately 48 months. Because of active school operation, less than five acres (contiguous) on campus would be disturbed at any one time. An average of 50 workers would be on-site when students are present. A maximum of 150 workers will be on site during peak construction periods when school is not in session (i.e. winter, summer breaks).

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22 TRC Solutions. August 2017. Roosevelt Senior High School: Preliminary Environmental Assessment Equivalent Report.

As Roosevelt High School is an active campus, construction of the new buildings and modernization must be phased in a way to maintain the academic functions. To complete the comprehensive campus-wide modernization while school is in session, the construction process must be broken down into several phases so that the school can continue operating.

Tiering

The proposed Project is one of many types of projects that were analyzed in the Program EIR, certified by the LAUSD BOE on November 10, 2015.[23] LAUSD's SUP EIR meets the criteria of a Program EIR under CEQA Guidelines Section 15168 (a)(4) as one "prepared on a series of actions that can be characterized as one large project and are related…[a]s individual activities carried out under the same authorizing statutory or regulatory authority and having generally similar environmental effects which can be mitigated in similar ways."

The certified Program EIR enables LAUSD to streamline future environmental compliance and reduce the need for repetitive environmental studies. It serves as the framework and baseline for CEQA analyses of later projects through a process known as "tiering." Under CEQA Guidelines Sections 15152(a) and 15385, "tiering" refers to using the analysis of general matters from a broad EIR (such as one prepared for a program) and applying it to later EIRs and negative declarations on narrower projects, incorporating by reference the general discussion from the broad EIR and concentrating the later EIR or negative declaration solely on the issues specific to that project.

The Program EIR is applicable to all projects implemented under the SUP. The Program EIR grouped potential projects into four categories based on project scope, type of construction, and location of projects. This project falls under the categories of Type 2, "New Construction on Existing Campus,"[24] and Type 3, "Modernization, Repair, Replacement, Upgrade, Remodel, Renovation and Installation."

The proposed Project is considered a site-specific project under the SUP and analyzed in the Program EIR; therefore, the EIR will be tiered from the 2015 Program EIR. The Program EIR is

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23 LAUSD OEHS. "School Upgrade Program Final Environmental Impact Report." http://achieve.lausd.net/ceqa. Adopted by the Board of Education on November 10, 2015.

24 Type 2: Demolition and new building construction on existing campus (replace school building on same location); Installation of temporary structures. Type 3: Outdoor repair, modernization, replacement or upgrade of athletic fields, play equipment, fencing, parking, replace shade shelter, asphalt/concrete paths, driveways, ADA compliance, seismic retrofits; Repair and replacement of building systems such as flooring, windows, and roofing; Interior and exterior installation, repair, replacement and maintenance.

available for review online at http://achieve.lausd.net/ceqa and at LAUSD's Office of Environmental Health and Safety, 333 South Beaudry Avenue, 21st Floor, Los Angeles, CA 90017.

Project Plans and Building Design

The project is subject to California Department of Education (CDE) criteria and the school architectural designs are subject to review and approval by the California Division of the State Architect (DSA). The proposed Project, as with all other SUP-related projects, is required to comply with specific design standards and sustainable building practices. Certain standards assist in reducing environmental impacts, such as the California Green Building Code (CALGreen),[25] LAUSD Standard Conditions of Approval, and the Collaborative for High Performance Schools (CHPS) criteria.[26]

Sustainable Design Features

LAUSD is the first school district in the United States to adopt and implement the Collaborative for High Performance Schools (CHPS) Criteria.[27] The BOE adopted a Resolution on High Performance School Facilities requiring Phase II of the new school construction program and future phase schools to be certified according to CHPS.[28] These measures are considered beneficial to improving environmental quality, as well as the learning environment. LAUSD has incorporated these into the Project design and operation of projects as part of standard LAUSD practices. The CHPS criteria are assumed to be part of the District's projects as they may apply to specific projects and are not included as mitigation measures. CHPS recommends flexible standards to promote energy efficiency, water efficiency, site planning, materials, and indoor environmental quality.

25 CALGreen. California Green Building Standards Code, Title 24, Part 11, of the California Code of Regulations.

26 The Board of Education's October 2003 Resolution on Sustainability and Design of High Performance Schools, directs staff to continue its efforts to ensure that every new school and modernization project in the District, from the beginning of the design process, incorporate CHPS (Collaborative for High Performance Schools) criteria to the extent possible.

27 Los Angeles Unified School District. *Key OEHS Programs*. Available at: http://achieve.lausd.net/Page/3495

28 Los Angeles Unified School District. 2003. *Board of Education Resolution, Sustainability and the Design and Construction of High Performance Schools*. October. Available at: http://www.laschools.org/documents/download/sustainability%2Fhealthy_schools%2FBoard_Resolution_on_CHPS.pdf

Project Design Features

Project design features (PDFs) are environmental protection features that modify a physical element of a site-specific project and are depicted in a site plan or documented in the project design plans. PDFs may be incorporated into a project design or description to offset or avoid a potential environmental impact and do not require more than adhering to a site plan or project design. Unlike mitigation measures, PDFs are not special actions that need to be specifically defined or analyzed for effectiveness in reducing potential impacts.

Standard Conditions of Approval

LAUSD Standard Conditions of Approval (SC) are uniformly applied development standards and were adopted by the LAUSD BOE in November 2015.[29] The SCs have been updated since the adoption of the 2015 version in order to incorporate and reflect changes in the recent laws, regulations, and the Los Angeles Unified School District's standard policies, practices, and specifications. The SCs were compiled from established LAUSD standards, guidelines, specifications, practices, plans, policies, and programs, as well as typically applied mitigation measures. The conditions are divided into the 18 LAUSD CEQA environmental topics (Appendix G of the CEQA Guidelines plus Pedestrian Safety).[30] For each SC, compliance is triggered by factors such as the project type, existing conditions, and type of environmental impact. Compliance with every condition is not required.

Mitigation Measures

If, after incorporation and implementation of federal, state, and local regulations; CHPS prerequisite criteria; PDFs; and SC, there are still significant environmental impacts, then feasible and project-specific mitigation measures are required to reduce impacts to less than significant levels. Mitigation under CEQA Guidelines Section 15370 includes:

- Avoiding the impact altogether by not taking a certain action or parts of an action.
- Minimizing impacts by limiting the degree or magnitude of the action and its implementation.

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29 LAUSD. 2015. Program EIR for the School Upgrade Program. Available at: http://achieve.lausd.net/ceqa. (see Table 4-1 and Appendix F of the Program EIR).

30 The LAUSD Standard Conditions of Approval only covers 18 topics. However, as of September 2016 an additional environmental topic (Tribal Cultural Resources) has since been required by the State Office of Planning and Research. The LAUSD Environmental Checklist now has 19 topics.

- Rectifying the impact by repairing, rehabilitating, or restoring the impacted environment.
- Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action.
- Compensating for the impact by replacing or providing substitute resources or environments.

Mitigation measures must be project specific and must further reduce significant environmental impacts by implementing requirements or efforts that exceed compliance with federal, state, and local laws and regulations; CHPS criteria; PDFs; and SCs.

The specific, applicable LAUSD SCs are identified under each CEQA topic.[31] Federal, state, regional, and local laws, regulations, plans, and guidelines; CHPS criteria; PDFs; and SCs are considered part of the Project and are included in the environmental analysis.

31 Collaborative for High Performance Schools (CHPS) criteria are summarized. The full list of criteria can be found at http://www.chps.net/dev/Drupal/California.

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

☐ Aesthetics	☐ Agriculture Resources	☒ Air Quality
☐ Biological Resources	☒ Cultural Resources	☐ Geology and Soils
☐ Greenhouse Gases	☒ Hazards and Hazardous Materials	☐ Hydrology and Water Quality
☐ Land Use and Planning	☐ Mineral Resources	☒ Noise
☐ Population and Housing	☒ Pedestrian Safety	☐ Public Services
☐ Recreation	☒ Transportation and Traffic	☐ Tribal Cultural Resources
☐ Utilities and Service Systems	☐ Mandatory Findings of Significance	

DETERMINATION (To be completed by the Lead Agency):

On the basis of this initial evaluation:

☐ I find that the proposed Project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☐ I find that although the proposed Project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☒ I find that the proposed Project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the proposed Project MAY have a "potentially significant" or "potentially significant unless mitigated" impact on the environment, but at least one effect (1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and (2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed Project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed Project, nothing further is required.



Signature

10/11/2017

Date

Robert Laughton, Director
Office of Environmental Health & Safety
CEQA Officer of the Los Angeles Unified School District

EVALUATION OF ENVIRONMENTAL IMPACTS:

1) A brief explanation is required for all answers, except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the Project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the Project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).

2) All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.

3) Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect is significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.

4) "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from Section XVII, "Earlier Analyses," may be cross-referenced).

5) Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR, or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:

   a) Earlier Analyses Used. Identify and state where they are available for review.

   b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of, and adequately analyzed in, an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.

   c) Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the Project.

6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.

7) Supporting Information Sources. A source list should be attached and other sources used or individuals contacted should be cited in the discussion.

8) This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.

9) The explanation of each issue should identify:

   a) the significance criteria or threshold, if any, used to evaluate each question; and

   b) the mitigation measure identified, if any, to reduce the impact to less than significant.

	Issues:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
I.	**AESTHETICS. Would the project:**				
a)	Have a substantial adverse effect on a scenic vista?	☐	☐	☒	☐
b)	Substantially damage scenic resources, including, but not limited to, tress, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☒
c)	Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☐	☒	☐
d)	Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☒	☐

The Program EIR included SCs for minimizing impacts to aesthetic resources of the existing environment in areas where future projects would be implemented under the SUP. Applicable SCs related to aesthetic resource impacts associated with the proposed Project are provided below.

SC-AE-3: LAUSD shall assess a proposed project's consistency with the general character of the surrounding neighborhood, including any proposed changes to the density, height, bulk, and setback of new buildings, (including stadium), addition, or renovation. Where feasible, LAUSD shall make appropriate design changes to reduce, or eliminate, viewshed obstruction and degradation of neighborhood character. Such design changes could include, but are not limited to, changes to campus layout, height of buildings, landscaping, and/or the architectural style of buildings.

SC-AE-6: During, and after, installation of lights, the Project shall comply with the School Design Guide, which outlines requirements for lighting and measures to minimize glare for pedestrians, drivers and sports teams, and to avoid light spilling onto adjacent properties.

SC-AE-7: LAUSD shall reduce the lighting intensity from the new sources on adjacent residences to no more than two foot-candles, measured at the residential property line. LAUSD shall utilize hoods, filtering louvers, glare shields, and/or landscaping as necessary to achieve the standard. The lamp enclosures and poles shall also be painted to reduce reflection. Following installation of lights, the lighting contractor shall review and adjust lights to ensure the standard is met.

SC-AE-8: Design site lighting and select lighting styles and technologies to have minimal impact off-site and minimal contribution to sky glow. Minimize outdoor lighting of architectural and landscape features and design interior lighting to minimize trespass outside from the interior.

Responses:

a) **Less than Significant Impact.** Scenic views are typically defined as those that provide expansive views of a highly-valued landscape for the benefit of the general public. The Project site is located in community of Boyle Heights, in a primarily urban area dominated by single and multi-family dwellings and commercial uses. The Project site is located in an area of relatively flat topography and dense development; however, intermittent views of the distant San Gabriel Mountains are available from Soto Street.

Although the proposed Project would change existing views by adding new structures and demolishing old ones, existing views within the right-of-way would not be affected. In addition, regarding viewshed obstruction, the proposed Project would be subject to **SC-AE-3** listed above.

The proposed Project consists of new buildings that would be one to three stories in height (approximately 57 feet to the top of the highest roof and approximately 67 feet to the top of the mechanical screens on the three-story classroom buildings), which is similar to the existing building massing on the site. As views are intermittent and no expansive vistas are available, construction of the proposed Project would not have a substantial effect on a scenic vista.

Thus, impacts related to scenic views/vistas would be less than significant and no further analysis is required in the EIR.

b) **No Impact.** There are no designated state scenic highways within, or adjacent to, the Project site[32]. The nearest state scenic highway is State Route 2, also known as the Historic Angeles Crest Highway, approximately 13 miles north of Roosevelt HS. In addition, the California Department of Transportation (Caltrans) has designated a six-mile portion of the Arroyo Seco Parkway [e.g., State Route 110 (SR-110)] as an historic parkway. The Arroyo Seco Parkway is approximately four miles west of the Project site. The Project site cannot be viewed from either highway. As such, no impact would occur on the scenic highways by the proposed Project and no further analysis is needed.

c) **Less than Significant Impact.** Visual quality is a measure of the overall impression or appeal of an area as determined by the particular landscape's characteristics and scenic resources (e.g., Santa Monica Mountains, Pacific Ocean, etc.). It is possible for new structures to be compatible with the existing setting if they replicate existing forms, lines, colors, and textures of the surrounding environment and if the new structures do not appreciably change the balance of natural elements. In summary, visual quality is concerned with the overall attractiveness of an area and the ability to preserve this attractiveness when new features are introduced.

The visual setting of the area is generally urbanized. Surrounding visual elements include single-family homes, multi-family homes, street trees, and Hollenbeck Middle School consisting of a middle school campus and play courts.

Construction

Evaluation of construction impacts focuses on the short-term visual impacts resulting from the demolition and removal of current buildings, construction of the proposed Project, as well as the presence of equipment and material storage. In a visual sense, construction impacts from the proposed Project could be obtrusive, or out of character with the surrounding landscape. Construction equipment and materials, exposed dirt and unfinished buildings would temporarily impact the visual character of the Project site. Motorists traveling on any of the roads bordering the Project site, as well as the

32 California Department of Transportation, California Scenic Highway Mapping System, http://www.dot.ca.gov/hq/LandArch/16_livability/scenic_highways/index.htm, accessed March 21, 2017.

immediate neighbors to Roosevelt HS, would be able to view the site. However, construction fencing would be provided around any active construction and staging areas, for both screening and security, and, as construction is short-term, the impact will be less than significant and no further analysis is required.

Operation

Once construction is completed, the Project site will be similar to pre-Project conditions. The aging buildings will be replaced with buildings of similar, although slightly larger size and massing. The Project will also reduce the inventory of portable buildings and small single or two-story buildings that inefficiently utilize the site areas. The Project will have more open space areas for physical education. New landscape, hardscape, and exterior paint will provide beneficial long-term visual impacts to the area. The changes at the Project site would substantially improve the visual appearance of Roosevelt HS, and would not substantially degrade the visual character, or quality of the site, or introduce any aesthetic elements that are not compatible with the surrounding land uses. Thus, impacts would be less than significant, and no further analysis is necessary.

d) **Less than Significant Impact.** Light impacts are typically associated with the use of artificial light during the evening and nighttime hours. Glare may be a daytime occurrence caused by the reflection of sunlight or artificial light from highly polished surfaces, such as a window glass and reflective cladding materials, and may interfere with the safe operation of a motor vehicle on adjacent streets. Daytime glare is common in urban areas and is typically associated with mid- to high-rise buildings with exterior façades largely, or entirely, comprised of highly reflective glass, or mirror-like materials. Nighttime glare is primarily associated with bright point-source lighting that contrasts with existing low ambient light conditions.

The Project site is located in an urban environment with streetlights and moderate nighttime illumination from existing residential dwellings. Uses surrounding the Project site that are sensitive to light levels and glare include residences immediately surrounding the school. All new outdoor lighting being added as part of the proposed Project would be subject to **SC-AE-6** through **SC-AE-8** listed above.

All lighting of outdoor areas would be directed onto the Project site to avoid any light impacts from lighting fixtures included in the proposed Project. Additionally, the Project

would be constructed in accordance with the CHPS Criteria SS5.1: Light Pollution Reduction. Additionally, exterior lighting shall only be provided when it is clearly required for safety and comfort, and is designed not to exceed 80 percent of the lighting power allowed by the California energy efficiency standards in effect at the time of submission of the Project to the DSA.

For new buildings on an existing campus, additions, and major modernizations, the exterior lighting requirement applies to the entire school site, not just the lighting around the building(s) being modernized. In accordance with the 2016 School Design Guide, all luminaries, or lighting sources, in connection with school construction projects shall be installed in such a manner as to minimize glare for pedestrians and drivers and to minimize light spilling onto adjacent properties.[33] Implementation of these SCs and adherence to the requirements set by CHPS would ensure impacts related to light and glare remain less than significant. No further analysis is required.

33 LAUSD, Design Standards Department. *2016 School Design Guide*. October 2016

	Issues:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
II.	**AGRICULTURE AND FORESTRY RESOURCES. In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. Would the project:**				
	a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒
	b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒

	Issues:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
c)	Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland production (as defined by Government Code section 51104(g))?	☐	☐	☐	☒
d)	Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
e)	Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?	☐	☐	☐	☒

The Program EIR did not require SCs for minimizing impacts to agriculture and forestry resources where future projects would be implemented under the SUP. Likewise, there are no applicable or required SCs related to agriculture and forestry resources associated with the proposed project.

Responses:

a) **No Impact.** Prime Farmland, Unique Farmland, and Farmland of Statewide Importance are all categorized by the California Department of Conservation, Division of Land Protection as "Important Farmland." As the Project site is in an urbanized residential area, it is not located within an area designated as Important Farmland, nor does it

contain any prime or unique farmland.[34] No impact on farmland or agricultural resources would occur from the proposed Project and no further analysis is required.

b,e) **No Impact.** The Project site is located within the Boyle Heights CPA of the City and is zoned Public Facilities (PF). No agricultural use is permitted within these zoning designations and no conversion of Farmland would result from the proposed Project. Only land located within an agricultural preserve is eligible for enrollment under a Williamson Act contract. The Project site does not contain any lands covered by a Williamson Act Contract.[35] Therefore, the proposed Project would have no impact on agricultural zoning, Williamson Act contracts, and/or result in the conversion of Farmland, and no further analysis is required.

c,d) **No Impact.** There are no forest lands or timberlands on the Project site. Consequently, there is no conflict with rezoning of forest, or timberlands. No impact would occur from the proposed Project and no further analysis is required.

34 California Division of Land Resources Protection. *Farmland Mapping and Monitoring Program*. Available at: http://www.conservation.ca.gov/dlrp/fmmp/Pages/LosAngeles.aspx, accessed February 8, 2017.

35 ZIMAS, zimas.lacity.org, accessed March 30, 2017.

	Issues:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
III.	**AIR QUALITY. Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:**				
	a) Conflict with or obstruct implementation of the SCAQMD or Congestion Management Plan?	☒	☐	☐	☐
	b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☒	☐	☐	☐
	c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	☒	☐	☐	☐
	d) Expose sensitive receptors to substantial pollutant concentrations?	☒	☐	☐	☐

	Issues:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
e)	Create objectionable odors affecting a substantial number of people?	☐	☐	☐	☒

The Program EIR included SCs for minimizing impacts to air quality resources of the existing environment in areas where future projects would be implemented under the SUP. Applicable SCs related to air quality resource impacts associated with the proposed Project are provided below.

SC-AQ-1 OEHS CEQA Specification Manual, Appendix J, Air Toxics Health Risk Assessment (HRA)

This document includes guidance on HRA protocols for permitted, non-permitted, and mobile sources that might reasonably be anticipated to emit hazardous air emissions and result in potential long-term and short-term health impacts to student and staff at the school site.

SC-AQ-2 LAUSD's construction contractor shall ensure that construction equipment is properly tuned and maintained in accordance with manufacturer's specifications, to ensure excessive emissions are not generated by unmaintained equipment.

SC-AQ-3 LAUSD's construction contractor shall:

- Maintain slow speeds with all vehicles
- Load impacted soil directly into transportation trucks to minimize soil handling
- Water/mist soil as it is being excavated and loaded onto the transportation trucks
- Water/mist and/or apply surfactants to soil placed in transportation trucks prior to exiting the site
- Minimize soil drop height into transportation trucks or stockpiles during dumping

- During transport, cover or enclose trucks transporting soils, increase freeboard requirements, and repair trucks exhibiting spillage due to leaks
- Cover the bottom of the excavated area with polyethylene sheeting when work is not being performed
- Place stockpiled soil on polyethylene sheeting and cover with similar material
- Place stockpiled soil in areas shielded from prevailing winds

SC-AQ-4 LAUSD shall prepare an air quality assessment:

If site-specific review of a school construction project identifies potentially significant adverse regional and localized construction air quality impacts, then LAUSD shall implement all feasible measures to reduce air emissions below the South Coast Air Quality Management's (SCAQMD) regional and localized significance thresholds.

LAUSD shall mandate that construction bid contracts include the measures identified in the air quality assessment. Measures shall reduce construction emissions during high-emission construction phases from vehicles and other fuel driven construction engines, activities that generate fugitive dust, and surface coasting operations. Specific air emission reduction measures include, but are not limited to, the following:

<u>Exhaust Emissions</u>

- Schedule construction activities that affect traffic flow to off-peak hours (e.g. between 10:00 AM and 3:00 PM)
- Consolidate truck deliveries and/or limit the number of haul trips per day
- Route construction trucks off congested streets
- Employ high pressure fuel injection systems or engine timing retardation
- Utilize ultra-low sulfur diesel fuel, containing 15 ppm sulfur or less (ULSD) in all diesel construction equipment
- Use construction equipment rated by the United States Environmental Protection Agency as having Tier 3 (model year 2006 or newer) or Tier 4 (model year 2008 or newer) emission limits for engines idle time, to not more than five consecutive minutes

- Utilize electrical power rather than internal combustion engine power generators as soon as feasible during construction
- Utilize electric or alternatively fueled equipment, if feasible
- Utilize construction equipment with the minimum practical engine size
- Utilize low-emission on-road construction fleet vehicles
- Ensure construction equipment is properly serviced and maintained to the manufacturer's standards

Fugitive Dust

- Apply non-toxic soil stabilizers according to manufacturers' specification to all inactive construction areas (previously graded area inactive for ten days or more)
- Replace ground cover in disturbed areas as quickly as possible
- Sweep streets at the end of the day if visible soil material is carried onto adjacent public paved roads (recommend water sweepers with reclaimed water)
- Install wheel washers where vehicles enter and exit unpaved roads onto paved roads, or wash off trucks and any equipment leaving the site each trip
- Pave construction roads that have a traffic volume of more than 50 daily trips by construction equipment, and/or 150 daily trips for all vehicles
- Pave all construction access roads for at least 100 feet from the main road to the Project site
- Water the disturbed areas of the active construction site at least three times per day, except during periods of rainfall
- Enclose, cover, water twice daily, or apply non-toxic binders according to manufacturers' specifications to exposed piles (i.e., gravel, dirt, and sand) with a five percent or greater silt content
- Suspend all excavating and grading operations when wind speeds (as instantaneous gusts) exceed 25 miles per hour (mph)
- Apply water at least three times daily, except during periods of rainfall, to all unpaved road surfaces
- Limit traffic speeds on unpaved road to 15 mph or less

- Prohibit high emission causing fugitive dust activities on days where violations of the ambient air quality standard have been forecast by SCAQMD
- Tarp and/or maintain a minimum of 24 inches of freeboard on trucks hauling dirt, sand, soil, or other loose materials
- Limit the amount of daily soil and/or demolition debris loaded and hauled per day

General Construction

- Utilize ultra-low VOC or zero-VOC surface coatings
- Phase construction activities to minimize daily emissions
- Configure construction parking to minimize traffic interference
- Provide temporary traffic control during construction activities to improve traffic flow (e.g., flag person)
- Develop a trip reduction plan for construction employees
- Implement a shuttle service to and from retail services and food establishments during lunch hours
- Increase distance between emission sources to reduce near-field emission impacts
- Require construction contractors to document compliance with the identified mitigation measures

SC-AQ-5 LAUSD shall encourage ride-sharing programs for students and teachers as well as maintain fleet vehicles such as school buses, maintenance vehicles, and other service fleet vehicles in good condition in order to prevent significant increases in air pollutant emissions created by operation of a new school

Responses:

a) **Potentially Significant Impact.** The Project site is located within the South Coast Air Basin (SoCAB) and is subject to the Air Quality Management Plan (AQMP) prepared by the South Coast Air Quality Management District (SCAQMD). The SCAQMD has adopted a 2012 AQMP which focuses on achieving clean air standards while accommodating population growth forecasts compiled by the Southern California Association of Governments (SCAG). According to the SCAQMD *CEQA Air Quality Handbook*, a project would have a significant impact if it conflicts with or delays implementation of the applicable AQMP. A project is consistent with the AQMP if it meets the following indicators:

- The project will not result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations, or delay the timely attainment of air quality standards or the interim emissions reductions specified in the AQMP.
- The project will not exceed the assumptions in the AQMP in 2017 or increments based on the year of project buildout (2022).

The proposed Project could potentially exceed the significance thresholds for construction and/or operational emissions. In addition, the Project could potentially exceed the screening criteria for the localized significance thresholds. Therefore, since the Project could potentially exceed the thresholds, it could potentially increase the frequency or severity of existing air quality violations or cause or contribute to new violations, or delay the timely attainment of air quality standards or the interim emissions reductions specified in the AQMP.

The EIR will evaluate the proposed Project for any impacts the proposed Project may have on the attainment of regional air quality objectives.

b) **Potentially Significant Impact.** Short-term air pollutant emissions would potentially occur during site preparation and construction activities associated with the proposed Project. Construction activities have the potential to generate fugitive dust, stationary-source emissions, and mobile-source emissions. Construction emissions can vary substantially from day to day, depending on the

level of activity, type of machinery in use, and for fugitive dust with the prevailing weather conditions.

In addition, the proposed Project would potentially generate long-term operation emissions. An air quality analysis will be conducted for the proposed Project to determine if the resulting short- or long-term emissions would exceed SCAQMD's regional significance thresholds. This issue will be analyzed further in the EIR.

c) **Potentially Significant Impact.** A significant impact would occur if implementation of the proposed project resulted in a cumulative net increase in any criteria above the SCAQMD significance threshold. The SCAQMD's approach for assessing cumulative air quality impacts is based on the AQMP forecasts of attainment of ambient air quality standards (AAQS) as nonattainment for ozone (O_3), coarse inhalable particulate matter (PM10), and fine inhalable particulate matter (PM2.5).[36] The SoCAB area is attainment for nitrogen oxides (NO_x) (a California standard only). Under the National AAQS, the SoCAB area is designated as nonattainment for ozone O_3, and fine inhalable particulate matter PM2.5, but is within the attainment parameters for coarse inhalable particulate matter (PM10)[37]. Construction of the proposed Project may increase existing levels of criteria pollutants and contribute to the nonattainment/attainment status for these criteria pollutants in the SoCAB. As mentioned above, short-term air pollutant emissions would occur during construction activities associated implementation of the proposed Project. In addition, the proposed Project would generate long-term operational emissions. An air quality analysis will be prepared to determine if implementation of the proposed Project results in a cumulatively considerable net increase in any criteria air pollutant. This issue will be analyzed further in the EIR.

d) **Potentially Significant Impact.** Sensitive receptors in the Project area are defined as residential areas adjacent to the Project site, as well as students that will be

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36 California Environmental Protection Agency Air Resources Board, National and State Area 2014 Designations, http://www.arb.ca.gov/desig/adm/adm.htm, accessed October 5, 2016.

37 California Environmental Protection Agency Air Resources Board, National and State Area 2014 Designations, http://www.arb.ca.gov/desig/adm/adm.htm, accessed October 5, 2016.

present at the Roosevelt HS and Hollenbeck Middle School (MS) campuses. During construction, sensitive receptors could be exposed to a variety of airborne emissions including those from construction equipment. The proposed Project potentially would expose sensitive receptors to substantial pollutant concentrations during construction. An impact is significant if sensitive receptors are exposed to substantial pollutant concentrations such as toxic air contaminants (TACs) and CO concentrations. The EIR will evaluate the potential for the construction and operation of the proposed Project to exceed SCAQMD's localized significance thresholds (LSTs) in accordance with SCAQMD's guidance methodology, generate traffic that results in significant CO hotspots, or generate substantial TACs. This issue will be analyzed further in the EIR.

e) **No Impact.** Land uses primarily associated with odorous emissions include waste transfer and recycling stations, wastewater treatment plants, landfills, composting operations, petroleum operations, food and byproduct processes, factories, and agricultural activities, such as livestock operations. The proposed Project does not include any of these types of land uses. In addition, the proposed Project would not be sited near any of these recognized sources of odors. Therefore, the Project would have no impact with respect to odors and no further analysis is needed.

	Issues:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
IV.	**BIOLOGICAL RESOURCES. Would the project:**				
a)	Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	☐	☐	☐	☒
b)	Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	☐	☐	☐	☒

	Issues:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
c)	Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	☒
d)	Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☐	☒
e)	Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance (e.g., oak trees or California walnut woodlands)?	☐	☐	☒	☐
f)	Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒

The Program EIR included SCs for minimizing impacts to biological resources of the existing environment in areas where future projects would be implemented under the SUP. Applicable SCs related to biological resource impacts associated with the proposed Project are provided below.

SC-BIO-3 LAUSD shall comply with the following:

- Project activities (including, but not limited to, staging and disturbances to native and nonnative vegetation, structures, and substrates) should occur outside of avian breading season to avoid take of birds or their eggs. Depending on the avian species present, a qualified biologist may determine that a change in the breeding season dates is warranted.
- If avoidance of the avian breeding season is not feasible, beginning 30 days prior to the initiation of the project activities, a qualified biologist with experience in conducting breeding bird surveys shall conduct weekly bird surveys to detect protected native birds occurring in suitable nesting habitat that is to be disturbed and (as access to adjacent areas allows) any other such habitat within 300 feet of the disturbance area (within 500 feet for raptors). The surveys shall continue on a weekly basis with the last survey being conducted no more than three days prior to the initiation of project activities. If a protected native bird is found, LAUSD shall delay all project activities within 300 feet of the suitable nesting habitat (within 500 feet for suitable raptor nesting habitat) until August 31. Alternatively, the qualified biologist could continue the surveys in order to locate any nests. If an active nest is located, project activities within 300 feet of the nest (within 500 feet for report nests or as determined by a qualified biologist, shall be postponed until the net is vacated and juveniles have fledged and there is no evidence of a second attempt at nesting. Flagging, stakes, and/or construction fencing shall be sued to demarcate the inside boundary of the 300- or 500-foot buffer between the project activities and the nest. Project personnel, including all contractors working on site, shall be instructed on the sensitivity of the area. LAUSD shall provide results of the recommended protective measures to document compliance with applicable State and Federal laws pertaining to the protection of native birds.

- If the qualified biologist determines that a narrower buffer between the project activities and observed active nests is warranted, a written explanation as to why (e.g., species-specific information; ambient conditions and birds' habituation to them; and the terrain, vegetation, and birds' lines of sight between the project activities and the nest and foraging areas) shall be submitted to LAUSD OEHS project manager. Construction contractors can then reduce the demarcated buffer.
- No construction shall occur within the fenced next zone until the young have fledged, are no longer being bed by the parents, have left the nest, and will no longer by impacted the construction
- A biological monitor shall be present on site during all grubbing and clearing of vegetation to ensure that these activities remain outside the demarcated buffer and that the flagging, stakes, and/or construction fencing are maintained, and to minimize the likelihood that active nests are abandoned or fail due to project activities. The biological monitor shall send weekly monitoring reports to LAUSD OEHS project manager during the grubbing and clearing of vegetation, and shall notify LAUSD immediately if project activities damage avian nests.

Responses:

a-c, f) **No Impact.** The Project site is located in an urbanized area in the Boyle Heights neighborhood of the City of Los Angeles. No known threatened, endangered, or rare species or their habitats, locally designated species, locally designated natural communities, riparian or wetland habitats exist on this Project site. The Project site is not within an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or similar plan. The Project site is neither within, nor proximate to, any Significant Ecological Area, Land Trust, or Conservation Plan.[38] No impact would occur from the proposed Project and no further analysis is needed.

d) **Less than Significant Impact.** The Project site does not contain any watercourse or greenbelt for wildlife movement. However, mature trees are located on the Project site, these trees have the potential for nesting sites for birds.

38 Los Angeles County Department of Regional Planning. 2015. *Figure 9.3, Significant Ecological Areas and Coastal Resource Areas Policy Map*. March 30, 2017.

The Migratory Bird Treaty Act of 1918 (MBTA) implements the United States' commitment to four treaties with Canada, Japan, Mexico, and Russia for the protection of shared migratory bird resources. The MBTA governs the taking, killing, possession, transportation, and importation of migratory birds, their eggs, parts, and nests. The US Fish and Wildlife Service administers permits to take migratory birds in accordance with the MBTA. Provisions of the MBTA are met by compliance with **SC-BIO-3** from the Program EIR and included above, which would ensure that if construction occurs during the breeding season, appropriate measures would be taken to avoid impacts to any nesting birds if found.

SC-BIO-3: If tree or building removal is required during nesting season, LAUSD shall either:

- Retain a qualified biologist to conduct an intensive nest search in all trees and buildings slated for removal before construction begins. If nest with young are found, the LAUSD shall not remove the trees until the young have fledged or the nest has been abandoned, or,
- Delay tree or building removal until September 1 to February 28 to ensure reproductive success for native and/or migratory species using the site for nesting.

With adherence to **SC-BIO-3**, impacts would be less than significant and no further analysis is required in the EIR.

e) Less than Significant Impact. Implementation of the proposed Project would not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.

A total of nine California sycamores (*Platanus racemosa*), a protected tree under City of Los Angeles' Protected Tree Ordinance, were identified in a tree survey conducted in November 2016.[39] Construction of the proposed Project may require the removal of street trees and trees on-site. The Project would include a landscape plan to offset the loss of trees on the Project site. Replacement trees will be planted at the appropriate size

[39] Tree Survey for Roosevelt High School, conducted by S. McAllaster, ISA Certified Arborist, reviewed by Cy Carlberg, Registered Consulting Arborist #405, November 2016.

at maturity for the space, and will be selected from the LAUSD Approved Plant List.[40] In accordance with the City of Los Angeles' Protected Tree Ordinance, LAUSD will complete the City's tree removal permit process, or an equivalent process that provides the same level of protection as the City's Ordinance as appropriate. Therefore, impacts conflicting with local policies and ordinances, including tree protection ordinances, would be less than significant and no further analysis is required in the EIR.

40 LAUSD, LAUSD Approved Plants List, 2012, http://www.laschools.org/documents/download/sustainability%2Fwater_conservation%2FCopy_of_Updated_Plant_List_2012.pdf

	Issues:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
V.	**CULTURAL RESOURCES. Would the project:**				
a)	Cause a substantial adverse change in the significance of a historical resource as defined in § 15064.5?	☒	☐	☐	☐
b)	Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?	☐	☐	☒	☐
c)	Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☒	☐
d)	Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	☒	☐

The Program EIR included SCs for minimizing impacts to cultural resources of the existing environment in areas where future projects would be implemented under the SUP. Applicable SCs related to cultural resource impacts associated with the proposed Project are provided below.

SC-CUL-13: The contractor shall halt construction activities in the immediate area and notify the LAUSD. LAUSD shall retain a qualified archeologist to make an immediate evaluation of significance and appropriate treatment of the resource. To complete this assessment, the qualified archeologist will be afforded the necessary time to recover, analyze, and curate the find. The qualified archeologist shall recommend the extent of archeological monitoring necessary to ensure the protection of any other resources that may be in the area. Construction activities may continue on other parts of

the building site while evaluation and treatment of historical, or unique, archaeological resources takes place.

SC-CUL-17: LAUSD shall determine whether it is feasible to prepare and implement a Phase III Data Recovery/Mitigation Program. A Phase III Data Recovery/Mitigation Program would be designed by a Qualified Archaeologist to recover a statistically valid sample of the archaeological remains and to document the site to a level where the impacts can be determined to be less than significant. All documentation shall be prepared in the standard format of the ARMR Guidelines, as prepared by the OHP. Once a Phase III Data Recovery/Mitigation Program is completed, an archaeological monitor shall be present on site to oversee the grading, demolition activities, and/or initial construction activities to ensure that construction proceeds in accordance with the adopted Phase III Data Recovery/Mitigation Program. The extent of the Phase III Data Recovery/Mitigation Program and the extent and duration of the archaeological monitoring program depend on site-specific factors.

SC-CUL-18: All work shall stop within a 30-foot radius of the discovery. Work shall not continue until the discovery has been evaluated by a qualified archaeologist and the local Native American representative has been contacted and consulted to assist in the accurate recordation and recovery of the resources.

SC-CUL-19 LAUSD shall have a paleontological monitor on-call during construction activities. This monitor shall provide the construction crew(s) with a brief summary of the sensitivity, the rationale behind the need for protection of these resources, and information on the initial identification of paleontological resources. If paleontological resources are uncovered during construction, the on-call paleontologist shall be notified and afforded the necessary time and funds to recover, analyze, and curate the find(s). Subsequently, the monitor shall remain on site for the duration of the ground disturbances to ensure the protection of any other resources that may be in the area.

SC-CUL-20 The paleontological monitor shall be on site for all ground altering activities and shall advice LAUSD as to necessary means of protecting potentially significant paleontological resources, including, but not limited to, possible cessation of construction activities in the immediate area of a find. If resources are identified during the monitoring program, the paleontologist shall be afforded the necessary time and funds to recover, analyze, and curate the find(s). Subsequently, the monitor shall remain on site for the duration of the ground disturbances to ensure the protection of any other resources that may be in the area.

Responses:

a) **Potentially Significant Impact.** A project that may cause a substantial adverse change in the significance of a historical resource is a project that may have a significant effect on the environment.[41] Section 15064.5 of the *State CEQA Guidelines* defines an historical resource as: (1) a resource listed in, or determined to be eligible by, the State Historical Resources Commission, for listing in the California Register of Historical Resources; (2) a resource listed in a local register of historical resources, or identified as significant in an historical resource survey meeting certain state guidelines; or (3) an object, building, structure, site, area, place, record or manuscript that a lead agency determines to be significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California, provided that the lead agency's determination is supported by substantial evidence in light of the whole record.

With nearly 100 years of history on the site, Roosevelt High School has served multiple generations of families in Boyle Heights and the school's campus has witnessed significant social and demographic shifts that reflect the community at large. Among those important points in its history is the period of spring 1968, when students at Roosevelt HS, along with four other LAUSD high schools (Lincoln, Garfield, Belmont, and Wilson), staged mass student walkouts, also known as "Blowouts" associated with community activism under the growing Chicano Civil Rights Movement, also known as

41 California Public Resources Code Section 21084.1

'El Movimiento.'[42] The *Draft Supplemental Historic Resource Evaluation Report* conducted by ASM Affiliates identified Roosevelt High School's campus as an historic district given the potential eligibility in criteria listed for the National Register of Historic Places and the California Register of Historical Resources. The study evaluated the Blowouts as a potentially significant event as well as the involvement of Sal Castro as a potentially significant person during the Blowouts.

To ensure that all possible impacts of the Project on historical resources are fully examined, an EIR will be completed that will analyze this threshold in detail.

b) **Less than Significant Impact.** Section 15064.5 of the *State CEQA Guidelines* defines significant archaeological resources as resources that meet the criteria for historical resources, as discussed above, or resources that constitute unique archaeological resources.

The Project site has been in use as a school facility since 1923, and has been subjected to past subsurface disturbance associated with excavation and grading activities associated with the construction of foundations for the existing school buildings and it is unlikely that undisturbed unique archeological resources exist on the Project site. Nevertheless, the unanticipated discovery of unique archeological resources is possible during earth moving and grading activities. However, based on the lack of previous resources on the site, the probability that archeological resources will be discovered is low. In addition, compliance with **SC-CUL-13, SC-CUL-17,** and **SC-CUL-18**, listed above, would require that upon discovery of an archeological resource: (1) construction activities in the immediate area of the find shall cease and LAUSD shall retain a qualified archaeologist to determine the significance of the find; (2) LAUSD shall determine if a Phase III Data Recovery/Mitigation Program is necessary; and (3) if the archaeological resource is a Native American resource, work shall stop within a 30-foot radius of the discovery.

The Project would be subject to the numerous laws and regulations, cited below that require State, and local agencies to consider the effects of a proposed Project on potentially buried cultural resources. These laws and regulations stipulate a process for compliance, define the responsibilities of the various agencies proposing the action, and

42 ASM Affiliates, *Draft Supplemental Historic Resource Evaluation Report for Roosevelt Senior High School, Los Angeles, Los Angeles County, California, June 20, 2017.*

prescribe the relationship among other involved agencies. They provide guidance concerning analytical techniques and approaches to defining compliance measures where potentially significant impacts may occur, such that in the event that archaeological resources are uncovered on the Project site during grading, or other construction activities, the District must be notified immediately and work must stop within a 100-foot radius until a qualified archeologist to be approved by the District, has evaluated the find. Construction activity may continue unimpeded on other portions of the Project site. If the find is determined by the qualified archeologist to be a unique archeological resource, as defined by Section 21083.2 of the Public Resources Code, the Project site shall be treated in accordance with the provisions of Section 21083.2 of the Public Resources Code. If the find is determined not to be a unique archeological resource, no further action is necessary and construction may continue.

Implementation of these SCs as well compliance with the federal, State, and local regulations would ensure impacts to archaeological resources remain less than significant. No further analysis in the EIR is required.

c) **Less than Significant Impact.** As discussed above, the Project site has been previously disturbed and, therefore, it is unlikely that undisturbed paleontological resources exist on the Project site. Any surficial paleontological resources, which may have existed at one time, have likely been unearthed or disturbed to accommodate building foundations, and shallow excavation, or surface grading, is unlikely to uncover any paleontological resources. Earth moving and grading activities could potentially exceed the depth of prior grading activities and therefore, unanticipated discovery of unique paleontological resources is possible. With implementation of **SC-CUL-19** and **SC-CUL-20** listed above, the potential impacts from the proposed Project on paleontological resources would be less than significant, and no further analysis is required.

d) **Less than Significant Impact.** No formal cemetery exists on the Project site, or in the vicinity of the proposed Project. As the Project site has been subject to past subsurface disturbance associated with grading and foundations, it is unlikely that intact human remains are present beneath the site. However, the unanticipated discovery of intact human remains is possible. In the event of an unexpected disturbance, significant impacts to archaeological resources and human remains could occur. Implementation of

SC-CUL-18, listed above, would reduce potentially significant impacts to less than significant levels. No further analysis is required.

	Issues:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
VI.	**GEOLOGY AND SOILS. Would the project:**				
	a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury or death involving:				
	i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☐	☒
	ii) Strong seismic ground shaking?	☐	☐	☐	☒
	iii) Seismic-related ground failure, including liquefaction?	☐	☐	☐	☒
	iv) Landslides?	☐	☐	☐	☒
	b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐

	Issues:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
c)	Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	☐	☐	☒	☐
d)	Be located on expansive soil, as defined in Table 18 1 B of the Uniform Building Code (1994), creating substantial risks to life or property?	☐	☐	☒	☐
e)	Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	☐	☐	☐	☒

The Program EIR included SCs for minimizing impacts resources related to geology and soils of the existing environment in areas where future projects would be implemented under the SUP. Applicable SCs related to geology and soil impacts associated with the proposed Project are provided below.

SC-HWQ-2 Compliance Checklist for Stormwater Requirements at a Construction Site: This checklist has requirements for compliance with the General Construction Activity Permit and is used by OEHS to evaluate permit compliance. Requirements listed include a SWPPP; BMPs for minimizing stormwater pollution to be specified in a SWPPP; and monitoring stormwater discharges to ensure that sedimentation of downstream waters remains within regulatory limits.

Responses:

a(i) **No Impact.** The proposed Project is the renovation of an existing school site and does not include any activities that would exacerbate any existing conditions related to faults, fault rupture, ground shaking or landslides that would directly expose people, or structures, to the risk of loss, injury, or death due to rupture of a known earthquake fault. Fault rupture is the displacement that occurs along the surface of a fault during an earthquake. The Project site is located in the Eastside region of Los Angeles County. The closest known active fault to the site is Upper Elysian Park Fault, approximately 2.4 miles to the north. North of the Project site lies the Raymond Fault and the Hollywood fault, 6.0 and 6.5 miles east and west, respectively.[43] The Project site is not located within an Alquist-Priolo Fault-Rupture Hazard Zone.[44] As the proposed Project would not exacerbate any of these existing conditions, no impact would occur.

a(ii) **No Impact.** The Project site is located within the seismically active Southern California region, and, therefore, could be subject to moderate and possibly strong ground motion due to earthquakes. The Raymond Fault, located about 6.0 miles north of the Roosevelt HS, is the closest large, active fault. The Project will be constructed in accordance with CBC and DSA standards. The planned construction of the Project will also take recommendations and incorporate project design features from the Geotechnical Report[45] upon completion. As a public school, Roosevelt HS will have to comply with the California Code of Regulations Title 24 requirements and the California Geological Survey Checklist for Review of Geologic/Seismic Reports. As described above, the Project does not include any activities that would exacerbate an existing geologic condition. No impact would occur from the proposed Project.

a(iii) **No Impact.** Liquefaction is a seismic phenomenon in which loose, saturated, fine-grained granular soils behave similarly to a fluid when subjected to high intensity ground shaking. Liquefaction occurs when three general conditions exist: (1) shallow groundwater; (2) low-density, fine, clean sandy soils; and (3) high intensity ground motion. Studies indicate that saturated, loose and medium-dense, near-surface

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43 Geotechnical Professionals, Inc., *Geotechnical Investigation, Proposed Roosevelt High School, Campus Modifications, 456 S. Mathews Street, Los Angeles, California*, June 14, 2015.

44 Ibid.

45 Geotechnical Professionals, Inc., *Geotechnical Investigation, Proposed Roosevelt High School, Campus Modifications, 456 S. Mathews Street, Los Angeles, California*, June 14, 2015.

cohesionless soils exhibit the highest liquefaction potential, while dry, dense, cohesionless soils and cohesive soils exhibit low to negligible liquefaction potential.[46]

Regulatory maps[47] indicate that the Project site is not in an area potentially affected by liquefaction. Further, the proposed renovation activities would not exacerbate existing liquefaction potential. No impact would occur from the proposed Project and no further analysis is required.

a(iv) **No Impact.** Landslides and other types of slope failures, such as lateral spreading, can result in areas with varying topography in the event of an earthquake. The site is not located within an area identified as having a potential for slope instability, nor in an area having a potential for seismic slope instability.[48] The Project does not include any activities that would result in the exacerbation of any existing landslide potential. No impact would occur from the proposed Project.

b) **Less than Significant Impact.** Erosion is the movement of rock and soil from place to place and is a natural process. Common agents of erosion in the vicinity of the Project area include wind and flowing water. Significant erosion typically occurs on steep slopes where stormwater and high winds can carry topsoil down hillsides. Erosion can be increased greatly by earthmoving activities if erosion-control measures are not used.

The Project site is located in an urban area of the City, with the Project site, and surrounding vicinity, being generally flat. No major slopes or bluffs are on, or adjacent to, the Project site. The proposed Project is an educational facility that will include landscaped and hardscaped area, and will not contain large amounts of exposed soil. Following the completion of construction, the potential for soil erosion or the loss of topsoil is expected to be extremely low.

Construction of the proposed Project would involve soil disturbance activities, including grading and demolition that will leave soil on the Project site exposed. Common means

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46 California Department of Conservation. 2016. Available at: http://maps.conservation.ca.gov/cgs/informationwarehouse/index.html?map=regulatorymaps, accessed February 9, 2017.

47 Geotechnical Professionals, Inc., *Geotechnical Investigation, Proposed Roosevelt High School, Campus Modifications, 456 S. Mathews Street, Los Angeles, California*, June 14, 2015.

48 Geotechnical Professionals, Inc., *Geotechnical Investigation, Proposed Roosevelt High School, Campus Modifications, 456 S. Mathews Street, Los Angeles, California*, June 14, 2015.

of soil erosion include water, wind, and being tracked off-site by vehicles. These activities could result in soil erosion. However, the proposed Project would be subject to local and state codes and requirements for erosion control and grading during construction, including, but not limited to, grading permits and haul route approval from the City, which include requirements and standards designed to limit potential impacts to acceptable levels. In addition, the proposed Project would be required to comply with standard regulations, including South Coast Air Quality Management District Rule 402, which will reduce construction erosion impacts. Rule 402 requires dust suppression techniques be implemented to prevent dust and soil erosion from creating a nuisance off-site.

Additionally, the Construction General Permit (CGP) issued by the State Water Resources Control Board (SWRCB), effective July 1, 2010, regulates construction activities to minimize water pollution, including sediment. The proposed Project would be subject to National Pollution Discharge Elimination System (NPDES) permitting regulations, including the development and implementation of a Storm Water Pollution Prevention Plan (SWPPP). Construction contractors would be required to prepare and implement a SWPPP and associated best management practices (BMPs). Adherence to the BMPs in the SWPPP would reduce, prevent, or minimize soil erosion from project related grading and construction activities. In addition, the proposed Project would be subject to **SC-HWQ-2,** seen above.

Therefore, soil erosion impacts from grading and construction activities associated with construction and operation of the proposed Project would not occur and soil erosion impacts would be less than significant. No further analysis is required in the EIR.

c) **Less than Significant Impact.** Potential impacts with regard to liquefaction and landslide potential are evaluated, above. Building improvements founded on collapsible soils may be damaged by sudden and often induced settlement when these soils are saturated after construction. Collapsible soils are typified by low values of dry unit weight and natural water content. The amount of settlement depends on the applied vertical stresses and the extent of wetting and available water. Published geologic maps[49] of the area indicated that the site is underlain by alluvial fans consisting of loam, clay loam, and clay. This soil

49 Geotechnical Professionals, Inc., *Geotechnical Investigation, Proposed Roosevelt High School, Campus Modifications, 456 S. Mathews Street, Los Angeles, California*, June 14, 2015.

is more resistant to liquefaction and as a result, the Project site is not in a liquefaction area. With proper design and construction in accordance with current engineering practices, the impacts would be less than significant and no further analysis is necessary.

d) **Less than Significant Impact.** Expansive soils shrink, or swell, as the moisture content decreases or increases; the shrinking or swelling can shift, crack, or break structures built on such soils. Published geologic maps of the area indicated that the site is underlain by Holocene age alluvium consisting of poorly consolidated silty sand, sandy silt, sandy clay, and clay.[50] As stated above in S**ection VI (c),** all potential impact from soil quality would be reduced through compliance with proper design and construction practices. Therefore, impacts would be less than significant, and no further analysis is needed in the EIR.

e) **No Impact.** The existing school is connected to the existing sewer. No septic tank use is proposed as part of the Project. No impact regarding the ability of the soil to support septic tanks will occur from the proposed Project.

50 Geotechnical Professionals, Inc., *Geotechnical Investigation, Proposed Roosevelt High School, Campus Modifications, 456 S. Mathews Street, Los Angeles, California*, June 14, 2015.

	Issues:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
VII.	**GREENHOUSE GAS EMISSIONS. Would the project:**				
a)	Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐
b)	Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☒	☐

The Program EIR included SCs for minimizing impacts related to greenhouse gas emissions to the existing environment in areas where future projects would be implemented under the SUP. Applicable SCs related to greenhouse gas emissions associated with the proposed Project are provided below.

SC-USS-1 School Design Guide

Construction and demolition waste shall be recycled to the maximum extent feasible. LAUSD has established a minimum non-hazardous construction and demolition debris recycling requirement of 75% by weight as defined in Specifications 01340, Construction & Demolition Waste Management.

Guide Specifications 2004 – Section 01340, Construction & Demolition Waste Management.

This section of the LAUSD Specifications includes procedures for preparation and implementation, including reporting and documentation, of a Waste Management Plan for reusing, recycling, salvage or disposal of non-hazardous waste materials generated during demolition and/or new construction (Construction & Demolition (C&D) Waste), to foster material recovery and re-use

and to minimize disposal in landfills. Requires the collection and separation of all C&D waste materials generated on-site, reuse or recycling on-site, transportation to approved recyclers or reuse organizations, or transportation to legally designated landfills, for the purpose of recycling salvaging and/or reusing a minimum of 75% of the C&D waste generated.

SC-GHG-1 During school operation, LAUSD shall perform regular preventative maintenance on pumps, valves, piping, and tanks to minimize water loss.

SC-GHG-2 LAUSD shall utilize automatic sprinkler set to irrigate landscaping during the early morning hours to reduce water loss from evaporation.

SC-GHG-3 LAUSD shall reset automatic sprinkler timers to water less cooler months and rainy season.

SC-GHG-5 LAUSD shall ensure that the time dependent valued energy of the proposed project design is at least 10 percent, with a goal 20 percent less than a standard design that is in minimum compliance with the California Title 24, Part 6 energy efficiency standards that are in force at the time the project is submitted to the Division of the State Architect.

Background

Greenhouse gas (GHG) emissions refer to a group of emissions that are believed to affect global climate conditions. These gases trap heat in the atmosphere and the major concern is that increases in GHG emissions are causing global climate change. Global climate change is a change in the average weather on earth that can be measured by wind patterns, storms, precipitation and temperature. Although there is disagreement as to the speed of global warming and the extent of the impacts attributable to human activities, most agree that there is a direct link between increased emission of GHGs and long-term global temperature. What GHGs have in common is that they allow sunlight to enter the atmosphere, but trap a portion of the outward-bound infrared radiation and warm up the air. The process is similar to the effect a greenhouse has in raising the internal temperature, hence the name greenhouse gases. Both natural processes and human activities emit GHGs. The accumulation of GHGs in the atmosphere regulates the earth's temperature; however, it is the scientific consensus that emissions from human activities such as electricity generation and motor vehicle operations have elevated the concentration of GHGs in the atmosphere. This accumulation of GHGs has

contributed to an increase in the temperature of the earth's atmosphere and contributed to global climate change.

The principal GHGs are carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), sulfur hexafluoride (SF_6), perfluorocarbons (PFCs), hydrofluorocarbons (HFCs), and water vapor (H_2O). CO_2 is the reference gas for climate change because it is the predominant greenhouse gas emitted. To account for the varying warming potential of different GHGs, GHG emissions are often quantified and reported as CO_2 equivalents (CO_2e).

According to the 2010 California Climate Action Team (CAT) Report, temperature increases arising from increased GHG emissions potentially could result in a variety of impacts to the people, economy, and environment of California associated with a projected increase in extreme conditions, with the severity of the impacts depending upon actual future emissions of GHGs and associated warming.

In 2005, in recognition of California's vulnerability to the effects of climate change, Governor Schwarzenegger established Executive Order S-3-05, which sets forth a series of target dates by which statewide emissions of GHG would be progressively reduced, as follows:

- By 2010, reduce GHG emissions to 2000 levels;
- By 2020, reduce GHG emissions to 1990 levels; and
- By 2050, reduce GHG emissions to 80 percent below 1990 levels.

In response to Executive Order S-3-05, the Secretary of Cal/EPA created the CAT, which, in March 2006, published the first CAT Report (2006 CAT Report). The 2006 CAT Report identified a recommended list of strategies that the State could pursue to reduce climate change GHG emissions. These are strategies that could be implemented by various State agencies to ensure that the Governor's targets are met and can be met with existing authority of the State agencies.

In 2006, California passed the California Global Warming Solutions Act of 2006 (Assembly Bill No. 32; California Health and Safety Code Division 25.5, Sections 38500, et seq., or AB 32), which requires the California Air Resources Board (ARB) to design and implement emission limits, regulations, and other measures, such that feasible and cost-effective statewide GHG emissions are reduced to 1990 levels by 2020.

As a central requirement of AB 32, the ARB was assigned the task of developing a Scoping Plan that outlines the State's strategy to achieve the 2020 GHG emissions limit. This Scoping Plan, which was developed by the ARB in coordination with the CAT, was published in October 2008. The Scoping Plan proposed a comprehensive set of actions designed to reduce overall GHG emissions in California, improve the environment, reduce the State's dependence on oil, diversify the State's energy sources, save energy, create new jobs, and enhance public health. An important component of the plan is a cap-and-trade program covering 85 percent of the State's emissions. Additional key recommendations of the Scoping Plan include strategies to enhance and expand proven cost-saving energy efficiency programs; implementation of California's clean cars standards; increases in the amount of clean and renewable energy used to power the State; and implementation of a low-carbon fuel standard that will make the fuels used in the State cleaner. Furthermore, the Scoping Plan also proposes full deployment of the California Solar Initiative, high-speed rail, water-related energy efficiency measures, and a range of regulations to reduce emissions from trucks and from ships docked in California ports. The Proposed Scoping Plan was approved by the ARB on December 11, 2008.

Because climate change is already affecting California and current emissions will continue to drive climate change in the coming decades, the need to adapt to the impacts of climate change is recognized by the State of California. The 2009 California Climate Adaptation Strategy Discussion Draft (the Strategy) begins what will be an ongoing process of adaptation, as directed by Governor Schwarzenegger's Executive Order S-13-08. The goals of the strategy are to analyze risks and vulnerabilities and identify strategies to reduce the risks. Once the strategies are identified and prioritized, government resources will be identified. Finally, the strategy includes identifying research needs and educating the public.

Climate change risks are evaluated using two distinct approaches: (1) projecting the amount of climate change that may occur using computer-based global climate models; and (2) assessing the natural or human system's ability to cope with and adapt to change by examining historical experience with climate variability, and extrapolating this to understand how the systems may respond to the additional impact of climate change. The major anticipated climate changes expected in the State of California include increases in temperature, decreases in precipitation, particularly as snowfall, and increases in sea level, as discussed above. These gradual changes will also lead to an increasing number of extreme events, such as heat waves, wildfires, droughts, and floods. This would impact public health, ocean and coast resources, water supply, agriculture, biodiversity, and the transportation and energy infrastructures.

Key preliminary adaptation recommendations included in the Strategy are as follows:

- Appointment of a Climate Adaptation Advisory Panel;
- Improved water management in anticipation of reduced water supplies, including a 20 percent reduction in per capita water use by 2020;
- Consideration of project alternatives that avoid significant new development in areas that cannot be adequately protected from flooding due to climate change;
- Preparation of agency-specific adaptation plans, guidance or criteria by September 2010;
- Consideration of climate change impacts for all significant State projects;
- Assessment of climate change impacts on emergency preparedness;
- Identification of key habitats and development of plans to minimize adverse effects from climate change;
- Development of guidance by the California Department of Public Health by September 2010 for use by local health departments to assess adaptation strategies;
- Amendment of Plans to assess climate change impacts and develop local risk reduction strategies by communities with General Plans and Local Coastal Plans; and
- Inclusion of climate change impact information into fire program planning by State firefighting agencies.

In August 2007, the Legislature adopted Senate Bill 97 (SB 97), which required the Governor's Office of Planning and Research (OPR) to prepare and transmit new CEQA guidelines for the mitigation of GHG emissions or the effects of GHG emissions to the Natural Resources Agency by July 1, 2009. On April 13, 2009, OPR submitted to the Secretary for Natural Resources its proposed amendments to the state CEQA Guidelines for GHGs, as required by Senate Bill 97. These proposed CEQA Guideline amendments provided guidance to public agencies regarding the analysis and mitigation of the effects of greenhouse gas emissions in draft CEQA documents. On December 31, 2009, the Natural Resources Agency transmitted the Adopted Amendments and the entire rule-making file to the Office of Administrative Law (OAL). On February 16, 2010, OAL approved the Adopted Amendments and filed them with the Secretary of State for inclusion in the California Code of Regulations. The Adopted Amendments became effective on March 18, 2010.

In the CEQA Guideline Amendments, a threshold of significance for GHG emissions was not specified, nor does it prescribe assessment methodologies or specific mitigation measures. Instead, the amendments encourage lead agencies to consider many factors in performing a CEQA analysis and rely on the lead agencies to make their own significance threshold determinations based upon substantial evidence. The CEQA Amendments also encourage public agencies to make use of programmatic mitigation plans and programs from which to tier when they perform individual project analyses.

There are several unique challenges to analyzing greenhouse gas emissions and climate change under CEQA, largely because of climate change's "global" nature. Typical CEQA analyses address local actions that have local – or, at most, regional – impacts, whereas climate change presents the considerable challenge of analyzing the relationship between local activities and the resulting potential, if any, for global environmental impacts. Most environmental analyses examine the "project-specific" impacts that a particular project is likely to generate. With regard to global warming, however, it is generally accepted that while the magnitude of global warming effects may be substantial, the GHG emissions from a single general development project would have no noticeable effect on global climate.

For GHG emissions and global warming, there is not, at this time, one established, universally agreed-upon "threshold of significance" by which to measure an impact. While the ARB published some draft thresholds several years ago, they were never adopted and the ARB recommended that local air districts and lead agencies adopt their own thresholds for GHG impacts.

The SCAQMD has published draft thresholds using a tiered approach. The draft approach as most recently updated in September 2010 is as follows:[51]

- **Tier 1**: Is the project exempt from further analysis under existing statutory or categorical exemptions? If yes, there is a presumption of less than significant impacts with respect to climate change.

- **Tier 2**: Is the project's GHG emission within the GHG budgets in an approved regional plan? (The plan must be consistent with *State CEQA Guidelines* §§15064(h)(3), 15125(d), or

51 South Coast Air Quality Management District, "Greenhouse Gases (GHG) CEQA Significance Thresholds Working Group Meeting #6". 2008. http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/ghg-significance-thresholds, accessed October 4, 2017.

15152(s).) If yes, there is a presumption of less than significant impacts with respect to climate change.

- **Tier 3**: Is the project's incremental increase in GHG emissions below or mitigated to less than the significance screening level (10,000 metric tons of carbon dioxide equivalent [$MTCO_2e$] per year for industrial projects; 3,500 $MTCO_2e$ for residential projects; 1,400 $MTCO_2e$ for commercial projects; 3,000 $MTCO_2e$ for mixed-use or all land use projects)? If yes, there is a presumption of less than significant impacts with respect to climate change.

- **Tier 4**: Does the project meet one of the following performance standards? If yes, there is a presumption of less than significant impacts with respect to climate change.

    - Option #1: Achieve some percentage reduction in GHG emissions from a base case scenario, including land use sector reductions from AB 32.

    - Option #2: For individual projects, achieve a project-level efficiency target of 4.8 MTCO2e per service population by 2020 or a target of 3.0 MTCO2e per service population by 2035. For plans, achieve a plan-level efficiency target of 6.6 MTCO2e per service population by 2020 or a target of 4.1 MTCO2e per service population by 2035.

- **Tier 5**: Does the project obtain offsets alone or in combination with the above to achieve the target significance screening level (offsets provided for 30-year project life, unless the project life is limited by permit, lease, or other legally binding conditions)? If yes, there is a presumption of less than significant impacts with respect to climate change. Otherwise, the project is significant.

The SCAQMD has not announced when or if, in light of recent CEQA case law, staff is expecting to present a finalized version of these thresholds to the Governing Board for consideration. The SCAQMD has adopted Rules 2700, 2701, and 2702 that address GHG reductions; however, these rules are currently applicable to boilers and process heaters, forestry, and manure management projects.

The Tier 3 thresholds are the most applicable to this Project. Tier 3 requires that a project's incremental increase in GHG emissions should be below or mitigated to less than the significance screening level. Proposed projects that do not exceed the thresholds would not be

considered to have a significant impact on the attainment of air quality goals and would, therefore, be considered consistent with the current air quality plan.

Responses:

a) **Less than Significant Impact.** The proposed Project would not generate direct GHG emissions from new vehicle trips and onsite area sources as trips currently exist and no change in the number of seats is proposed. Additionally, no indirect emissions from off-site energy production required for on-site activities, water use, and waste disposal would be generated. The Program EIR estimated GHG emissions for Central Los Angeles High School No. 12. The analysis of Central Los Angeles High School No. 12 includes emissions from construction and operation as it was a new school. Central Los Angeles High School No. 12 was estimated to generate emissions from both the new buildings and new vehicle trips. Because there is no increase in the operational component of the proposed Project (i.e., no increase in vehicle trips), GHG emissions would be lower than those analyzed for Central Los Angeles High School No. 12. Further, because the square footage of the proposed Project is less than the square footage of the existing campus, combined with the fact that new facilities as part of the proposed Project would be required to comply with **SC-USS-1, SC-GHG-1, SC-GHG-2, SC-GHG-3**, and **SC-GHG-5**[52] there would be a slight net decrease in operational GHG emissions related to energy, waste, and water, as compared to existing conditions. **Table 2, GHG Emissions of an LAUSD School**, shows the total emissions generated from Central Los Angeles High School No. 12.

52 LAUSD Standard Conditions of Approval, adopted by the Board of Education in September 2015 as part of the 2015 School Upgrade Program EIR, as Appendix E, available online at http://achieve.lausd.net/ceqa

Table 2
GHG Emissions of an LAUSD School

Central Los Angeles High School No. 12[1]		
Source	**$MTCO_{2e}$/Year**	**Percent of Project Total**
Area	0	0%
Energy	241	17%
Transportation	938	64%
Waste	227	16%
Water	39	1%
Amortized Construction Emissions[2]	30	2%
Total	**1,475**	**100%**
Proposed SCAQMD Bright-Line Screening Threshold	3,000 $MTCO_{2e}$	NA
Exceeds Proposed Bright-Line Screening Threshold?	**No**	**NA**

Source: LAUSD School Upgrade Program EIR, June 2014, Table 5.7-4
Notes: The sum of the emissions does not equal 100 percent of the total emissions due to rounding.
[1] = Based on 55,361 building square feet of school facilities, capacity of 500 high school students, and 855 average daily trips generated
[2] = As construction emissions are short-term, they are amortized over 30 years per SCAQMD methodology[53]

As shown in **Table 2**, development of a new school would not exceed the proposed SCAQMD significance thresholds of 3,000 MTCO2e. As previously discussed, the proposed Project would involve the demolition of existing classrooms (262,103 square feet), and construction of the same number of classrooms, but at a lesser square footage (226,773 square feet). Additionally, the number of students in attendance would not change. Therefore, GHG emissions associated with the proposed Project are limited to amortized construction emissions, as there would be a net decrease in operational GHG emissions under the proposed Project. Therefore, total CO_{2e} emissions would be lower than the 1,475 MTCO2e for Central Los Angeles High School No. 12 provided in **Table 2** and would be below the 3,000 MRCO2e threshold.

It is important to note that no individual project is large enough to single-handedly result in increased concentrations of GHG globally. GHGs are not necessarily confined

53 South Coast Air Quality Management District, 2020 GHG CEQA Significance Thresholds Working Group Meeting 15

in a specific air basin, and are usually dispersed into the atmosphere. As such, it is important to analyze impacts cumulatively and not by a project-by-project basis. As previously discussed, the proposed Project would not increase capacity, and, therefore, would not contribute cumulatively to emissions of GHGs.

Therefore, the cumulative contribution to GHG emissions from the Project would be less than significant. No further analysis is required.

b) **Less than Significant Impact.** In response to concern regarding GHGs and global climate change, the State passed Assembly Bill 32 (AB 32) also known as the California Global Warming Solutions Act of 2006. AB 32 (Health and Safety Code Section 38500 et. Seq.) mandated a reduction in the state's GHG levels. AB 32 is the basis for reduction of GHG emissions in California. Local agencies such as the SCAQMD base their planning and regulations on the requirements included in AB 32, which include a reduction of GHG emissions to 1990 rates by 2020. The SCAQMD adopted the GHG significance thresholds specifically to meet AB 32 requirements within its jurisdiction, and so plans and projects that meet those thresholds can be assumed to meet the requirements of AB 32.

Senate Bill 32 (SB 32) was signed into law on August 31, 2016. This bill requires CARB to adopt rules and regulations to ensure that statewide GHG emissions are reduced to 40 percent below the 1990 level by 2030.

The Project site is within the jurisdiction of the SCAQMD. As the net emissions associated with the proposed Project would be well below the SCAQMD thresholds, the proposed Project would not conflict with plans, policies, or regulations for reducing GHG emissions. As a result, the proposed Project would not conflict with the State's ability to meet its GHG goals under AB 32 and SB 32.

In addition, Senate Bill 375 (SB 375) passed by the State of California in 2009, requires metropolitan regions to adopt transportation plans and sustainable communities strategies that reduce vehicle miles travelled. In accordance with SB 375, SCAG prepared and adopted the 2016 RTP/SCS with the primary goal of enhancing sustainability by increasing multi-modal transportation options, and identifying land use strategies that focus new housing and job growth in areas served by public transit. Additionally, the 2016 RTP/SCS reaffirms the 2008 Advisory Land Use Policies that were incorporated

into the 2012 RTP/SCS. The proposed Project is in use as a school and would upgrade the existing facilities to modern energy efficient standards. The proposed Project would not conflict with any plans, policies, or regulations adopted for the purpose of reducing GHG emissions.

Impacts would be less than significant and no further analysis is required.

	Issues:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
VIII.	**HAZARDS AND HAZARDOUS MATERIALS. Would the project:**				
a)	Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☒	☐	☐	☐
b)	Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☒	☐	☐	☐
c)	Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☒	☐	☐	☐
d)	Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☒	☐

	Issues:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
e)	For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒
f)	For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒
g)	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐
h)	Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	☐	☐	☒	☐

	Issues:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
i)	Be located on a site that is (a) a current of former hazardous waste disposal site or solid waste disposal site and, if so, has the waste been removed; (b) a hazardous substance release site identified by the State Department of Health Services in a current list adopted pursuant to Section 25356 of Division 20 of the Health and Safety Code; or (c) a site that contains one or more pipelines, situated underground or above ground, which carries materials or hazardous wastes, unless the pipeline is a natural gas line which is used only to supply natural gas to that school or neighborhood?	☐	☐	☒	☐
j)	Be located on a site where the property line less than the following distance from the edge of respective power line easement: • 100 feet of a 50-133 kV line, • 150 feet of a 220-230 kV line, or • 350 feet of a 500-550 kV line?	☐	☐	☒	☐

	Issues:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
k)	Be located on a site that is within 1,500 feet of a railroad track easement?	☐	☐	☐	☒
l)	Be located on a site that is adjacent or near to a major arterial roadway or freeway that may pose a safety hazard?	☐	☐	☒	☐
m)	Be located on a site that is near a reservoir, water storage tanks or high-pressure water lines?	☐	☐	☐	☒
n)	Be located within 1,500 feet of a pipeline that may pose a safety hazard?	☒	☐	☐	☐
o)	Be located on a site that does not have a proportionate length to width ratio to accommodate the building layout, parking and play fields that can be safely supervised?	☐	☐	☐	☒
p)	Be located on a site where the existing or proposed zoning of the surrounding properties is incompatible with schools and may pose a health or safety risk to students?	☐	☐	☐	☒
q)	Be located on a site that contains, or is near, propane tanks that can pose a safety hazard?	☐	☐	☒	☐

	Issues:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
r)	Be located on a site with a traffic pattern for school buses that can pose a safety hazard?	☐	☐	☒	☐
s)	Be located on a site that is within 2,000 feet of a significant disposal of hazardous waste?	☐	☐	☒	☐

The Program EIR included SCs for minimizing impacts to the existing environment of hazards and hazardous materials where future projects would be implemented under the SUP. Applicable SCs related to hazards and hazardous materials associated with the proposed Project are provided below.

SC-T-4: LAUSD shall require its contractors to submit a construction worksite traffic control plan to the LADOT for review prior to construction. The plan will show the location of any haul routes, hours of operation, protective devices, warning signs, and access to abutting properties LAUSD shall encourage its contractor to limit construction-related trucks to off-peak commute periods. As required by Caltrans, applicable transportation related safety measures shall be implemented during construction.

Responses:

a) Potentially Significant Impact.

Construction

A significant impact would occur if the proposed Project would create a significant hazard through the routine transfer, use, or disposal of hazardous materials. Construction of the proposed Project would involve the use of potentially hazardous materials, including vehicle fuels, oils, and transmission fluids. However, the transport, use, and disposal of construction-related hazardous materials would occur in conformance with all applicable local, state, and federal regulations governing such activities.

Approximately 7,019 cubic yards (cy) of soil containing COCs; specifically, arsenic, lead, petroleum hydrocarbons, at levels that exceed the District's cleanup goals would be removed from areas located throughout the Project site during construction[54]. Impacts related to the removal of this contaminated soil during construction would be potentially significant, and therefore, this topic will be analyzed further in an EIR.

Operation

The proposed Project is an educational facility and would not involve the routine transport, storage, production, use, or disposal of hazardous materials or use of pressurized tanks during operation. Small amounts of pesticides may be stored for the maintenance of landscaped areas and limited quantities of custodial and maintenance products, including commercial cleansers, lubricants, and paints would also be stored on-site.

The design and operation of the proposed Project would satisfy all legal requirements by providing for and maintaining appropriate storage areas for hazardous materials, installing or affixing appropriate warning signs and labels, using commercial services that specialize in the recycling of used hazardous substances (i.e., collecting hazardous materials on a regular basis to minimize the quantity stored on campus), installing emergency wash areas for flushing irritating substances from eyes and exposed skin areas should such contact occur, providing well-ventilated areas in which to use paints and solvents, and maintaining adult supervision during student's use of hazardous materials. All hazardous materials would be contained, stored, and used in accordance with manufacturers' instructions and handled in compliance with applicable standards and regulations. Any associated risk would be adequately reduced to a less than significant level through compliance with these standards and regulations, and would not pose significant hazards to the public or the environment. Therefore, operational impacts related to the transport, use, or disposal of hazardous materials use would be less than significant. No further analysis is required.

b) **Potentially Significant Impact.** A significant impact would occur if the proposed Project created a significant hazard to the public, or environment, due to a reasonably foreseeable release of hazardous materials. Construction of the proposed Project would

54 TRC Solutions. June 27, 2017. Roosevelt High School: Revised Summary of Proposed Excavation Areas.

involve the use of potentially hazardous materials, including vehicle fuels, oils, and transmission fluids.

Construction

As discussed in **Threshold VIII.a** above, approximately 7,019 cy of contaminated soil on the Project site would be removed during construction. The activities related to construction would potentially lead to the release of hazardous materials Therefore, this issue will be further addressed in the EIR.

Operation

The proposed Project would not create a hazard through upset or accident conditions involving hazardous materials. As discussed in **Threshold VIII.a** above, the use of hazardous materials and substances at school facilities during operations would be minimal and in small quantities. Additionally, all materials and substances would be subject to applicable health and safety requirements stipulated by LAUSD OEHS including Chemical Hygiene, Safe School Inspections, and Environmental Compliance Programs.[55] This would include affixing appropriate warning signs and labels, installing emergency wash areas, providing well-ventilated areas and special plumbing, and maintaining adult supervision. Compliance with existing regulations would result in no reasonably foreseeable upset or accident conditions that would create a significant hazard to the public due to the release of hazardous materials. Potential operation impacts related to hazardous materials would be less than significant. No further analysis is required.

c) **Potentially Significant Impact.** There are six schools within a quarter-mile of the proposed Project site, including the Project site itself. Hollenbeck Middle School is directly across E. 6th Street, approximately 75 feet south of the Project site. Further south, approximately 1,200 feet southwest of Roosevelt HS is the SEA Charter School. To the east and northeast are the Our Lady of Talpa School (approximately 1,160 ft.) and First Street Elementary School (approximately 1,240 feet), respectively. Breed Street Elementary School, is about 1,250 feet northwest of the site.

55 Refer to OEHS Chemical Evaluation and Chemical Safety Coordinator programs online at http://achieve.lausd.net/Page/2562

Construction

As discussed in **Threshold VIII.a** above, construction of the proposed Project would involve the removal of approximately 7,019 cy of contaminated soil on the Project site. There is the potential for accidental release of contaminants during construction, or during demolition of the remaining buildings on the Project site. Therefore, this issue will be further addressed in the EIR.

Operation

As the proposed Project is a school, impacts could occur if hazardous materials were released on the Project site during operation. Operation of the proposed Project may require a limited quantity of hazardous materials (e.g., for landscaping, custodial, and educational purposes) be stored on the Project site.

Examples of such materials could include, but are not limited to, cleaning solvents, pesticides and herbicides for landscaping, and painting supplies. All potentially hazardous materials transported, stored, or used on site for daily upkeep will be contained, stored, and used in accordance with manufacturers' instructions and handled in compliance with applicable regulations set forth by LAUSD Office of Environmental Health and Safety (OEHS) including Chemical Hygiene, Safe School Inspections, and Environmental Compliance Programs.[56]

Further, procedures for the systematic evacuation of students from classrooms and other school facilities are established and practiced by the LAUSD at all schools. Each school's Safe School Plan describes procedures to be followed in the event of a biological or chemical release.

Compliance with applicable laws, regulations, and standard LAUSD policies and practices during Project operation would ensure that impacts associated with upset or accidental conditions which could cause a release of hazardous materials are less than significant, and no further analysis is necessary.

56 Refer to OEHS Chemical Evaluation and Chemical Safety Coordinator programs online at http://achieve.lausd.net/Page/2562

d) **Less than Significant Impact.** The proposed Project is not located on a site that is included on a list of hazardous materials pursuant to Government Code 65962.5, which is the Hazardous Waste and Substances (Cortese) List.[57] A review of the Cortese List compiled on the Department of Toxic Substances Control, the State Water Board, and CAL EPA showed that the site is not identified on any of these database lists.[58] The Project site is currently in use as a school and has been in use as a school since 1923. Potential impacts would be less than significant, and no further analysis is required in the EIR.

e-f) **No Impact.** The proposed Project would not result in safety hazards regarding airports and airplanes. The Project site is not located within an airport safety zone. The nearest airports are the El Monte Airport, 11.06 miles to the northeast and the Hawthorne Muni Airport, approximately 11.5 miles southwest of Roosevelt HS. There is also the Jay Stephen Hooper Memorial Heliport 1.5 miles northwest of the Project site. No impact would occur from the proposed Project and no further analysis is needed.

g) **Less than Significant Impact.** The Project is not anticipated to interfere with an emergency response plan or evacuation plan. As stated in the Program EIR, district schools are required to comply with the California Education Code Sections 32281-32289 dealing with the preparation of "Safe School Plans." These plans help develop an emergency response protocol during an emergency on a District site, including renovation, modification work, and contracted work. As required by **SC-T-4** listed above, a Construction Traffic Plan would be submitted to the City for review and approval.

The Construction Traffic Plan would detail haul routes, potential lane closures and construction hours. Advance notice of the construction timing and phasing will allow the City to appropriately plan for lane closures, etc. Implementation of **SC-T-4** would ensure impacts related to emergency response would be less than significant.

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57 California State Water Resources Control Board. 2015. *GeoTracker*. Available at: https://geotracker.waterboards.ca.gov/map/, accessed February 17, 2017.

58 California Department of Toxic Substances Control. *EnviroStor.* Available at: http://www.envirostor.dtsc.ca.gov/public/search.asp?cmd=search&reporttype=CORTESE&site_type=CSITES,OPEN,FUDS,CLOSE&status=ACT,BKLG,COM&reporttitle=HAZARDOUS+WASTE+AND+SUBSTANCES+SITE+LIST

LAUSD has developed a district-wide Emergency Operation Plan (EOP) that addresses the District's responsibilities in emergencies such as natural disaster, human-caused emergencies, and technological incidents.[59] The EOP provides a framework for coordination of response and recovery efforts within the District in coordination with local, State, and federal agencies. The EOP meets the requirements of Los Angeles County's policies on emergency response and planning and the Standardized Emergency Management System (SEMS) operations area response. Based on LAUSD's standard plans and procedures related to emergency response, impacts to existing emergency response plans and/or evacuation plans/routes would be less than significant and no further analysis in the EIR is necessary.

h) **Less than Significant Impact.** The proposed Project would not expose people or structures to a substantial risk of wildland fires. The Project site is located in a developed, residential area of the City of Los Angeles, and is not within a Very High Fire Hazard Severity Zone.

The Program EIR includes the following Thresholds:

California Department of Education Thresholds

Title 5 of the California Code of Regulation Section 14010 incorporates health and safety factors provided in the California Department of Education's (CDE) School Site Selection and Approval Guide. In combination with the thresholds provided in the State CEQA Guidelines, these thresholds (**Thresholds VIII.i** through **VIII.s**, below) ensure that schools provide a safe learning environment for students. It is important to note that these following thresholds are tied to site acquisition. As LAUSD already owns the Project site, CDE thresholds will be analyzed on whether the proposed Project would

59 LAUSD. 2010. *Emergency Operations Plan*. April.

exacerbate existing conditions in accordance with the ruling in CBIA v. BAAQMD.[60] The following discussions provide analysis of the CDE school site safety thresholds.

i) **Less than Significant Impact.** The State Department of Health Services has not identified the Project site as a hazardous substance release site, nor does the site contain one or more pipelines which transport hazardous waste.[61] There is such a pipeline directly north of the site, running beneath E. 4th St. before running along S. Fickett St. The Project site has not been used as a hazardous waste disposal site. Impacts related to being located on a hazardous materials disposal site would be less than significant. No further analysis is required in the EIR.

j) **Less than Significant Impact.** The Project site is not expected to create any new significant safety hazards or exacerbate any existing safety hazards to students from high voltage powerlines or electromagnetic fields within 350 feet of the Project site. No high-voltage power lines were observed within 350 feet. No impact would occur from the proposed Project, and no further analysis is needed in the EIR.

k) **No Impact.** The Project site is not located within 1,500 feet of a railroad track easement. Therefore, a Rail Safety Study is not required pursuant to SC-HAZ-3, which requires that new classrooms or outdoor play areas within 1,500 feet of a railroad track easement must be evaluated to determine if there would be an unreasonable safety hazard to students and staff at the school. No impact would occur from the proposed Project and no further analysis is required.

l) **Less than Significant Impact.** The Project site is located in an urban area. S. Soto St. and E. 4th St. are arterial roadways, located less than 500 feet west and immediately north of the site, respectively. Although the Project site is located near major highways and arterial roadways, the proximity of such roads would not pose an immediate safety

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60 *California Building Industry Association v. Bay Area Air Quality Management District (Aug. 12, 2016) 2 Cal.App.5th 1057* decided that CEQA does not apply to the impacts of the environment on a project, with some specific exceptions. One circumstances that sensitive receptors thresholds can be valid would be to school projects stating, "Given the confluence of purpose between measuring environmental significance as contemplated by the Receptor Thresholds, and measuring risks to human health as contemplated by the CEQA requirements for siting a new school, the levels of air pollution described by the Receptor Thresholds could be used by a school district to assess the health risk to students and employees at a proposed school site."

61 National Pipeline Mapping System. 2017. *NPMS Public Map Viewer.* Available at: https://www.npms.phmsa.dot.gov/ PublicViewer/, accessed February 21, 2017.

hazard to students and staff accessing the Project site. No further analysis is required in the EIR. However, a traffic study that includes analysis of existing roadway hazards and pedestrian safety issues has been prepared for the proposed Project, and is further discussed below in Section XIII Pedestrian Safety.

m) **No Impact.** Pursuant to CCR, Title 5, Section 14010(h), a school site shall not be located near an aboveground water tank that can pose a safety hazard, as determined by a risk analysis study conducted by a competent professional. The CDE *School Site Selection and Approval Guide* (2000) extends the regulatory protection for hazardous substance pipelines to high-pressure water lines within 1,500 feet of a school site.

No known infrastructure, including water storage tanks, reservoirs, and/or high-pressure water lines are located near the Project site. Therefore, no impact would occur from the proposed Project and no further analysis is necessary in the EIR.

n) **Potentially Significant Impact.** Pursuant to CEC Section 17213(a)(3), a school district shall not approve a Project involving the acquisition of a school site that contains one or more aboveground or underground pipelines that carry hazardous substances, acutely hazardous materials, or hazardous wastes, unless the pipeline is a natural gas line that is used only to supply natural gas to that school or neighborhood. Under CCR, Title 5, Section 14010(h) the school site shall not be located near a fuel storage tank or within 1,500 feet from the easement of an aboveground or underground pipeline that can pose a safety hazard, as determined by a risk analysis study conducted by a competent professional, which may include certification from a local public utility commission. In addition, LAUSD has guidelines for Pipeline Safety Hazard Assessments for existing schools located within 1,500 feet of high pressure natural gas pipelines.[62]

No pipelines are located on the Project site. A gas transmission line owned by Sempra Energy is located adjacent to the northeast along 4th Street and diverts further north to South Fickett Street. According to information from the Sempra Energy website, this pipeline is generally equipped with a larger diameter and operates at pressures above 200 psi. This pipeline transports gas from supply points to the gas transmission system.[63]

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62 LAUSD Office of Environmental Health and Safety. *User Manual: Pipeline Safety Hazard Assessment.* March 2005, with updates.

63 Converse Consultants, *Phase I Environmental Site Assessment Report, Theodore Roosevelt High School, 456 South Mathews Street, Los Angeles, California 90033*, August, 30, 2016.

The Project site has been in use as a school since 1923, very likely well before the gas line was put in place. The renovation of the existing school site would not expose new students to an existing hazard, as there is no change in student population proposed. However, due to its proximity to the Roosevelt HS, this issue will be further addressed in the EIR.

o) **No Impact.** The 22.7-acre Project site is rectangular in shape. The Project site is not unusually shaped and has a sufficient length to width ratio that is consistent with CDE standards for school sites, which state that the length-to-width should not exceed 2:1. As illustrated in the Project description, the proposed structures, parking, and play areas could be accommodated within the Project site. Therefore, no impact would occur from the proposed Project and no further analysis is necessary in the EIR.

p) **No Impact.** The Project site is located within a primarily residential neighborhood in the community of Boyle Heights. The parcel is currently zoned PF. As such, no change would occur to land use and the proposed Project would be sited on an existing school property. Therefore, no adverse impacts to student health or safety would occur as a result of surrounding development, and no further analysis is necessary in the EIR.

q) **Less than Significant Impact.** Although no propane tanks are known to be located on the Project site, propane tanks could be present in home dwellings, immediately adjacent to the Project site. Rules and regulations pertaining to the storage, transportation, and use of propane would ensure that all propane tanks would not pose a safety hazard to individuals on the Project site. Impacts would be less than significant, and no further analysis is required.

r) **Less than Significant Impact.** Operation of the proposed Project would result in the same vehicle, pedestrian, bicycle, school bus, and public transit trips as Roosevelt HS generates currently, as facilities will only be renewed and replaced and no addition of new students is anticipated. Project related construction activities would only temporarily increase vehicle trips on nearby roadways.

Individual projects would include the use of standard design and engineering practices, such as standard driveway widths and turning radii and provision of adequate line of sight to avoid design elements that could result in hazards. Implementation of LAUSD OEHS CEQA Specification Manual, Appendix C, Traffic and Pedestrian Safety

Requirements for New Schools and the School Design Guide, require that bus loading areas do not overlap with car loading areas, which would reduce the potential for conflicts between cars and buses arriving and departing, especially during peak periods.

Under the Design Guide, Section 2.3 LAUSD will:

- Ensure adequate and safe access for students, staff and visitors walking, entering and circulating on the campus. Vehicle traffic patterns shall not interfere with major pedestrian traffic patterns. Foot traffic shall not pass through entrance driveways.
- Provide safe and clearly indicated student pick-up and drop-off provisions by car and bus.
- Delivery and utility vehicles shall have direct access from the street without crossing playgrounds or fields.

As such, implementation of standard LAUSD conditions regarding pick-up and drop-off operations would reduce potential safety hazards regarding buses. Impacts would be less than significant, and no further analysis is necessary.

s) **Less than Significant Impact.** The nearest hazardous waste disposal site is approximately 1.6 miles southwest of the site at the S.A.F.E. Center location on Washington Boulevard.[64] No known hazardous waste sites or facilities that dispose of significant quantities of hazardous materials are known to exist within 2,000 feet as the Project site is predominantly surrounded by residential uses. Further, a review of the Cortese List compiled on the Department of Toxic Substances Control, the State Water Board, and CAL EPA showed that the site is not located near any sites identified on any of these database lists.[65] Impacts would be less than significant, and no further analysis is necessary.

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64 City of Los Angeles Sanitation (LASAN); https://www.lacitysan.org/san/faces/wcnav_externalId/s-lsh-wwd-s-c-hw-safemc;jsessionid=aW_zBsc1_CFbS2iHf1ALHBZqzv7oFPjd4WQV7Gm8Ou4GUmobaixb!-714959136!-1416067313?_afrLoop=1726976593733206&_afrWindowMode=0&_afrWindowId=null#!%40%40%3F_afrWindowId%3Dnull%26_afrLoop%3D1726976593733206%26_afrWindowMode%3D0%26_adf.ctrl-state%3D16uw62lqxx_4, accessed October 3, 2017.

65 California Department of Toxic Substances Control. *EnviroStor.* Available at: http://www.envirostor.dtsc.ca.gov/public/search.asp?cmd=search&reporttype=CORTESE&site_type=CSITES,OPEN,FUDS,CLOSE&status=ACT,BKLG,COM&reporttitle=HAZARDOUS+WASTE+AND+SUBSTANCES+SITE+LIST

	Issues:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
IX.	**HYDROLOGY AND WATER QUALITY. Would the project:**				
a)	Violate any water quality standards or waste discharge requirements?	☐	☐	☒	☐
b)	Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	☐	☐	☒	☐
c)	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on-or off-site?	☐	☐	☒	☐

	Issues:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
d)	Substantially alter the existing drainage pattern of the site or area, including through alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on-or-off-site?	☐	☐	☒	☐
e)	Create or contribute runoff water which would exceed the capacity of existing planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	☐	☐	☒	☐
f)	Otherwise substantially degrade water quality?	☐	☐	☒	☐
g)	Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	☐	☐	☒	☐
h)	Place within a 100-year flood hazard areas structures which would impede or redirect flood flows?	☐	☐	☒	☐

	Issues:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
i)	Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	☐	☐	☒	☐
j)	Expose people or structures to a significant risk of loss, injury or death involving inundation by seiche, tsunami, or mudflow?	☐	☐	☐	☒

The Program EIR included SCs for minimizing impacts to hydrology and water quality of the existing environment in areas where future projects would be implemented under the SUP. Applicable SCs related to hydrology and water quality impacts associated with the proposed Project are provided below.

SC-HWQ-1 Stormwater Technical Manual: This manual establishes design requirements and provides guidance for the cost-effective improvement of water quality in new and significantly redeveloped LAUSD school sites. These guidelines are intended to improve water quality and mitigate potential impacts to the Maximum Extent Practicable (MEP). While these guidelines meet current post-construction SUSMP requirements. The guidelines address the mandated post-construction element of the NPDES program requirements.

SC-HWQ-2 Compliance Checklist for Stormwater Requirements at a Construction Site: This checklist has requirements for compliance with the General Construction Activity Permit and is used by OEHS to evaluate permit compliance. Requirements listed include a SWPPP; BMPs for minimizing stormwater pollution to be specified in a SWPPP; and monitoring stormwater discharges to ensure that sedimentation of downstream waters remains within regulatory limits.

SC-HWQ-3: During construction and operation, miscellaneous requirements include:

- Environmental Training Curriculum
- Hazardous Waste Management Program
- Medical Waste Management Program
- Environmental Compliance Inspections
- Safe School Inspections
- Integrated Pest Management Program
- Fats Oil and Grease Management Program
- Solid Waste Management Program

SC-HWQ-4: The analysis for new projects shall include evaluation of all possible flood hazards as determined by: (1) review of FEMA flood maps; (2) review of flood information provided by local city or county floodplain managers; (3) review of California Department of Water Resources dam safety information; and (4) local drainage analysis by a civil engineer. The flood hazard determination shall include consideration of tsunamis and debris flow. New projects should be located outside of these hazard areas, if practical.

SC-HWQ-5: Where placing the project outside the floodplain is impractical, the school or project structure shall be protected from flooding by containment and control of flood flows (e.g., elevating lowest floors at least one foot above the expected 100-year flood level).

Responses:

a) **Less than Significant Impact.** As part of Section 402 of the Clean Water Act, the United States Environmental Protection Agency (EPA) has established regulations under the National Pollution Discharge Elimination System (NPDES) program to control direct stormwater discharges. In California, the State Water Resources Board (SWRCB) administers the NPDES permitting program and is responsible for developing NPDES permitting requirements. The NPDES program regulates industrial pollutant discharges, which include construction activities. The SWRCB works in coordination with the

Regional Water Quality Control Board (RWQCB) to preserve, protect, enhance, and restore water quality.

A project would normally have a significant impact on surface water quality if discharges associated with a project will create pollution, contamination, or nuisance as defined in Section 13050 of the California Water Code (CWC) or that cause regulatory standards to be violated, as defined in the applicable NPDES stormwater permit or Water Quality Control Plan for the receiving water body. For the purpose of this specific issue, a significant impact may occur if a project will discharge water which does not meet the quality standards of agencies which regulate surface water quality and water discharge into stormwater drainage systems. Significant impacts will also occur if a project does not comply with all applicable regulations with regard to surface water quality as governed by the SWRCB. These regulations include compliance with the Standard Urban Storm Water Mitigation Plan (SUSMP) requirements to reduce potential water quality impacts.

As required under the NPDES, the proposed Project would be responsible for the preparation of a SWPPP and implementation of BMPs to mitigate the effects of erosion and the inherent potential for sedimentation and other pollutants entering the stormwater system. The proposed Project would also be subject to **SC-HWQ-1** and **SC-HWQ-2,** seen above.

Implementation of a SWPPP and compliance with NPDES and City discharge requirements will ensure that the construction of the proposed Project would not violate any water quality standards and discharge requirements, or otherwise substantially degrade water quality. Thus, construction related ground disturbance activities as well as operation activities would not result in significant impacts to water quality. Therefore, water quality impacts would be less than significant and no further analysis is required.

b) **Less than Significant Impact.** A significant impact would occur if the proposed Project substantially depleted groundwater or interfered with groundwater recharge.

The Project site is already the location of Roosevelt HS and the Project entails the demolition and replacement of existing buildings. Build out of the proposed Project would not create substantially more impermeable surfaces such that groundwater

recharge would be affected. In fact, the proposed Project would include new landscaped areas, which could allow more percolation of rainwater to groundwater, as well as opportunities for newer technologies such a permeable pavement, bioswales and similar features.

Furthermore, groundwater levels in the City are maintained through the City and specific recharge basins. The Project site is not identified as an opportunity for groundwater recharge activities.[66] Additionally, no groundwater production wells are located in the vicinity of the project site, nor is the proposed Project growth inducing. Therefore, impacts related to groundwater recharge would be less than significant and no further evaluation is required.

c) **Less than Significant Impact.** A significant impact would occur if the proposed Project substantially alters the drainage pattern of the site or an existing stream or river, so that substantial erosion or siltation would result on- or off-site. No stream or river is present on the Project site. The topography of the Project site is relatively level. Very little change would occur to the drainage pattern on the Project site with development of the proposed Project, as the Project site is already established.

During construction, erosion and siltation from the Project site could increase as a result of soil disturbance from surface grading and limited excavation. Construction-related activities that expose soils to potential mobilization by rainfall/runoff and wind are primarily responsible for sediment releases. Such activities include removal of vegetation, grading and trenching of the site. Environmental factors that affect erosion include topographic, soil, and rainfall characteristics. Unless adequate erosion controls are installed and maintained at the site during construction, significant quantities of sediment may be delivered from the concrete channel and discharged into the Pacific Ocean. As required by **SC-HWQ-2** detailed above, the construction contractor would be required to prepare a SWPPP and implement BMPs to prevent sediment flows from entering storm drainage systems by constructing temporary filter inlets around existing storm drain inlets prior to the stabilization of the construction site area. Specific BMPs will be detailed in the SWPPP. As such, impacts would be less than significant and no further analysis is required.

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66 Environmental Protection Agency (EPA). 2016. *Pacific Southwest Region 9, Designated Sole Source Aquifers.* Available at: https://www3.epa.gov/region9/water/groundwater/ssa.html, accessed February 21, 2017

d) **Less than Significant Impact.** A significant impact would occur if the proposed Project substantially altered the drainage pattern of an existing stream or river so that flooding would result. No streams or rivers exist on the project site.

As required by **SC-HWQ-1** detailed above, an NPDES stormwater permit application shall be submitted and the effluent quality criteria shall be specified in the permit, as determined by the Los Angeles RWQCB based on water guidelines. Monitoring of the outflow from the collection system may be required in the permit to ensure that the requirements and water quality criteria specified by the permit are achieved. The contractor shall use reclaimed water during the construction process, specifically for dust control, soil compaction, and concrete mixing to the extent feasible. In addition, the Project would comply with **SC-HWQ-1** through **SC-HWQ-5** seen above.

Compliance with **SC-HWQ-1** through **SC-HWQ-5** would ensure alteration of existing drainage patterns resulting in flooding would not occur. Impacts would be less than significant and no further analysis is required.

e) **Less than Significant Impact.** A significant impact would occur if runoff water exceeded the capacity of existing or planned storm drain systems serving the Project site. A Project-related significant impact would also occur if the Project would substantially increase the probability that polluted run-off would reach the storm drain system.

There are three general sources of potential short-term construction-related stormwater pollution associated with the proposed Project.

1) The handling, storage, and disposal of construction materials containing pollutants. Generally, routine safety precautions for handling and storing construction materials effectively mitigate the potential pollution of stormwater by these materials. These same types of common sense, "good housekeeping" procedures, or BMPs, can be extended to non-hazardous stormwater pollutants such as sawdust and other solid wastes.

2) The maintenance and operation of construction equipment. Poorly maintained vehicles and heavy equipment leaking fuel, oil, antifreeze or other fluids on the construction site are also common sources of stormwater pollution and soil contamination.

3) Ground-disturbing activities (e.g., grading, excavation, etc.) which when not controlled, may generate soil erosion and/or loss of top soil via storm runoff or mechanical equipment. Grading activities can greatly increase erosion processes. Two general strategies are recommended to prevent construction silt from entering local storm drains. First, erosion control procedures should be implemented for those areas that must be exposed. Secondly, the area should be secured to control off-site migration of pollutants. During construction, the District shall be required to implement all applicable and mandatory BMPs in accordance with the SWPPP as required by **SC-HQW-2**. When properly designed and implemented, these "good-housekeeping" practices are expected to reduce short-term construction-related impacts to a less than significant level.

Activities associated with operation of the proposed Project would generate substances that could degrade the quality of water run-off. The deposition of certain chemicals by cars in the surface parking lot could have the potential to contribute metals, oil and grease, solvents, phosphates, hydrocarbons, and suspended solids to the storm drain system.

However, as mentioned in **Thresholds IX .a)** and **IX.b),** impacts to water quality would be reduced since the proposed Project must comply with water quality standards and wastewater discharge BMPs set forth by the SWRCB and through **SC-HQW-1** through **SC-HQW-5**. In addition, LAUSD's construction contractor would prevent sediment flows and other pollutants from entering storm drain systems through trapping particles in temporary filter drain inlets. Storm drain improvements onsite shall provide capacity to carry 25-year peak runoff rates in case of additional stormwater. Compliance with existing regulations would reduce the potential for the proposed Project to exceed the capacity of existing or planned stormwater drainage systems, or provide substantial additional sources of polluted runoff impacts to a less than significant level. Impacts would be less than significant. No further analysis is required.

f) **Less than Significant Impact.** A significant impact would occur if the proposed Project would substantially degrade water quality. Other than the sources discussed above, the Project does not include other potential sources of contaminants which could potentially degrade water quality. Therefore, Project impacts related to operational water quality would be less than significant and no further analysis is required.

g-h) **Less than Significant Impact.** The Federal Emergency Management Agency (FEMA) prepares and maintains Flood Insurance Rate Maps (FIRMs), which show the extent of Special Flood Hazard Areas (SFHAs) and other thematic features related to flood risk. The Project site is located in an area of minimal flood risk (Zone X) and is not located within a 100-year flood zone, as mapped by FEMA.[67] Further, in accordance with CBIA v. BAAQMD[68] the Project would not exacerbate an existing flood hazard as it would include the renovation of an existing school. Impacts would be less than significant and no further analysis is required.

i) **Less than Significant Impact.** As discussed above, the Project site would not expose people or structures to significant risk including injury or death as a result of flooding. Furthermore, the Project site and the neighborhood of Boyle Heights are not located within a potential inundation area as identified by the City's General Plan Safety Element[69], and in accordance with CBIA v. BAAQMD[70] the proposed Project would not exacerbate any existing potential for flooding as a result of the failure of a levee or dam. No impact would occur from the proposed Project and no further analysis is required.

j) **No Impact.** A significant impact would occur if the proposed Project exacerbated an existing hazard such as inundation by seiche, tsunami, or mudflow. A seiche is an oscillation of a body of water in an enclosed or semi-enclosed basin, such as a reservoir, harbor, or lake. A tsunami is a great sea wave produced by a significant undersea disturbance. Mudflows result from the downslope movement of soil and/or rock under the influence of gravity. The Project site is not mapped within a tsunami hazard zone.[71] Similarly, damage to the Project site due to a seiche is not likely at the Project site because no bodies of water are present near the site. Furthermore, the project site, which is not positioned downslope from any unprotected slopes or landslide areas, and is not

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67 FEMA's Flood Map Service Center, Panel 06037C16375F, accessed 2/21/2017.

68 *California Building Industry Association v. Bay Area Air Quality Management District (Aug. 12, 2016) 2 Cal.App.5th 1057* decided that CEQA does not apply to the impacts of the environment on a project, with some specific exceptions. One circumstances that sensitive receptors thresholds can be valid would be to school projects stating, "Given the confluence of purpose between measuring environmental significance as contemplated by the Receptor Thresholds, and measuring risks to human health as contemplated by the CEQA requirements for siting a new school, the levels of air pollution described by the Receptor Thresholds could be used by a school district to assess the health risk to students and employees at a proposed school site."

69 City of Los Angeles Department of City Planning. 1996. *General Plan Safety Element, Exhibit G*. November.

70 Op Cit.

71 City of Los Angeles Department of City Planning. 1996. *General Plan Safety Element, Exhibit G*. November.

positioned in an area of potential mudflow. The Project would not exacerbate any existing hazard condition. Therefore, no impact related to inundation by seiche, tsunami, or mudflow would occur, and no further analysis is required.

	Issues:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
X.	**LAND USE AND PLANNING. Would the project:**				
a)	Physically divide an established community?	☐	☐	☐	☒
b)	Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	☒
c)	Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	☒

The Program EIR did not require SCs for minimizing impacts to resources related to land use and planning where future projects would be implemented under the SUP. Likewise, there are no applicable or required SCs related to land use and planning resources associated with the proposed project.

Responses:

a) **No Impact.** The Project site is located in a residential area of the Boyle Heights community on a site that is already developed as a school. The proposed Project would involve the demolition of buildings and the construction of their replacements. Improvements will be limited to the interior of the site and there would be no physical

effect on the surrounding residential neighborhood. As such, a community will not be divided and no further inquiry is necessary.

b) **No Impact.** The City's General Plan use designation for the Project site is PF. Furthermore, the proposed Project site is located within the Boyle Heights CPA. The CPA Land Use Designation for the Project site is also PF. The City of Los Angeles Municipal Code – Zoning Plan has designated the proposed Project as PF: Public Facilities, or a zone for the use and development of publicly owned land, including public elementary and secondary schools. Moreover, the proposed Project site is currently Roosevelt HS and will remain as such after the proposed improvements. Therefore, the proposed Project would not conflict with an applicable land use plan, policy, or regulation of an agency with jurisdiction over the project site as it is zoned for public facility use and would be developed as a public facility use. No impact would occur from the proposed Project and no further analysis is required.

c) **No Impact.** The Project site is not within a habitat conservation plan or a natural community conservation plan (See **Threshold IV.f) in Biological Resources)**. Thus, the proposed Project would not conflict with any applicable conservation elements or natural community conservation plan. No impact would occur as a result of Project implementation, and there is no need for further analysis.

	Issues:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
XI.	**MINERAL RESOURCES. Would the project:**				
a)	Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒
b)	Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☐	☐	☐	☒

The Program EIR did not require SCs for minimizing impacts to mineral resources where future projects would be implemented under the SUP. Likewise, there are no applicable or required SCs related to mineral resources associated with the proposed project.

Responses:

a,b) **No Impact.** The Project site is located in an urbanized area in the City of Los Angeles. There are no identified mineral resources within the Project site and the Boyle Heights community plan area as designated by the City's General Plan.[72] Therefore, no impact associated with mineral resources would occur, and no further analysis is required.

72 City of Los Angeles General Plan. 2001. *Conservation Element, Exhibit A Mineral Resources.* Available at: http://planning.lacity.org/cwd/gnlpln/ConsvElt.pdf, accessed February 9, 2017.

	Issues:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
XII.	**NOISE. Would the project result in:**				
a)	Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☒	☐	☐	☐
b)	Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	☒	☐	☐	☐
c)	A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☒	☐
d)	A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☒		☐	☐
e)	For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

	Issues:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
f)	For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

Responses:

a) **Potentially Significant Impact.** Construction and operation of the proposed Project will have the potential to increase noise levels in the vicinity of the Project site. Construction activities could generate substantial noise affecting existing residences adjacent to the Project site. In addition, vehicle trips that would be generated by the proposed Project could result in increased noise. The EIR will address the potential noise impacts associated with construction and operation of the proposed Project.

b) **Potentially Significant Impact.** Groundborne vibration or noise would primarily be generated during construction of the proposed Project. The temporary increase in the groundborne vibration levels could impact sensitive land use (e.g., single- and multi-family residential, as well as the Project site itself) within the Project area. This issue will be analyzed further in the EIR.

c) **Less than Significant Impact**. The majority of any long-term noise impacts will come from traffic traveling to and from the area. Off-site noise generated by traffic from the Project was modeled under existing year (2017) no project and future year (2022) with project conditions utilizing the FHWA TNM 2.5 model. When calculating future noise levels along project area roadways from traffic, additional impacts from 24 additional potential new or proposed Projects were considered. Thus, the existing traffic results without the proposed Project and future traffic results with the proposed Project account for the cumulative impacts from these other projects. Since the noise impacts are generated directly from the traffic study results, the existing without project and future with project noise impacts described reflect cumulative impacts.

Table 3
Estimated Cumulative AM Peak Hour Mobile Source Noise Levels

Roadway Segment	Estimated dB(A), Leq No Project (2017)	With Project (2022)	Project Change	Significant Impact
4th Street from Soto Street to Mathews Street	61.1	61.3	0.2	No
4th Street from Mathews Street to Mott Street	62.8	63.3	0.5	No
6th Street from Mathews Street to Mott Street	53.7	53.6	-0.1	No
Mathews Street from 4th Street to 6th Street	55.7	56.0	0.3	No
Mott Street from 4th Street to 6th Street	58.0	57.4	-0.6	No

Source: Impact Sciences, 2017.

Table 3, Estimated Cumulative AM Peak Hour Mobile Source Noise Levels, shows the future with project compared to existing without project traffic noise scenarios. The greatest Project-related noise increases would be 0.5 dB(A) Leq along 4th Street between Mathews Street and Mott Street during the AM peak hour. These impacts are considered negligible and would be less than the 3 dB(A) significance threshold. Therefore, the Project's individual and cumulative mobile source noise impacts would be considered less than significant. No further analysis is required.

d) **Potentially Significant Impact**. Demolition and construction activities associated with the proposed Project will result in a temporary increase in noise levels in the areas adjacent to the Project site. This issue will be analyzed further in the EIR and mitigation measures will be included as necessary.

e) **No Impact.** The Project site is not located within an airport land use plan or within two miles of a public airport or public use airport. The nearest public (general aviation) airport is the San Gabriel Valley Airport in the City of El Monte, located approximately 10 miles northeast of the Project site. Los Angeles International Airport (LAX) is approximately 13 miles southwest of the Project site. As such, the Project would not expose future employees or students to excessive airport-related noise levels. No impacts would occur from the proposed Project.

f) **No Impact.** The Project site is not in the vicinity of a private airstrip. As a result, the proposed Project will not expose future employees or students to excessive noise levels from any private airstrip. No impacts would occur from the proposed Project.

	Issues:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
XIII.	**PEDESTRIAN SAFETY. Would the project:**				
a)	Substantially increase vehicular and/or pedestrian safety hazards due to a design feature or incompatible uses?	☒	☐	☐	☐
b)	Create unsafe routes to schools for students walking from local neighborhoods?	☒	☐	☐	☐
c)	Be located on a site that is adjacent to or near a major arterial roadway or freeway that may pose a safety hazard?	☐	☐	☒	☐

Responses:

a-b) **Potentially Significant Impact.** The proposed Project would utilize the existing network of regional and local roadways that serve the Project area. No changes to the design or configuration of roadways surrounding the Project site and/or the streetscape are proposed. The Project would increase daily trips, including truck haul trips, associated with construction. Therefore, the Project would potentially increase vehicular and/or pedestrian safety hazards.

During the construction phase, truck traffic would access the site on a daily basis. The intersection of haul trucks and pedestrians has the potential to result in safety hazards. The Project would generate a number of haul truck trips per day over the course of construction. The potential for these trips to impact pedestrian safety will be further analyzed in the EIR.

c) **Less than Significant Impact.** As noted above, these guidelines are generally for the acquisition of new school sites. While the site is adjacent to 4th Street, a major arterial roadway, the Project site has been in use as a school since 1923. As per the current

existing conditions, the primary pedestrian access to the Project site would remain along 4th Street, and access to staff parking would remain on Mathews Street. Minor changes to improve safety would be made to the existing pedestrian circulation patterns. Enhancements to pedestrian crossings on 4th Street, near the school front entrance, would be made at the existing signalized intersections of Mathews Street/4th Street (at the northwest corner of the school site), Fickett Street/4th Street (at the north side of the school site), and Mott Street/4th Street (at the northeast corner of the school site). These intersections all have existing striped yellow school crosswalks.

There are no identified impacts for pedestrian access or general safety issues for the proposed school access configuration, based on the review of the conceptual site plan. Impacts would be less than significant and no additional analysis would be required.

	Issues:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
XIV.	**POPULATION AND HOUSING. Would the project:**				
a)	Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of road or other infrastructure)?	☐	☐	☐	☒
b)	Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒
c)	Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

The Program EIR included a SC for minimizing impacts to resources related to population and housing of the existing environment in areas where future projects would be implemented under the SUP. However, there are no applicable SCs related to population and housing associated with the proposed project.

Responses:

a) **No Impact.** The proposed Project would not directly induce substantial growth to the area as it would accommodate the existing student population. The proposed new facilities on campus would be for Roosevelt HS current students, faculty, and staff. The proposed Project is a modernization plan and no increase in students or staff is proposed. In addition, the proposed Project does not include any features such as new homes or businesses that may induce growth. The proposed Project also would not indirectly induce growth through the extension of roads or other infrastructure as no

new infrastructure or roads are proposed. As such, there will be no impact and no further analysis is needed.

b,c) **No Impact.** The Project site is the campus for Roosevelt HS and is not in use for housing. Therefore, the proposed Project would not result in the displacement of existing housing or displace a substantial number of people resulting in the construction of replacement housing elsewhere. No impacts would occur from the proposed Project and no further analysis is required.

	Issues:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
XV.	**PUBLIC SERVICES. Would the project:**				
a)	Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
i)	Fire protection?	☐	☐	☒	☐
ii)	Police protection?	☐	☐	☒	☐
iii)	Schools?	☐	☐	☐	☒
iv)	Parks?	☐	☐	☐	☒
v)	Other public facilities?	☐	☐	☒	☐

The Program EIR included SCs for minimizing impacts to the public services of the existing environment in areas where future projects would be implemented under the SUP. Applicable SCs related to impacts to public services associated with the proposed Project are provided below.

SC-PS-1 LAUSD shall: 1) have local fire and police jurisdictions review all construction and site plans prior to the State Fire Marshall's final approval; and 2) provide a full site plan for the local review, including all buildings, both existing and

proposed, fences, drive gates, retaining walls, and other construction affecting emergency vehicle access, with unobstructed fire lanes for access indicated.

SC-PS-2 LAUSD shall implement emergency preparedness and response procedures in all schools as required in LAUSD References, Bulletins, Safety Notes, and Emergency Preparedness Plans.

Responses:

a)(i,ii) **Less than Significant Impact.** The Project site is currently served by the Los Angeles Fire Department Fire Station 25, located approximately 2,500 feet to the southeast. Similarly, Roosevelt HS is under the jurisdiction of the Los Angeles School Police Department (LASPD). The LASPD provides general law enforcement services for all LAUSD campuses, however the everyday campus activities would be under the supervision of the principal, vice principal, teachers, and other staff members. LAPD would provide additional police protection services to the project site if needed. The nearest LAPD station is the Hollenbeck Community Police Station, approximately 2,800 feet northwest of the site. As the Project is not expected to increase the population or size of the site, current government facilities would be sufficient to properly serve the campus. Therefore, the Project would have a less than significant impact on these public services and requires no further investigation.

a.(iii) **No Impact.** The proposed Project would not include any residential component and would not directly and/or indirectly result in population growth. Development of the proposed Project would improve Roosevelt HS for its current students and not warrant additional schools in the area. No impact would occur from the proposed Project and no further analysis is required.

a.(iv) **No Impact.** The City of Los Angeles Department of Recreation and Parks manages park facilities and provides recreation programs to Boyle Heights residents. Hollenbeck Park, Boyle Heights Sports Center, and Evergreen Recreational Center are all within a 2,000-foot radius of the Project site. The City also shares use of the swimming pool on the Roosevelt HS campus. The proposed Project would not include any residential uses that would result in a permanent population increase, resulting in a need for new or expanded park facilities. The proposed Project design includes active and passive areas located throughout the Project site, including play fields, a courtyard, and several other

landscaped areas. Pursuant to California Education Code Section 38131.b, also known as the Civic Center Act, school facilities would be available during off-school hours for permitted use by public organizations which would add to the available recreation space in the community. With the availability of shared-use open space for recreation onsite, the project is anticipated to have a beneficial effect on the community. Impacts would be beneficial and no further analysis is necessary.

a.(v) **Less than Significant Impact.** The closest library to the proposed Project site is the Benjamin Franklin Library is located at 2200 E. 1st Street, approximately 1,700 feet from Roosevelt HS. There are no residential units are included as part of the proposed Project which would result in a permanent increase in population resulting in a need for new or expanded library facilities. In addition, Roosevelt HS has a library facility on campus. Therefore, any increase in use of public libraries would be less than significant, requiring no further analysis.

	Issues:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
XVI.	**RECREATION. Would the project:**				
a)	Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☒
b)	Does the project include recreational facilities or require the construction or expansion of recreational facilities which have an adverse physical effect on the environment?	☐	☐	☒	☐

The Program EIR did not require SCs for minimizing impacts to recreation resources where future projects would be implemented under the SUP. Likewise, there are no applicable or required SCs related to recreation resources associated with the proposed project.

Responses:

a) **No Impact.** The proposed Project does not involve residential uses and as such, there will not be a permanent population increase. The proposed Project design includes active and passive areas located throughout the project site, including play fields, a courtyard, and several other landscaped areas. Pursuant to California Education Code Section 38131.b, also known as the Civic Center Act, school facilities would be available during off-school hours for permitted use by public organizations which would add to the available recreation space in the community. With the availability of shared-use recreation facilities onsite, the project is anticipated to result in beneficial effects for the community. Therefore, no further analysis is required.

b) **Less than Significant Impact.** Refer to **Section XV, Public Services a(iv)**, above. The proposed Project includes the construction of a school facility. Although recreational uses are proposed as part of the proposed Project, the construction of these facilities is a small part of the Project (i.e., playfields, etc.) that, as demonstrated throughout this document, would not result in any specific adverse physical impacts. Therefore, impacts related to requiring construction or expansion of recreational facilities is less than significant, and no further analysis is required.

	Issues:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
XVII.	**TRANSPORTATION and TRAFFIC. Would the project:**				
a)	Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?	☒	☐	☐	☐
b)	Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?	☒	☐	☐	☐
c)	Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	☐	☐	☐	☒
d)	Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☐	☒
e)	Result in inadequate emergency access?	☐	☐	☐	☒

	Issues:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
f)	Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?	☐	☐	☒	☐

The Program EIR included SCs for minimizing impacts to transportation and traffic of the existing environment in areas where future projects would be implemented under the Program EIR. Applicable SCs related to transportation and traffic resource impacts associated with the proposed Project are provided below.

SC-T-1 **OEHS CEQA Specification Manual, Appendix C, Traffic and Pedestrian Safety Requirements for New Schools.**

Requirements identifies performance requirements for the selection and design of school sites to minimize potential pedestrian safety risks:

- Site Selection
- Bus and Passenger Loading Areas
- Vehicle Access
- Pedestrian Routes to School

Requirements also state school traffic studies shall identify measures to ensure separation between pedestrians and vehicles along potential pedestrian routes, such as sidewalks, crosswalks, bike paths, crossing guards, pedestrian and traffic signals, stop signs, warning signs, and other pedestrian access measures.

SC-T-2 **School Design Guide**

Vehicular access and parking shall comply with Section 2.3, Vehicular Access and Parking of the School Design Guide, January 2014. The Design Guide contains the following regulations related to traffic:

- Parking Space Requirements
- General Parking Guidelines
- Vehicular Access and Pedestrian Safety
- Parking Structure Security

SC-T-3 Coordinate with the local City or County jurisdiction and agree on the following:

- Compliance with the jurisdiction's design guidelines for access, parking, and circulation in the vicinity of the project.

- Scope of analysis and methodology for the traffic and pedestrian study, including trip generation rates, trip distribution, number and location of intersections to be studied, and traffic impact thresholds.
- Implementation of SR2S, traffic control and pedestrian safety devices.
- Fair share contribution and/or other mitigation measures for potential traffic impacts.
- Traffic and pedestrian safety impact studies shall address local traffic and congestion during morning arrival times, and before and after evening stadium events.
- Traffic study will use the latest version of Institute of Transportation Engineer's (ITE) Trip Generation manual to determine trip generation rates (parents vehicles, school buses, staff/faculty vehicles, and delivery vehicles) based on the size of the school facility, unless otherwise required by local jurisdiction.
- Loading zones will be analyzed to determine the adequacy as pick-up and drop-off points. Recommendations will be developed in consultation with the local jurisdiction for curb loading bays or curb parking restrictions to accommodate loading needs and will control double parking and across-the-street loading.

SC-T-4 LAUSD shall require its contractors to submit a construction worksite traffic control plan to the LADOT for review prior to construction. The plan will show the location of any haul routes, hours of operation, protective devices, warning signs, and access to abutting properties LAUSD shall encourage its contractor to limit construction-related trucks to off-peak commute periods. As required by Caltrans, applicable transportation related safety measures shall be implemented during construction.

Responses:

a) **Potentially Significant Impact.** The proposed Project would utilize the existing network of regional and local roadways that serve the Project area. There are no changes proposed to the design or configuration of roadways surrounding the Project site. The Project's construction would generate haul truck trips over a period of 48 months (four

years) which will be further analyzed in the EIR. Furthermore, a traffic study will be prepared for the proposed project, and the methodology, findings, and conclusions of the analysis will also be provided in the EIR.

b) **Potentially Significant Impact.** By its nature, the Los Angeles County Congestion Management Program (CMP) is a cumulative scenario that considers the impact of single projects in the context of cumulative traffic demand on CMP roadways. CMP guidelines require that freeway monitoring locations must be examined if the proposed Project would add 150 or more trips (in either direction) during either the AM or PM weekday peak hours or 50 or more trips at CMP intersections during the AM or PM weekday peak hour. The proposed Project would potentially add 150 or more trips during construction (in either direction) during the AM or PM weekday peak hours at CMP mainline freeway monitoring locations or 50 or more trips during either the AM or PM peak weekday peak hours at CMP intersections, which is the threshold for preparing a CMP facility traffic impact assessment. Consequently, the proposed Project may potentially be significant with the criteria. This will be further analyzed in the EIR.

c) **No Impact.** The proposed Project would not impact air traffic. The Project site is not located within an airport safety zone nor does the Project propose any structure that would conflict with air traffic patterns. The nearest airports are the Los Angeles International Airport approximately 14 miles to the west, and the Santa Monica Airport approximately 13 miles to the west. No impact would occur and no further analysis is needed in the EIR.

d) **Less than Significant Impact.** The proposed Project would utilize the existing network of regional and local roadways that serve the Project area. There are no changes proposed to the design or configuration of roadways surrounding the Project site. The proposed Project would not create new hazards due to design features or incompatible uses. Impacts would be less than significant and no additional analysis would be required.

e) **Less than Significant Impact.** The Project is not anticipated to interfere with an emergency response plan or evacuation plan. Construction activities would not result in temporary partial obstruction of adjacent roadways and the District would comply with applicable regulations relating to access. Further, the proposed Project would be developed in consultation with the City of Los Angeles Fire Department, LAPD, and

City of Los Angeles Department of Public Works, Bureau of Engineering. Therefore, the impact would be less than significant and no further study is required.

f) **Less than Significant Impact.** County of Los Angeles Metropolitan Transit Authority (Metro) bus lines run along Soto Street and 4th Street. Construction and operation of the proposed Project would not alter the location of existing bus stops. LAUSD works with Metro to implement the Metro Transit Education Program which provides transit education to the public and schools along the Metro Rail Lines (the Soto Street Gold Line station is located three blocks north of the campus). It offers students the opportunity to ride the train and receive specific safety information, site specific presentations in the schools and a mobile theatre. The goal of the Transit Education Program is to increase public awareness and teach residents of the Los Angeles County how to live safely around trains and buses.[73] Implementation of the proposed Project would not conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks). Impacts related to alternative transportation would be less than significant, and no further analysis is necessary.

73 LAUSD OEHS Traffic and Pedestrian Safety Program, https://achieve.lausd.net/Page/4238

	Issues:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
XVIII.	**TRIBAL CULTURAL RESOURCES. Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that:**				
	a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)?	☐	☐	☐	☒

	Issues:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
b)	A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?	☐	☐	☐	☒

The Program EIR included SCs for minimizing impacts to tribal cultural resources of the existing environment in areas where future projects would be implemented under the SUP. Applicable SCs related to aesthetic resource impacts associated with the proposed Project are provided below.

SC-CUL-18 All work shall stop within a 30-foot radius of the discovery. Work shall not continue until the discovery has been evaluated by a qualified archaeologist and the local Native American representative has been contacted and consulted to assist in the accurate recordation and recovery of the resources.

Responses:

a,b) **No Impact.** Assembly Bill 52 (AB 52) requires meaningful consultation with California Native American tribes on potential impacts to tribal cultural resources, as defined in PRC Section 21074. Tribal cultural resources are sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native

American tribe that are either eligible, or listed, in the California Register of Historical Resources, or the local register of historical resources.[74]

As part of the AB 52 process, Native American tribes must submit a written request to LAUSD (lead agency) to be notified of projects within their traditionally and culturally affiliated area. LAUSD must provide written, formal notification to those tribes within 14 days of deciding to undertake a project. The tribe must respond to LAUSD within 30 days of receiving this notification if they want to engage in consultation on the Project, and LAUSD must begin the consultation process within 30 days of receiving the tribe's request. Consultation concludes when either: 1) the parties agree to mitigation measures to avoid a significant effect on a tribal cultural resource; or 2) a party, acting in good faith and after reasonable effort, concludes mutual agreement cannot be reached. To date the District has not received any requests to be notified about projects in the District. Additionally, although the school is eligible for listing on the National Register of Historic Places and the California State Register of Historical Resources, no specific Tribal resources have been identified and the Project site is unlikely to yield sensitive resources during ground disturbance as discussed in **Threshold V.b)**. However, in the unlikely event that construction-related ground disturbance results in the discovery of potential resources, **SC-CUL-18** would be implemented in order to avoid potential impacts to Tribal resources. No impacts to listed tribal cultural resources would occur.

74 California Natural Resources Agency. AB 52 Regulatory Update. http://resources.ca.gov/ceqa/.

	Issues:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
XIX.	**UTILITIES AND SERVICE SYSTEMS. Would the project:**				
a)	Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☐	☒
b)	Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☐	☒
c)	Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☐	☒

	Issues:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
d)	Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed? In making this determination, the District shall consider whether the project is subject to the water supply assessment requirements of Water Code Section 10910, et. seq. (SB 610), and the requirements of Government Code Section 664737 (SB 221).	☐	☐	☐	☒
e)	Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☐	☒
f)	Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	☐	☒
g)	Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☐	☐

The Program EIR included SCs for minimizing impacts to utilities and service systems of the existing environment in areas where future projects would be implemented under the SUP. Applicable SCs related to aesthetic resource impacts associated with the proposed Project are provided below.

SC-HWQ-1 Stormwater Technical Manual

The manual establishes design requirements and provides guidance for the cost-effective improvement of water quality in new and significantly redevelopment LAUSD school sites. These guidelines are intended to improve water quality and mitigate potential impacts to the Maximum Extent Practicable (MEP). While these guidelines meet current post-construction Standard Urban Stormwater Mitigation Plan (SUSMP) requirements. The guidelines address the mandated post-construction element of the NPDES program requirements.

SC-HWQ-2 Compliance Checklist for Storm Water Requirements at Construction Sites

This checklist has requirements for compliance with the General Construction Activity Permit and is used by OEHS to evaluate permit compliance. Requirements listed include a SWPPP; BMPs for minimizing storm water pollution to be specified in a SWPPP; and monitoring storm water discharges to ensure that sedimentation of downstream waters remains within regulatory limits.

SC-USS-1: School Design Guide. January 2014

Construction and demolition waste shall be recycled to the maximum extent feasible. LAUSD has established a minimum non-hazardous construction and demolition debris recycling requirement of 75 percent by weight as defined in Specification 01340, Construction & Demolition Waste Management.

Guide Specifications 2004 - Section 01340, Construction & Demolition Waste Management

This section of the LAUSD Specifications includes procedures for preparation and implementation, including reporting and documentation, of a Waste Management Plan for reusing, recycling, salvage or disposal of non-hazardous waste materials generated during demolition and/or new construction [Construction & Demolition (C&D) Waste], to foster material recovery and re-use and to minimize disposal in landfills. Requires the collection and separation of all C&D waste materials generated on-site, reuse or recycling on-site, transportation to approved recyclers or reuse organizations, or transportation to legally designated landfills, for the purpose of recycling salvaging and/or reusing a minimum of 75 percent of the C&D waste generated.

SC-USS-2: LAUSD shall coordinate with the City of Los Angeles Department of Water and Power ("LADWP"), or other appropriate jurisdiction and department, prior to the relocation or upgrade of any water facilities, to reduce the potential for disruptions in service.

SC-USS-3: Provide easily accessible area serving the entire school that are dedicated to the collection and storage of materials for recycling including (at a minimum) paper, cardboard, glass, plastics, metals and landscaping waste. There shall be at least one centralized collection point (loading dock), and ability for separation of recyclables where waste is disposed of for classrooms and common areas such as cafeteria's, gyms or multi-purpose rooms.

Responses:

a) **Less than Significant Impact.** The RWQCB regulates the treatment of wastewater at treatment plants and the discharge of the treated wastewater into receiving waters.

As required by **SC-HWQ-1** and **SC-HWQ-2** detailed above, LAUSD would need to obtain NPDES permits when carrying out construction with requirements for wastewater discharge, BMPs, and SWPPP. Additionally, LAUSD would need to comply with the effluent quality criteria specified within the NPDES so the proposed Project would not exceed wastewater treatment requirements of the applicable RWQCB.

The Project site is currently served by an 8" sewer line along Mathews Street, a 6" sewer line along Mott Street, an 8" sewer line along E. Fourth Street, and an 8" sewer line along

E. Sixth Street. There are multiple existing sewer laterals around the site, especially along Mathews Street.

Implementation of the proposed Project would not result in an increase in the on-site school population (i.e., students, faculty, and staff). As such, the proposed Project would not increase generated wastewater, which would continue to be contained and directed through the current system to a wastewater treatment plant in the City. Therefore, this impact would be less than significant, and no further analysis is necessary.

b) **Less than Significant Impact.** Refer to **Threshold (a)** above, for a discussion of wastewater impacts. Wastewater impacts would be less than significant.

c) **Less than Significant Impact.** A significant impact would occur if the volume of stormwater water runoff would increase to a level exceeding the capacity of the storm drain system serving a project site, requiring the construction of new stormwater drainage facilities.

Currently, stormwater from the site curb drains out onto the streets. The water then flows onto existing catch basins located at the southeast and southwest corners of the site's public right of way. As described in **IX e),** the proposed Project would not result in a significant increase in site runoff, or significant changes in the local drainage patterns. Therefore, this impact would be less than significant, and no further analysis is necessary.

d) **Less than Significant Impact.** Senate Bill 221 and Senate Bill 610 amended existing California law regarding land use planning and water supply availability by requiring more information and assurance of supply than is currently required in an Urban Water Management Plan (UWMP). As of January 1, 2002, California law requires water retail providers to demonstrate that sufficient and reliable supplies are available to serve large-scale developments (i.e., 500 dwelling units or 250,000 square feet of commercial space) prior to completion of the environmental review process and approval of such large-scale projects.

Under SB 610, it is the responsibility of the water service provider to prepare a Water Supply Assessment (WSA) requested by a City or County for any "project" defined by Section 10912 of the Water Code that is subject to CEQA.

Section 10912 of the Water Code defines a "project" as

- a proposed residential development of more than 500 dwelling units;
- a proposed shopping center or business establishment employing more than 1,000 persons or having more than 500,000 sf of floor space;
- a proposed commercial office building employing more than 1,000 persons or having more than 250,000 sf of floor space;
- a proposed hotel or motel, or both, having more than 500 rooms;
- a proposed industrial, manufacturing or processing plant, or industrial park, planned to house more than 1,000 persons, occupying more than 40 acres of land, or having more than 650,000 sf of floor space;
- a proposed mixed-use project that includes one or more of the previously listed projects; or
- a proposed Project that would demand an amount of water equivalent to, or greater than, the amount of water required by a 500-dwelling-unit project.[75]

The proposed Project would not meet any of the criteria resulting in the need for a WSA; therefore, a WSA is not necessary.

During construction water may be used on site for dust suppression or similar activities. The small amount of water necessary during construction of the proposed Project would not result in the need for new or expanded water entitlements. Construction of the proposed Project would not result in a significant impact to the City's existing water supply.

Implementation of the proposed Project would not result in an increase in the on-site school population (i.e., students, faculty, and staff). As such, buildout of the proposed Project would generate a demand on the City's water supplies similar to that of the current demand. Water supply to the Project site is provided by the LADWP. As the

75 Water demand is calculated using City of Los Angeles Department of Public Works Wastewater Engineering Services Division generation factors in units of gallons per day (GPD). Educational facilities have an average demand rate of 15 GPD/student and dwelling units (DU) average 228 GPD/du. Thus, Hale Charter Academy would generate approximately 7,980 GPD at full enrollment. Project implementation would not exceed expected water demands of a 500-dwelling-unit project.

proposed Project would not increase the total number of students enrolled, the proposed Project would not increase demand on the City's water supplies.

Further, implementation of Program EIR SCs for water supply would also offset potential impacts associated with the proposed Project. With implementation of **SC-USS-2**, impacts would be less than significant, and no further analysis is necessary.

e) **Less than Significant Impact.** Refer to **Threshold a)** and **b)** above.

f) **Less than Significant Impact.** Construction of the proposed Project would generate construction debris. Waste materials generated during construction are expected to be typical construction debris, including concrete, stucco, asphalt, rocks, building materials, wood, paper, glass, plastic, metals, cardboard, and other inert wastes (i.e., wastes that are not likely to produce leachates of environmental concern), as well as green wastes. The District would be subject to the 2016 CAL Green Construction Waste Reduction Requirements that require 65 percent of the construction waste generated on the project site be diverted from landfills.[76] Waste generated during demolition and construction that is not recycled would result in an incremental and intermittent increase in solid waste disposal at landfills; however, this increase in solid waste would be short-term and not exceed the available capacities of area landfills.

In addition, the proposed Project would be subject to the **SC-USS-1**, which requires compliance with the School Design Guide & Specification 01340, Construction and Demolition Waste Management, seen above.

In addition, the Project would comply with all waste recycling/reuse requirements in California Green Building Code Section 5.408, and the LAUSD School Design Guide & Specification 01340, Construction & Demolition Waste Management, that requires the collection and separation of all construction and demolition waste materials on-site, reuse or recycling on site, transportation to approved recyclers, transportation to legally designated landfills, for the purpose of recycling, salvaging, and/or reusing 75 percent of the construction and demolition waste generated. Thus, construction impacts related to solid waste would be less than significant.

76 CalRecycle. *Frequently Asked Questions Website*. Available at: http://www.calrecycle.ca.gov/LGCentral/Library/canddmodel/instruction/faq.htm#CALGreen, accessed February 9, 2017.

Operationally, the District contracts with private waste haulers to dispose of solid waste generated on school campuses. As the size of the student body would not increase, the proposed Project would not expand total solid waste generation within the District, and sufficient capacity exists to serve existing students. The proposed Project would comply with the recycling requirements in AB 341, and would adhere to **SC-USS-3** for accessible collections of recycling material, seen above.

Thus, the proposed Project would have a less than significant impact on landfill capacity. No further analysis is required.

g) **Less than Significant Impact.** During construction and operation of the proposed Project, the District would comply with all applicable City, County, and state solid waste diversion, reduction, and recycling mandates. Additionally, the proposed Project would be subject to **SC-USS-3.**

Compliance with **SC-USS-3** would ensure project compliance with statutes and regulations governing solid waste, and the impact would be less than significant. No further analysis is required.

	Issues:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
XX.	**MANDATORY FINDINGS OF SIGNIFICANCE**				
a)	Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☒	☐	☐	☐
b)	Does the project have impacts which are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that incremental effects of an individual project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.	☐	☐	☒	☐

	Issues:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
c)	Does the project have environmental effects which cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☒	☐

Responses:

a) Potentially Significant Impact.

As discussed in **Section IV, Biological Resources,** the proposed Project would not impact any endangered fauna or flora. Further, because of the highly urbanized nature of the Project site and the surrounding area, construction and operation of the proposed Project would not impact the habitat or population of the Project site and the surrounding area, the Project would not impact the habitat or population level of fish or wildlife species, nor would it threaten a plant or animal community, nor impact the range of a rare endangered plant or animal.

Potentially significant impacts related to cultural resources will be analyzed further in the EIR.

b) Less than Significant Impact. Based on the preceding discussion, with implementation of Standard Conditions, and compliance with existing regulations, the proposed Project would not result in any significant adverse impacts which could contribute to a cumulatively considerable impact.

c) Less than Significant Impact. As discussed in the above analyses for the Project, with implementation of the SCs, and compliance with existing regulations, the proposed Project would not result in any unmitigated significant adverse impacts. Thus, the Project would not have the potential to result in substantial adverse effect on human beings.

XXI. ENERGY CONSUMPTION

The following section evaluates potential impacts associated with the consumption of energy that would result from the implementation of the proposed Project. The section generally follows the guidance for the evaluation of energy impacts provided in Appendix F, Energy Conservation, of the *State CEQA Guidelines*.

It is noteworthy that the directives in Appendix F are advisory. In addition, Appendix F states the following: "Potentially significant energy implications of a project shall be considered in an EIR to the extent relevant and applicable to the project. The following list of energy impact possibilities and potential conservation measures is designed to assist in the preparation of an EIR. In many instances, specific items may not apply or additional items may be needed. Where items listed below are applicable or relevant to the project, they should be considered in the EIR." Therefore, the evaluation below does not address every directive in Appendix F. As directed by CEQA, the focus of the analysis is whether the Project would result in a wasteful or inefficient consumption of energy, and whether mitigation is required to avoid or reduce inefficient or wasteful consumption of energy.

	Issues:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
XXI.	**Energy. Would the project:**				
a)	**The Project would not involve the wasteful, inefficient, and unnecessary consumption of energy, especially fossil fuels such as coal, natural gas, and petroleum, associated with project design, project location, the use of electricity and/or natural gas, and/or the use of fuel by vehicles anticipated to travel to and from the project.**	☐	☐	☒	☐

Response:

a) Less than Significant Impact.

Electricity Supply

LADWP provides electricity service to the Project site. LADWP is the nation's largest municipal electric utility, and serves a 465-square-mile area in Los Angeles and much of the Owens Valley. The Power System supplies more than a 26 million megawatt-hours (MWh) of electricity a year for the City's 1.4 million residential and business customers.[77] Electrical service provided by LADWP is divided into two planning districts: Valley and Metropolitan. The Valley Planning District includes the LADWP service area north of Mulholland Drive, and the Metropolitan Planning District includes the LADWP service area south of Mulholland Drive. The Project site is located within the LADWP Metropolitan Planning District.

In total, LADWP operates 21 receiving stations and 162 distribution stations to provide electricity to LADWP customers, with additional facilities to be acquired as their load increases. Power supply sources include: 20 percent from renewable energy sources, 22 percent from natural gas, 9 percent from nuclear, 2 percent from large hydro, 40 percent from coal, and 7 percent from other and unspecified sources. Typical residential energy use per customer is about 500 kilowatt-hours (kWh) per month. Business and industry consume about 70 percent of the electricity in Los Angeles, but residents constitute the largest number of customers.[78] Projected future demand growth for LADWP is less than 1 percent per year.

LADWP has a maximum plant capacity of 7200 megawatts. Historically, Los Angeles peak demand was 6.396 reached on September 16, 2014.

Power lines are located along the streets surrounding the Project site, including East 4th Street, South Mathews Street, East 6th Street, and South Mott Street. The proposed Project would receive power by connecting the new buildings to the existing easements and power lines surrounding the site.

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77 LADWP, 2016 IRP, Executive Summary pg. ES-1, https://www.ladwp.com/cs/idcplg?IdcService=GET_FILE&dDocName=OPLADWPCCB562207&RevisionSelectionMethod=LatestReleased, accessed June 21, 2017

78 Ibid.

Natural Gas

Natural gas is provided and distributed to residents and businesses in the City of Los Angeles by the Southern California Gas Company (SoCalGas). According to the 2016 California Gas Report, SoCalGas is expected to provide an average of 2,526,000 Kilo British Thermal Unit (kBtu) per day by 2021.[79] In addition, due to modest economic growth, energy efficiency standards and programs, renewable electricity goals and the decline in commercial and industrial demand, starting in 2013 and continuing through 2035, natural gas demands are projected to decline at an annual rate of 0.6 percent throughout the SoCalGas service area.[80]

SoCalGas purchases gas supplies on a daily, monthly, and longer-term basis from producers and marketers in California, Canada, the Rockies, and elsewhere in the U.S. Southwest. In 2012[81], natural gas was used in California to produce electricity (45.6 percent), in residential uses (20.8 percent), in industrial uses (14.5 percent), oil and gas industry operations (9.4 percent), in commercial uses and for transportation (8.6 percent), for agriculture (0.5 percent), and other unspecified uses (0.6 percent). The total natural gas usage in 2012 was 23,323 million therms.[82]

Petroleum Based Fuel

In 2016, it is estimated that 15.2 billion gallons of gasoline (non-diesel)[83] and 2.9 billion gallons of diesel fuel[84] were sold statewide. The estimated 2015 gasoline sales for Los Angeles County[85] were approximately 3.47 billion gallons, and 313 million gallons of diesel fuel.[86]

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79 *2016 California Gas Report, prepared by the California Gas and Electric Utilities, Table 1-SCG, website, https://www.socalgas.com/regulatory/documents/cgr/2016-cgr.pdf, accessed June 21, 2017.*

80 Ibid. *2016 California Gas Report, prepared by the California Gas and Electric Utilities, pg. 64.*

81 *Note: 2012 figures are the most recent available.*

82 *California Energy Commission, Energy Almanac, Overview of Natural Gas in California, Natural Gas Supply. http://energyalmanac.ca.gov/naturalgas/overview.html, accessed June 21, 2017.*

83 *California Energy Commission, California Gasoline Data, Facts, and Statistics. http://www.boe.ca.gov/sptaxprog/reports/MVF_10_Year_Report.pdf, accessed June 21, 2017.*

84 *California Energy Commission, Diesel Fuel Data, Facts, and Statistics, http://www.boe.ca.gov/sptaxprog/reports/Diesel_10_Year_Report.pdf, accessed June 21, 2017.*

85 *Note: 2015 figures are the most recent available.*

86 *California Energy Commission, California Annual Retail Fuel Outlet Report Results (CEC-A15) Spreadsheets, http://www.energy.ca.gov/almanac/transportation_data/gasoline/2015_A15_Results.xlsx, accessed June 21, 2017.*

Construction

Project construction would require demolition, grading, utility installation, foundation construction, building construction, paving, and landscaping installation. All construction would be typical for the region and building type. During construction, energy would be consumed in the form of petroleum-based fuels (i.e., gasoline and diesel) used to power off-road construction vehicles and equipment on the Project site, for construction worker travel to and from the Project site, as well as for delivery truck trips; and to operate generators to provide temporary power for lighting and electronic equipment. The manufacturing of construction materials used by the proposed Project would also involve energy use.

Due to the large number of materials and manufacturers involved in the production of construction materials (including manufacturers in other states and countries), upstream energy use cannot be reasonably estimated. However, it is reasonable to assume that manufacturers of building materials such as concrete, steel, etc., would employ all reasonable energy conservation practices in the interest of minimizing the cost of doing business. Furthermore, neither the City nor the District has control over or the ability to influence energy resource use by the manufacturers of construction materials. Therefore, this analysis does not evaluate upstream energy use.

The average annual and total consumption of gasoline and diesel fuel during Project construction was estimated using the same assumptions and factors from CalEEMod that were used in estimating construction air emissions in **Section III., Air Quality**. As shown in **Table 4, Off-Road Construction Equipment Diesel Fuel Consumption**, and **Table 5, Construction Worker Gasoline Consumption**, a total of approximately 2,547,746 gallons of diesel fuel, and 19,541,600 gallons of gasoline would be consumed over the Project's construction horizon, or approximately 1,273,873 gallons of diesel fuel, and 9,770,800 gallons of gasoline annually.

Table 4
Off-Road Construction Equipment Diesel Fuel Consumption

Phase	Equipment Type	Units	Hours	Horse Power	Load Factor	Number of Days	Fuel Usage Factor[a]	Diesel Usage[b]
Demolition	Concrete/Industrial Saws	1	8	81	0.73	88	0.05	2,082
	Excavators	1	8	158	0.38	88	0.05	2,114
	Rubber Tired Loaders	1	8	203	0.36	88	0.05	2,573
	Skid Steer Loaders	1	8	65	0.37	88	0.05	847
	Rubber Tired Dozers	2	8	247	0.4	88	0.05	6,956
	Crushing/Proc. Equipment	1	8	85	0.78	88	0.05	2,334
	Air Compressor	1	8	78	0.48	88	0.05	1,318
Site Preparation	Plate Compactors	1	8	8	0.43	88	0.05	121
	Rubber Tired Loaders	1	8	203	0.36	88	0.05	2,573
	Tractors/Loaders/ Backhoes	4	8	97	0.37	88	0.05	5,054
	Rubber Tired Dozers	3	8	247	0.4	88	0.05	10,434
	Skid Steer Loaders	1	8	65	0.37	88	0.05	847
	Rollers	1	8	80	0.38	88	0.05	1,070
	Trenchers	1	8	78	0.5	88	0.05	1,373
	Excavators	1	8	158	0.38	88	0.05	2,113
Paving	Pavers	1	8	130	0.43	86	0.05	1,923
	Paving Equipment	2	8	132	0.36	86	0.05	3,269
	Rollers	1	8	80	0.38	86	0.05	1,046
	Skid Steer Loaders	1	8	65	0.37	86	0.05	827
Building Construction	Cranes	1	8	231	0.29	434	0.05	11,629
	Forklifts	1	8	89	0.20	434	0.05	3,090
	Generator Sets	1	8	84	0.74	434	0.05	10,791
	Tractors/Loaders/ Backhoes	1	8	97	0.37	434	0.05	6,231
	Bore/Drill Rigs	1	8	221	0.5	434	0.05	19,183
	Pumps	1	8	84	0.74	434	0.05	10,791
	Air Compressor	1	8	78	0.48	434	0.05	6,500
Architectural Coatings	Air Compressors	1	6	78	0.48	87	0.05	977
							Project Total	**118,066**

Source: CalEEMod Model Data; Impact Sciences, 2017
Notes:
a horsepower/gallon/hour
b in gallons

Table 5
Construction Worker Petroleum Fuel Consumption

Phase	Number of Daily Trips	Number of Days	Average Round-Trip Commute Distance (in miles)	Fuel Usage (ave mpg)[a]	Fuel Usage (in gallons)
Worker Trips (Gasoline)					
Demolition	13	88	14.7	18.6	312,792
Site Preparation	15	88	14.7	18.6	360,914
Building Construction	150	434	14.7	18.6	17,799,642
Architectural Coatings	37	87	14.7	18.6	880,139
Paving	8	86	14.7	18.6	188,113
				Total Gasoline Usage	**19,541,600**
Hauling Trips (Diesel)					
Construction	4,840 [b]	--	20	25.1	2,429,680
				Total Diesel Usage	**2,429,680**

Source: CalEEMod Model Data; Impact Sciences 2017
Notes:
ave – average mpg – miles per gallon
a This is a conservatively estimated total, as it assumes no electric, hybrid or other alternate fuel use vehicles in the fleet mix.
b Number of haul trips total for entire phase

The estimated amounts of energy resources reported in **Tables 4** and **5** would be consumed over a period of four years (48 months) and would represent a small percentage of the total energy used in the state. More importantly, for reasons presented below, this consumption would not represent a wasteful and inefficient use of energy resources.

There is growing recognition among developers and retailers that sustainable construction is not any more expensive than "business as usual" construction methods, and further, that there are long-term significant cost-savings potential in utilizing green building practices and materials. In addition, the proposed Project would feature a sustainable design to comply with CALGreen and CHPS, which would result in the use of sustainable materials and recycled content that would reduce energy consumption during Project construction. Construction materials would include recycled materials and products originating from nearby sources to the extent feasible in order to comply with CALGreen and to reduce costs of transportation.

Worker trips are estimated in **Table 5** above. Worker trips are expected to vary by phase; however, trips would be temporary and would occur over the three-year timeframe of construction activity. As these trips would be temporary, they would not be wasteful or

inefficient use of energy. CARB has adopted Title 13 Section 2485, an Airborne Toxic Control Measure (ATCM), to limit diesel motor vehicle idling in order to reduce public exposure to diesel particulate matter and other toxic air contaminants. All diesel-fueled commercial heavy and medium-duty vehicles are required to comply with these measures.

The ATCM requires that construction idling times shall be minimized either by shutting equipment off when not in use, or limiting the maximum idling time to five minutes. It also requires that all construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications, and that all equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation. **SC-AQ-2,** and **SC-AQ-3** require that construction equipment be selected to minimize emissions, and that all diesel-powered off-road equipment larger than 50 horsepower and operating on the site for more than two days continuously shall, at a minimum, meet US EPA particulate matter emissions standards for Tier 4 engines or equivalent.

Idling restrictions and the use of newer engines and properly maintained equipment would result in less fuel combustion and energy consumption. Furthermore, contractors and owners have a strong financial incentive to avoid wasteful, inefficient, and unnecessary consumption of energy during construction.

For the reasons listed above, the proposed Project would not involve the inefficient, wasteful, and unnecessary use of energy during construction and the construction-phase impact related to energy consumption would be less than significant.

Operation

Electricity and Natural Gas

Title 24 represents the state policy on building energy efficiency. The goals of the Title 24 standards are to improve energy efficiency of residential and non-residential buildings, minimize impacts during peak energy-usage periods, and reduce impacts on state energy needs. The proposed Project is required to comply with Title 24, and therefore would be energy efficient. Furthermore, the proposed Project would include features to minimize energy consumption, many of which are mandated by the CALGreen and CHPS, which would further reduce the amount of electricity and natural gas consumed by the proposed Project.

It is anticipated that SCE and SoCalGas would be able to provide electricity and natural gas to the Project site using existing infrastructure. Only minor modifications to the distribution system would be required to connect the new buildings to be constructed under the proposed Project to the existing off-site electrical and natural gas systems. Further, the Project's demand for electricity by itself would not require the construction of new power generation facilities.

The proposed Project does not include a residential component, and would not induce population growth. The students who would attend the renovated school are existing students that currently attend other schools. As such, no new students would be generated through this Project. Many of the proposed students are currently housed in less efficient portable classrooms; therefore, the construction of the new energy efficient school would be an environmental benefit.

Further, the electrical loads and natural gas demand that would be required by the proposed Project are within the parameters of projected load growth in the City, and SCE and SoCalGas would be able to meet the demand in this area. Therefore, the proposed Project would not result in the consumption of energy resources that could not be accommodated within the long-term electricity and natural gas supply.

Petroleum-Based Fuel

The proposed Project would result in the consumption of petroleum-fuel related to vehicular travel (quantified as VMT) to and from the Project site. **Table 6, Estimated Petroleum-based Fuel Usage at Buildout**, below, presents the projected consumption of approximately 64,612 gallons of diesel and 438,060 gallons of gasoline per year, or a total of 502,672 gallons of petroleum-based fuels per year based on an annual estimate of 9,769,680 VMT obtained from the CalEEMod results for the proposed Project.

This is a conservative estimate, given that it assumes no electric, hybrid, or other alternate fuel use vehicles in the fleet mix. Furthermore, this level of annual consumption is based on fuel efficiency rates (miles per gallon) shown in **Table 6**. Federal and State laws and regulations will continue to require further improvements in fuel efficiency in motor vehicles produced and/or sold in the US, and total annual consumption of petroleum-based fuel is expected to decrease over time.

Table 6
Estimated Petroleum-based Fuel Usage at Project Buildout

Source	Fleet Mix[a]	Generation Factor[b, c]	Annual Consumption (in gallons)
Mobile			
Diesel (gallons)	16.6%	1,621,767/25.1 mpg	64,612
Gasoline (gallons)	83.4%	8,147,913/18.6 mpg	438,060
		Total	**502,672**

Source: Impact Sciences 2017
Notes:
mpg = miles per gallon
a Data Source: FHWA OHPI, Highway Statistics, Fuel Consumption by State and Type http://www.fhwa.dot.gov/policyinformation/pubs/hf/pl11028/chapter5.cfm
b Data Source: California Department of Transportation, 2007 California Motor Vehicle Stock, Travel and Fuel Forecast, http://www.energy.ca.gov/2008publications/CALTRANS-1000-2008-036/CALTRANS-1000-2008-036.PDF
c Diesel-powered vehicles typically get 30-35% more miles per gallon than comparable vehicles powered by gasoline. US Department of Energy, Fuel Economy Guide, http://www.fueleconomy.gov/feg/pdfs/guides/FEG2013.pdf

As previously discussed, in 2016, it is estimated that 15.2 billion gallons of gasoline (non-diesel)[87] and 2.9 billion gallons of diesel fuel[88] were sold statewide. Thus, at buildout, the proposed Project would represent less than 0.002 percent of the statewide annual gasoline consumption and less than 0.001 percent of the statewide annual diesel consumption.

For the reasons listed above, the proposed Project would not involve the inefficient, wasteful, and unnecessary use of energy during operation and the operation-phase energy impact would be less than significant. No further analysis is necessary.

87 *California Energy Commission, California Gasoline Data, Facts, and Statistics. http://www.boe.ca.gov/sptaxprog/reports/MVF_10_Year_Report.pdf, accessed June 21, 2017.*

88 *California Energy Commission, Diesel Fuel Data, Facts, and Statistics, http://www.boe.ca.gov/sptaxprog/reports/Diesel_10_Year_Report.pdf, accessed June 21, 2017.*

UNAVOIDABLE ADVERSE EFFECTS

Appendix F of the State CEQA Guidelines recommends that the EIR report any unavoidable adverse impacts associated with the Project's energy use. The analysis presented above shows that the proposed Project would not result in a significant unavoidable impact associated with the use of energy.

IRREVERSIBLE COMMITMENT OF RESOURCES

Appendix F states that an irreversible commitment of resources could occur if the project preempts future energy development or future energy conservation. The proposed Project would not preempt future energy development on the Project site since there are no energy resources located on or near the Project site. The proposed Project would also not preempt future energy conservation because the District would implement energy efficiency improvements through CHPS that become available in the future.

SHORT-TERM GAINS AND LONG-TERM IMPACTS

Appendix F suggests that the project's short-term gains and long-term impacts can be evaluated by calculating the project's energy cost over the project's lifetime. As noted above, the proposed Project would not result in a wasteful use of energy. There would not be a reduction of long-term benefits for short-term gains as a result of the proposed Project.

GROWTH INDUCING EFFECTS

Appendix F states that growth inducing effects may include the energy consumption of the growth induced by the Project. As there is no residential component of the Project, implementation of the proposed Project would not induce any population or employment growth beyond what has been anticipated by the region. Therefore, there would be no energy consumption related to growth induced by the proposed Project.

ACRONYMS and ABBREVIATIONS

Air Resources Board	ARB
Air Quality Management Plan	AQMP
Ambient Air Quality Standards	AAQS
Backlight-Uplight-Glare	BUG
Below Ground Surfaces	bgs
Best Management Practices	BMPs
California Building Code	CBC
California Department of Education	CDE
California Department of Transportation	Caltrans
California Environmental Quality Act	CEQA
California Integrated Waste Management Act	CIWMA
California Water Code	CWC
Carbon Dioxide	CO_2
Climate Action Team	CAT
Coarse Inhalable Particulate Matter	PM10
Congestion Management Program	CMP
Construction General Permit	CGP
County of Los Angeles Metropolitan Transit Authority	Metro
CO_2 equivalents	CO_2e
Division of the State Architect	DSA
Environmental Protection Agency	EPA
Federal Emergency Management Agency	FEMA
Fine Inhalable Particulate Matter	PM2.5
Greenhouse Gases	GHG
Hydrofluorocarbons	HFCs
Illuminating Engineering Society	IES
Interstate 710	I-710
International Dark –Sky Association	IDA
Localized Significance Thresholds	LSTs
Los Angeles County Sanitation District	LACSD
Los Angeles Department of Water and Power	LADWP
Los Angeles Unified School District	LAUSD
Los Angeles Unified School District Program EIR	Program EIR
Maximum Extent Practicable	MEP
Methane	CH_4
Mineral Resources Zone 1	MRZ-1
Model Lighting Ordinance	MLO
Most Likely Descendant	MLD
Multi-Purpose Room	MPR
National Pollution Discharge Elimination System	NPDES
Native American Heritage Commission	NAHC
Nitrogen Oxides	NO_x

Nitrous Oxide	N_2O
Office of Administrative Law	OAL
Office of Planning and Research	OPR
Ozone	O_3
Perfluorocarbons	PFCs
Regional Transportation Plan /Sustainable Communities Strategy	RTP/SCS
Sacred Lands File	SLF
Science Technology Engineering Arts and Math	STEAM
Special Flood Hazard Areas	SFHA
South Central Coastal Information Center	SCCIC
South Coast Air Basin	SoCAB
South Coast Air Quality Management District	SCAQMD
Southern California Association of Governments	SCAG
Source Reduction and Recycling Element	SRRE
Standard Condition	SC
Standard Urban Stormwater Mitigation Plan	SUSMP
State Route 110	SR-110
State Water Resources Board	SWRB
Stormwater Pollution Prevention Plan	SWPPP
Sulfur Hexafluoride	SF_6
Toxic Air Contaminants	TACs
Urban Water Management Plan	UWMP
Waste Discharge Requirements	WDR
Water Supply Assessment	WSA
Water Reclamation Plant	WRP
Water Vapor	H_2O
Visual And Performing Arts	VAPA

PREPARERS OF THE INTIAL STUDY

Lead Agency

Los Angeles Unified School District (LAUSD)
Office of Environmental Health & Safety (OEHS)
333 South Beaudry Avenue, 21st Floor
Los Angeles, CA 90017

Gwenn Godek, CEQA Advisor/Contract Professional
Edward Paek, AICP, CEQA Project Manager/Contract Professional

Environmental Consultant

Impact Sciences, Inc.
28 N. Marengo Avenue
Pasadena, CA 91101
(626) 564-1500

Jessica Kirchner Flores, AICP, Managing Principal
Lynn Kaufman, Associate Principal
Jared Jerome, Technical Specialist
Brandon Whalen, Staff Planner
Alex Lee, Staff Planner
Sylvie Josel, Staff Planner
Van Hoang, Publications Coordinator

APPENDIX 3.1

Air Quality Data

Roosevelt HS

Los Angeles-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
High School	226.78	1000sqft	5.21	226,780.00	2600
Parking Lot	57.20	1000sqft	1.31	57,200.00	0
City Park	3.62	Acre	3.62	157,687.20	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	12			**Operational Year**	2022
Utility Company	Los Angeles Department of Water & Power				
CO2 Intensity (lb/MWhr)	1227.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - The Roosevelt Program Approval document and traffic study state that the school capacity is 2,600.

Construction Phase - Based on LPA phasing plan.

Off-road Equipment - Data from Roosevelt High School Comprehensive Modernization Project Construction Schedule and Equipment.

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment - Data from Roosevelt High School Comprehensive Modernization Project Construction Schedule and Equipment.

Trips and VMT -

Demolition - Based on LPA phasing plan. Phase 1 building demo = building #1. Phase 3 Gym = #19. Phase 3 7_29_31 = #7, 29, 31.

Grading - Soil export from RAW on-going during construction.

Architectural Coating - Standard Condition SC-AQ-4 requires ultra-low VOC or zero VOC paint.

Vehicle Trips - Traffic study states 4,446 daily trips. Project size approximately 226.78 ksf.

Area Coating - Standard Condition SC-AQ-4 requires ultra-low VOC or zero VOC paint.

Construction Off-road Equipment Mitigation - Mitigation reflects LAUSD Standard Condition for Approval SC-AQ-4

Area Mitigation -

Energy Mitigation - Reflects SC-GHG-5

Water Mitigation -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Energy Use -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	100.00	50.00
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tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	50.00
tblArchitecturalCoating	EF_Parking	100.00	50.00
tblArchitecturalCoating	EF_Parking	100.00	50.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	100	50
tblAreaCoating	Area_EF_Nonresidential_Interior	100	50
tblAreaCoating	Area_EF_Parking	100	50
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
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tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
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tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
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tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
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tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final

tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
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tblGrading	AcresOfGrading	50.00	5.00
tblGrading	AcresOfGrading	0.00	5.00
tblGrading	AcresOfGrading	0.00	5.00
tblGrading	MaterialExported	0.00	3,500.00
tblGrading	MaterialExported	0.00	3,500.00

tblLandUse	Population	0.00	2,600.00
tblTripsAndVMT	HaulingTripNumber	492.00	596.00
tblTripsAndVMT	HaulingTripNumber	176.00	0.00
tblTripsAndVMT	HaulingTripNumber	139.00	0.00
tblVehicleTrips	ST_TR	22.75	0.00
tblVehicleTrips	ST_TR	4.37	19.60
tblVehicleTrips	SU_TR	16.74	0.00
tblVehicleTrips	SU_TR	1.79	19.60
tblVehicleTrips	WD_TR	1.89	0.00
tblVehicleTrips	WD_TR	12.89	19.60

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2018	0.5473	5.6903	3.0573	5.6200e-003	1.0751	0.2885	1.3636	0.5584	0.2671	0.8254	0.0000	512.7563	512.7563	0.1357	0.0000	516.1497
2019	0.5504	4.9421	4.0509	9.3800e-003	0.6690	0.2254	0.8944	0.2798	0.2107	0.4906	0.0000	851.8989	851.8989	0.1266	0.0000	855.0648
2020	1.0823	5.2175	3.8016	8.3800e-003	1.3107	0.2467	1.5574	0.6517	0.2291	0.8808	0.0000	751.9699	751.9699	0.1395	0.0000	755.4576
2021	0.1114	0.9600	0.9949	2.4100e-003	0.0839	0.0395	0.1233	0.0226	0.0370	0.0596	0.0000	217.2145	217.2145	0.0303	0.0000	217.9730
2022	0.7341	1.7974	1.8078	4.4100e-003	0.1564	0.0725	0.2289	0.0404	0.0680	0.1083	0.0000	395.8856	395.8856	0.0588	0.0000	397.3565
Maximum	**1.0823**	**5.6903**	**4.0509**	**9.3800e-003**	**1.3107**	**0.2885**	**1.5574**	**0.6517**	**0.2671**	**0.8808**	**0.0000**	**851.8989**	**851.8989**	**0.1395**	**0.0000**	**855.0648**

2.1 Overall Construction

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2018	0.0765	0.4132	3.0438	5.6200e-003	0.4308	8.8000e-003	0.4396	0.2188	8.7600e-003	0.2276	0.0000	512.7557	512.7557	0.1357	0.0000	516.1492
2019	0.2048	1.4688	4.0627	9.3800e-003	0.4444	0.0156	0.4599	0.1579	0.0151	0.1730	0.0000	851.8984	851.8984	0.1266	0.0000	855.0644
2020	0.6878	1.0472	3.8544	8.3800e-003	0.6334	0.0124	0.6457	0.2849	0.0121	0.2970	0.0000	751.9693	751.9693	0.1395	0.0000	755.4571
2021	0.0498	0.3415	1.0505	2.4100e-003	0.0839	2.7700e-003	0.0866	0.0226	2.7000e-003	0.0253	0.0000	217.2144	217.2144	0.0303	0.0000	217.9729
2022	0.6117	0.5575	1.9245	4.4100e-003	0.1471	5.1600e-003	0.1522	0.0390	5.0600e-003	0.0440	0.0000	395.8853	395.8853	0.0588	0.0000	397.3563
Maximum	**0.6878**	**1.4688**	**4.0627**	**9.3800e-003**	**0.6334**	**0.0156**	**0.6457**	**0.2849**	**0.0151**	**0.2970**	**0.0000**	**851.8984**	**851.8984**	**0.1395**	**0.0000**	**855.0644**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**46.11**	**79.43**	**-1.63**	**0.00**	**47.21**	**94.88**	**57.19**	**53.44**	**94.61**	**67.57**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	8-1-2018	10-31-2018	2.0155	0.1585
2	11-1-2018	1-31-2019	3.3137	0.2791
3	2-1-2019	4-30-2019	1.3345	0.4337
4	5-1-2019	7-31-2019	1.1068	0.4208
5	8-1-2019	10-31-2019	1.1089	0.4230
6	11-1-2019	1-31-2020	1.0798	0.4174

7	**2-1-2020**	**4-30-2020**	0.9900	0.3875
8	**5-1-2020**	**7-31-2020**	2.0480	0.4733
9	**8-1-2020**	**10-31-2020**	2.6859	0.7305
10	**11-1-2020**	**1-31-2021**	0.2047	0.0161
13	**8-1-2021**	**10-31-2021**	0.4497	0.1418
14	**11-1-2021**	**1-31-2022**	0.8936	0.3648
15	**2-1-2022**	**4-30-2022**	0.8107	0.3415
16	**5-1-2022**	**7-31-2022**	0.8171	0.6381
17	**8-1-2022**	**9-30-2022**	0.3049	0.0275
		Highest	3.3137	0.7305

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.8780	3.0000e-005	3.6800e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	7.1400e-003	7.1400e-003	2.0000e-005	0.0000	7.6100e-003
Energy	0.0127	0.1156	0.0971	6.9000e-004		8.7900e-003	8.7900e-003		8.7900e-003	8.7900e-003	0.0000	884.7514	884.7514	0.0203	6.0200e-003	887.0524
Mobile	1.5473	8.3938	23.0754	0.0862	7.2049	0.0717	7.2766	1.9313	0.0669	1.9982	0.0000	7,964.1460	7,964.1460	0.4013	0.0000	7,974.1775
Waste						0.0000	0.0000		0.0000	0.0000	59.9067	0.0000	59.9067	3.5404	0.0000	148.4163
Water						0.0000	0.0000		0.0000	0.0000	2.3890	201.1160	203.5049	0.2501	6.7800e-003	211.7773
Total	**2.4380**	**8.5095**	**23.1762**	**0.0869**	**7.2049**	**0.0805**	**7.2854**	**1.9313**	**0.0757**	**2.0070**	**62.2957**	**9,050.0204**	**9,112.3161**	**4.2121**	**0.0128**	**9,221.4312**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.8780	3.0000e-005	3.6800e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	7.1400e-003	7.1400e-003	2.0000e-005	0.0000	7.6100e-003
Energy	0.0104	0.0949	0.0797	5.7000e-004		7.2100e-003	7.2100e-003		7.2100e-003	7.2100e-003	0.0000	818.2384	818.2384	0.0189	5.3900e-003	820.3155
Mobile	1.5473	8.3938	23.0754	0.0862	7.2049	0.0717	7.2766	1.9313	0.0669	1.9982	0.0000	7,964.1460	7,964.1460	0.4013	0.0000	7,974.1775
Waste						0.0000	0.0000		0.0000	0.0000	59.9067	0.0000	59.9067	3.5404	0.0000	148.4163
Water						0.0000	0.0000		0.0000	0.0000	2.3890	192.1791	194.5681	0.2499	6.7300e-003	202.8222
Total	**2.4357**	**8.4888**	**23.1588**	**0.0868**	**7.2049**	**0.0789**	**7.2838**	**1.9313**	**0.0741**	**2.0054**	**62.2957**	**8,974.5706**	**9,036.8663**	**4.2104**	**0.0121**	**9,145.7391**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.09**	**0.24**	**0.08**	**0.14**	**0.00**	**1.96**	**0.02**	**0.00**	**2.09**	**0.08**	**0.00**	**0.83**	**0.83**	**0.04**	**5.31**	**0.82**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition p1	Demolition	6/1/2018	12/31/2018	5	152	
2	Site Preparation p1	Site Preparation	6/1/2018	8/31/2018	5	66	
3	Grading p2	Grading	1/1/2019	1/28/2019	5	20	
4	Building Construction p2	Building Construction	2/1/2019	7/31/2020	5	391	
5	Architectural Coating p2	Architectural Coating	8/1/2020	8/31/2020	5	21	
6	Paving p2	Paving	9/1/2020	9/30/2020	5	22	
7	Demolition p3 gym	Demolition	9/1/2020	9/28/2020	5	20	
8	Paving p3	Paving	8/1/2021	8/27/2021	5	20	
9	Building Construction p3	Building Construction	10/1/2021	5/31/2022	5	173	
10	Architectural Coating P3	Architectural Coating	6/1/2022	6/30/2022	5	22	
11	Demolition p3 7_29_31	Demolition	9/1/2022	10/31/2022	5	43	
12	Site Preparation p2	Site Preparation	11/1/2018	2/14/2019	5	76	
13	Site Preparation p3	Site Preparation	6/1/2020	11/12/2020	5	119	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 1.31

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 340,170; Non-Residential Outdoor: 113,390; Striped Parking Area: 3,432 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation p2	Rubber Tired Dozers	3	8.00	247	0.40
Demolition p1	Concrete/Industrial Saws	1	8.00	81	0.73
Site Preparation p3	Rubber Tired Dozers	3	8.00	247	0.40

Demolition p1	Excavators	3	8.00	158	0.38
Demolition p1	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation p2	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Site Preparation p3	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Site Preparation p1	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation p1	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Architectural Coating P3	Air Compressors	1	6.00	78	0.48
Demolition p3 gym	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition p3 7_29_31	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction p3	Cranes	1	7.00	231	0.29
Demolition p3 gym	Excavators	3	8.00	158	0.38
Demolition p3 7_29_31	Excavators	3	8.00	158	0.38
Building Construction p3	Forklifts	3	8.00	89	0.20
Building Construction p3	Generator Sets	1	8.00	84	0.74
Grading p2	Graders	1	8.00	187	0.41
Paving p3	Pavers	2	8.00	130	0.42
Paving p3	Paving Equipment	2	8.00	132	0.36
Paving p3	Rollers	2	8.00	80	0.38
Demolition p3 gym	Rubber Tired Dozers	2	8.00	247	0.40
Demolition p3 7_29_31	Rubber Tired Dozers	2	8.00	247	0.40
Grading p2	Scrapers	2	8.00	367	0.48
Building Construction p3	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction p3	Welders	1	8.00	46	0.45
Grading p2	Excavators	2	8.00	158	0.38
Grading p2	Rubber Tired Dozers	1	8.00	247	0.40
Grading p2	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction p2	Cranes	1	7.00	231	0.29

Building Construction p2	Forklifts	3	8.00	89	0.20
Building Construction p2	Generator Sets	1	8.00	84	0.74
Building Construction p2	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction p2	Welders	1	8.00	46	0.45
Architectural Coating p2	Air Compressors	1	6.00	78	0.48
Paving p2	Pavers	2	8.00	130	0.42
Paving p2	Paving Equipment	2	8.00	132	0.36
Paving p2	Rollers	2	8.00	80	0.38

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition p1	6	15.00	0.00	596.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation p1	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating p3	1	37.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction p3	9	186.00	72.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Demolition p3 gym	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Demolition p3 7, 29, 31	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading p2	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction p2	9	186.00	72.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating p2	1	37.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving p2	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving p3	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation p2	7	18.00	0.00	438.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation p3	7	18.00	0.00	438.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use Soil Stabilizer

Replace Ground Cover

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition p1 - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0533	0.0000	0.0533	8.0700e-003	0.0000	8.0700e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.2826	2.9125	1.6951	2.9500e-003		0.1473	0.1473		0.1372	0.1372	0.0000	266.9430	266.9430	0.0736	0.0000	268.7816
Total	**0.2826**	**2.9125**	**1.6951**	**2.9500e-003**	**0.0533**	**0.1473**	**0.2006**	**8.0700e-003**	**0.1372**	**0.1452**	**0.0000**	**266.9430**	**266.9430**	**0.0736**	**0.0000**	**268.7816**

3.2 Demolition p1 - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.9900e-003	0.0995	0.0205	2.4000e-004	5.1200e-003	3.7000e-004	5.4900e-003	1.4100e-003	3.5000e-004	1.7600e-003	0.0000	23.5051	23.5051	1.6600e-003	0.0000	23.5465
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.3200e-003	5.4000e-003	0.0581	1.4000e-004	0.0125	1.1000e-004	0.0126	3.3200e-003	1.0000e-004	3.4200e-003	0.0000	12.4123	12.4123	4.7000e-004	0.0000	12.4239
Total	**9.3100e-003**	**0.1049**	**0.0787**	**3.8000e-004**	**0.0176**	**4.8000e-004**	**0.0181**	**4.7300e-003**	**4.5000e-004**	**5.1800e-003**	**0.0000**	**35.9174**	**35.9174**	**2.1300e-003**	**0.0000**	**35.9705**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0204	0.0000	0.0204	3.0900e-003	0.0000	3.0900e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0351	0.1522	1.7693	2.9500e-003		4.6800e-003	4.6800e-003		4.6800e-003	4.6800e-003	0.0000	266.9427	266.9427	0.0736	0.0000	268.7813
Total	**0.0351**	**0.1522**	**1.7693**	**2.9500e-003**	**0.0204**	**4.6800e-003**	**0.0251**	**3.0900e-003**	**4.6800e-003**	**7.7700e-003**	**0.0000**	**266.9427**	**266.9427**	**0.0736**	**0.0000**	**268.7813**

3.2 Demolition p1 - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.9900e-003	0.0995	0.0205	2.4000e-004	5.1200e-003	3.7000e-004	5.4900e-003	1.4100e-003	3.5000e-004	1.7600e-003	0.0000	23.5051	23.5051	1.6600e-003	0.0000	23.5465
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.3200e-003	5.4000e-003	0.0581	1.4000e-004	0.0125	1.1000e-004	0.0126	3.3200e-003	1.0000e-004	3.4200e-003	0.0000	12.4123	12.4123	4.7000e-004	0.0000	12.4239
Total	**9.3100e-003**	**0.1049**	**0.0787**	**3.8000e-004**	**0.0176**	**4.8000e-004**	**0.0181**	**4.7300e-003**	**4.5000e-004**	**5.1800e-003**	**0.0000**	**35.9174**	**35.9174**	**2.1300e-003**	**0.0000**	**35.9705**

3.3 Site Preparation p1 - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.5988	0.0000	0.5988	0.3280	0.0000	0.3280	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1506	1.5906	0.7417	1.2500e-003		0.0850	0.0850		0.0782	0.0782	0.0000	114.7077	114.7077	0.0357	0.0000	115.6004
Total	**0.1506**	**1.5906**	**0.7417**	**1.2500e-003**	**0.5988**	**0.0850**	**0.6839**	**0.3280**	**0.0782**	**0.4062**	**0.0000**	**114.7077**	**114.7077**	**0.0357**	**0.0000**	**115.6004**

3.3 Site Preparation p1 - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.2900e-003	2.8200e-003	0.0303	7.0000e-005	6.5100e-003	6.0000e-005	6.5700e-003	1.7300e-003	5.0000e-005	1.7800e-003	0.0000	6.4674	6.4674	2.4000e-004	0.0000	6.4735
Total	**3.2900e-003**	**2.8200e-003**	**0.0303**	**7.0000e-005**	**6.5100e-003**	**6.0000e-005**	**6.5700e-003**	**1.7300e-003**	**5.0000e-005**	**1.7800e-003**	**0.0000**	**6.4674**	**6.4674**	**2.4000e-004**	**0.0000**	**6.4735**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.2291	0.0000	0.2291	0.1255	0.0000	0.1255	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0154	0.0666	0.6887	1.2500e-003		2.0500e-003	2.0500e-003		2.0500e-003	2.0500e-003	0.0000	114.7076	114.7076	0.0357	0.0000	115.6003
Total	**0.0154**	**0.0666**	**0.6887**	**1.2500e-003**	**0.2291**	**2.0500e-003**	**0.2311**	**0.1255**	**2.0500e-003**	**0.1275**	**0.0000**	**114.7076**	**114.7076**	**0.0357**	**0.0000**	**115.6003**

3.3 Site Preparation p1 - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.2900e-003	2.8200e-003	0.0303	7.0000e-005	6.5100e-003	6.0000e-005	6.5700e-003	1.7300e-003	5.0000e-005	1.7800e-003	0.0000	6.4674	6.4674	2.4000e-004	0.0000	6.4735
Total	**3.2900e-003**	**2.8200e-003**	**0.0303**	**7.0000e-005**	**6.5100e-003**	**6.0000e-005**	**6.5700e-003**	**1.7300e-003**	**5.0000e-005**	**1.7800e-003**	**0.0000**	**6.4674**	**6.4674**	**2.4000e-004**	**0.0000**	**6.4735**

3.4 Grading p2 - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0629	0.0000	0.0629	0.0334	0.0000	0.0334	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0474	0.5452	0.3338	6.2000e-004		0.0238	0.0238		0.0219	0.0219	0.0000	55.7013	55.7013	0.0176	0.0000	56.1419
Total	**0.0474**	**0.5452**	**0.3338**	**6.2000e-004**	**0.0629**	**0.0238**	**0.0867**	**0.0334**	**0.0219**	**0.0553**	**0.0000**	**55.7013**	**55.7013**	**0.0176**	**0.0000**	**56.1419**

3.4 Grading p2 - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-003	8.3000e-004	9.0800e-003	2.0000e-005	2.1900e-003	2.0000e-005	2.2100e-003	5.8000e-004	2.0000e-005	6.0000e-004	0.0000	2.1067	2.1067	7.0000e-005	0.0000	2.1085
Total	**1.0000e-003**	**8.3000e-004**	**9.0800e-003**	**2.0000e-005**	**2.1900e-003**	**2.0000e-005**	**2.2100e-003**	**5.8000e-004**	**2.0000e-005**	**6.0000e-004**	**0.0000**	**2.1067**	**2.1067**	**7.0000e-005**	**0.0000**	**2.1085**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0241	0.0000	0.0241	0.0128	0.0000	0.0128	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.6200e-003	0.0330	0.3300	6.2000e-004		1.0200e-003	1.0200e-003		1.0200e-003	1.0200e-003	0.0000	55.7013	55.7013	0.0176	0.0000	56.1418
Total	**7.6200e-003**	**0.0330**	**0.3300**	**6.2000e-004**	**0.0241**	**1.0200e-003**	**0.0251**	**0.0128**	**1.0200e-003**	**0.0138**	**0.0000**	**55.7013**	**55.7013**	**0.0176**	**0.0000**	**56.1418**

3.4 Grading p2 - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-003	8.3000e-004	9.0800e-003	2.0000e-005	2.1900e-003	2.0000e-005	2.2100e-003	5.8000e-004	2.0000e-005	6.0000e-004	0.0000	2.1067	2.1067	7.0000e-005	0.0000	2.1085
Total	**1.0000e-003**	**8.3000e-004**	**9.0800e-003**	**2.0000e-005**	**2.1900e-003**	**2.0000e-005**	**2.2100e-003**	**5.8000e-004**	**2.0000e-005**	**6.0000e-004**	**0.0000**	**2.1067**	**2.1067**	**7.0000e-005**	**0.0000**	**2.1085**

3.5 Building Construction p2 - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2810	2.5084	2.0425	3.2000e-003		0.1535	0.1535		0.1443	0.1443	0.0000	279.7740	279.7740	0.0682	0.0000	281.4779
Total	**0.2810**	**2.5084**	**2.0425**	**3.2000e-003**		**0.1535**	**0.1535**		**0.1443**	**0.1443**	**0.0000**	**279.7740**	**279.7740**	**0.0682**	**0.0000**	**281.4779**

3.5 Building Construction p2 - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0363	1.0120	0.2768	2.2100e-003	0.0540	6.3700e-003	0.0603	0.0156	6.0900e-003	0.0217	0.0000	214.2553	214.2553	0.0143	0.0000	214.6128
Worker	0.1109	0.0924	1.0049	2.5800e-003	0.2425	2.1300e-003	0.2447	0.0644	1.9700e-003	0.0664	0.0000	233.1501	233.1501	8.0200e-003	0.0000	233.3505
Total	**0.1471**	**1.1044**	**1.2817**	**4.7900e-003**	**0.2965**	**8.5000e-003**	**0.3050**	**0.0800**	**8.0600e-003**	**0.0881**	**0.0000**	**447.4054**	**447.4054**	**0.0223**	**0.0000**	**447.9634**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0390	0.2659	2.0778	3.2000e-003		4.8500e-003	4.8500e-003		4.8500e-003	4.8500e-003	0.0000	279.7737	279.7737	0.0682	0.0000	281.4776
Total	**0.0390**	**0.2659**	**2.0778**	**3.2000e-003**		**4.8500e-003**	**4.8500e-003**		**4.8500e-003**	**4.8500e-003**	**0.0000**	**279.7737**	**279.7737**	**0.0682**	**0.0000**	**281.4776**

3.5 Building Construction p2 - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0363	1.0120	0.2768	2.2100e-003	0.0540	6.3700e-003	0.0603	0.0156	6.0900e-003	0.0217	0.0000	214.2553	214.2553	0.0143	0.0000	214.6128
Worker	0.1109	0.0924	1.0049	2.5800e-003	0.2425	2.1300e-003	0.2447	0.0644	1.9700e-003	0.0664	0.0000	233.1501	233.1501	8.0200e-003	0.0000	233.3505
Total	**0.1471**	**1.1044**	**1.2817**	**4.7900e-003**	**0.2965**	**8.5000e-003**	**0.3050**	**0.0800**	**8.0600e-003**	**0.0881**	**0.0000**	**447.4054**	**447.4054**	**0.0223**	**0.0000**	**447.9634**

3.5 Building Construction p2 - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1622	1.4677	1.2889	2.0600e-003		0.0855	0.0855		0.0804	0.0804	0.0000	177.1816	177.1816	0.0432	0.0000	178.2623
Total	**0.1622**	**1.4677**	**1.2889**	**2.0600e-003**		**0.0855**	**0.0855**		**0.0804**	**0.0804**	**0.0000**	**177.1816**	**177.1816**	**0.0432**	**0.0000**	**178.2623**

3.5 Building Construction p2 - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0200	0.5969	0.1616	1.4100e-003	0.0347	2.7800e-003	0.0375	0.0100	2.6600e-003	0.0127	0.0000	136.8332	136.8332	8.6900e-003	0.0000	137.0505
Worker	0.0657	0.0530	0.5857	1.6100e-003	0.1559	1.3300e-003	0.1573	0.0414	1.2200e-003	0.0426	0.0000	145.3280	145.3280	4.5800e-003	0.0000	145.4425
Total	**0.0857**	**0.6498**	**0.7473**	**3.0200e-003**	**0.1906**	**4.1100e-003**	**0.1947**	**0.0514**	**3.8800e-003**	**0.0553**	**0.0000**	**282.1611**	**282.1611**	**0.0133**	**0.0000**	**282.4930**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0251	0.1710	1.3357	2.0600e-003		3.1200e-003	3.1200e-003		3.1200e-003	3.1200e-003	0.0000	177.1814	177.1814	0.0432	0.0000	178.2621
Total	**0.0251**	**0.1710**	**1.3357**	**2.0600e-003**		**3.1200e-003**	**3.1200e-003**		**3.1200e-003**	**3.1200e-003**	**0.0000**	**177.1814**	**177.1814**	**0.0432**	**0.0000**	**178.2621**

3.5 Building Construction p2 - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0200	0.5969	0.1616	1.4100e-003	0.0347	2.7800e-003	0.0375	0.0100	2.6600e-003	0.0127	0.0000	136.8332	136.8332	8.6900e-003	0.0000	137.0505
Worker	0.0657	0.0530	0.5857	1.6100e-003	0.1559	1.3300e-003	0.1573	0.0414	1.2200e-003	0.0426	0.0000	145.3280	145.3280	4.5800e-003	0.0000	145.4425
Total	**0.0857**	**0.6498**	**0.7473**	**3.0200e-003**	**0.1906**	**4.1100e-003**	**0.1947**	**0.0514**	**3.8800e-003**	**0.0553**	**0.0000**	**282.1611**	**282.1611**	**0.0133**	**0.0000**	**282.4930**

3.6 Architectural Coating p2 - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.5295					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.5400e-003	0.0177	0.0192	3.0000e-005		1.1600e-003	1.1600e-003		1.1600e-003	1.1600e-003	0.0000	2.6809	2.6809	2.1000e-004	0.0000	2.6861
Total	**0.5321**	**0.0177**	**0.0192**	**3.0000e-005**		**1.1600e-003**	**1.1600e-003**		**1.1600e-003**	**1.1600e-003**	**0.0000**	**2.6809**	**2.6809**	**2.1000e-004**	**0.0000**	**2.6861**

3.6 Architectural Coating p2 - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.7900e-003	1.4500e-003	0.0160	4.0000e-005	4.2600e-003	4.0000e-005	4.2900e-003	1.1300e-003	3.0000e-005	1.1600e-003	0.0000	3.9680	3.9680	1.3000e-004	0.0000	3.9711
Total	**1.7900e-003**	**1.4500e-003**	**0.0160**	**4.0000e-005**	**4.2600e-003**	**4.0000e-005**	**4.2900e-003**	**1.1300e-003**	**3.0000e-005**	**1.1600e-003**	**0.0000**	**3.9680**	**3.9680**	**1.3000e-004**	**0.0000**	**3.9711**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.5295					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.1000e-004	1.3500e-003	0.0192	3.0000e-005		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	2.6809	2.6809	2.1000e-004	0.0000	2.6861
Total	**0.5299**	**1.3500e-003**	**0.0192**	**3.0000e-005**		**4.0000e-005**	**4.0000e-005**		**4.0000e-005**	**4.0000e-005**	**0.0000**	**2.6809**	**2.6809**	**2.1000e-004**	**0.0000**	**2.6861**

3.6 Architectural Coating p2 - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.7900e-003	1.4500e-003	0.0160	4.0000e-005	4.2600e-003	4.0000e-005	4.2900e-003	1.1300e-003	3.0000e-005	1.1600e-003	0.0000	3.9680	3.9680	1.3000e-004	0.0000	3.9711
Total	**1.7900e-003**	**1.4500e-003**	**0.0160**	**4.0000e-005**	**4.2600e-003**	**4.0000e-005**	**4.2900e-003**	**1.1300e-003**	**3.0000e-005**	**1.1600e-003**	**0.0000**	**3.9680**	**3.9680**	**1.3000e-004**	**0.0000**	**3.9711**

3.7 Paving p2 - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0149	0.1547	0.1612	2.5000e-004		8.2800e-003	8.2800e-003		7.6200e-003	7.6200e-003	0.0000	22.0310	22.0310	7.1300e-003	0.0000	22.2092
Paving	1.7200e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0166**	**0.1547**	**0.1612**	**2.5000e-004**		**8.2800e-003**	**8.2800e-003**		**7.6200e-003**	**7.6200e-003**	**0.0000**	**22.0310**	**22.0310**	**7.1300e-003**	**0.0000**	**22.2092**

3.7 Paving p2 - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.6000e-004	6.1000e-004	6.7900e-003	2.0000e-005	1.8100e-003	2.0000e-005	1.8200e-003	4.8000e-004	1.0000e-005	4.9000e-004	0.0000	1.6852	1.6852	5.0000e-005	0.0000	1.6866
Total	**7.6000e-004**	**6.1000e-004**	**6.7900e-003**	**2.0000e-005**	**1.8100e-003**	**2.0000e-005**	**1.8200e-003**	**4.8000e-004**	**1.0000e-005**	**4.9000e-004**	**0.0000**	**1.6852**	**1.6852**	**5.0000e-005**	**0.0000**	**1.6866**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	3.0900e-003	0.0134	0.1903	2.5000e-004		4.1000e-004	4.1000e-004		4.1000e-004	4.1000e-004	0.0000	22.0310	22.0310	7.1300e-003	0.0000	22.2092
Paving	1.7200e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**4.8100e-003**	**0.0134**	**0.1903**	**2.5000e-004**		**4.1000e-004**	**4.1000e-004**		**4.1000e-004**	**4.1000e-004**	**0.0000**	**22.0310**	**22.0310**	**7.1300e-003**	**0.0000**	**22.2092**

3.7 Paving p2 - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.6000e-004	6.1000e-004	6.7900e-003	2.0000e-005	1.8100e-003	2.0000e-005	1.8200e-003	4.8000e-004	1.0000e-005	4.9000e-004	0.0000	1.6852	1.6852	5.0000e-005	0.0000	1.6866
Total	**7.6000e-004**	**6.1000e-004**	**6.7900e-003**	**2.0000e-005**	**1.8100e-003**	**2.0000e-005**	**1.8200e-003**	**4.8000e-004**	**1.0000e-005**	**4.9000e-004**	**0.0000**	**1.6852**	**1.6852**	**5.0000e-005**	**0.0000**	**1.6866**

3.8 Demolition p3 gym - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0191	0.0000	0.0191	2.8900e-003	0.0000	2.8900e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0331	0.3320	0.2175	3.9000e-004		0.0166	0.0166		0.0154	0.0154	0.0000	33.9986	33.9986	9.6000e-003	0.0000	34.2386
Total	**0.0331**	**0.3320**	**0.2175**	**3.9000e-004**	**0.0191**	**0.0166**	**0.0357**	**2.8900e-003**	**0.0154**	**0.0183**	**0.0000**	**33.9986**	**33.9986**	**9.6000e-003**	**0.0000**	**34.2386**

3.8 Demolition p3 gym - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.9000e-004	5.6000e-004	6.1700e-003	2.0000e-005	1.6400e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.5320	1.5320	5.0000e-005	0.0000	1.5332
Total	**6.9000e-004**	**5.6000e-004**	**6.1700e-003**	**2.0000e-005**	**1.6400e-003**	**1.0000e-005**	**1.6600e-003**	**4.4000e-004**	**1.0000e-005**	**4.5000e-004**	**0.0000**	**1.5320**	**1.5320**	**5.0000e-005**	**0.0000**	**1.5332**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					7.3000e-003	0.0000	7.3000e-003	1.1100e-003	0.0000	1.1100e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.6200e-003	0.0200	0.2328	3.9000e-004		6.2000e-004	6.2000e-004		6.2000e-004	6.2000e-004	0.0000	33.9986	33.9986	9.6000e-003	0.0000	34.2385
Total	**4.6200e-003**	**0.0200**	**0.2328**	**3.9000e-004**	**7.3000e-003**	**6.2000e-004**	**7.9200e-003**	**1.1100e-003**	**6.2000e-004**	**1.7300e-003**	**0.0000**	**33.9986**	**33.9986**	**9.6000e-003**	**0.0000**	**34.2385**

3.8 Demolition p3 gym - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.9000e-004	5.6000e-004	6.1700e-003	2.0000e-005	1.6400e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.5320	1.5320	5.0000e-005	0.0000	1.5332
Total	**6.9000e-004**	**5.6000e-004**	**6.1700e-003**	**2.0000e-005**	**1.6400e-003**	**1.0000e-005**	**1.6600e-003**	**4.4000e-004**	**1.0000e-005**	**4.5000e-004**	**0.0000**	**1.5320**	**1.5320**	**5.0000e-005**	**0.0000**	**1.5332**

3.9 Paving p3 - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0126	0.1292	0.1465	2.3000e-004		6.7800e-003	6.7800e-003		6.2400e-003	6.2400e-003	0.0000	20.0235	20.0235	6.4800e-003	0.0000	20.1854
Paving	1.7200e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0143**	**0.1292**	**0.1465**	**2.3000e-004**		**6.7800e-003**	**6.7800e-003**		**6.2400e-003**	**6.2400e-003**	**0.0000**	**20.0235**	**20.0235**	**6.4800e-003**	**0.0000**	**20.1854**

3.9 Paving p3 - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.5000e-004	5.0000e-004	5.6700e-003	2.0000e-005	1.6400e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.4834	1.4834	4.0000e-005	0.0000	1.4845
Total	**6.5000e-004**	**5.0000e-004**	**5.6700e-003**	**2.0000e-005**	**1.6400e-003**	**1.0000e-005**	**1.6600e-003**	**4.4000e-004**	**1.0000e-005**	**4.5000e-004**	**0.0000**	**1.4834**	**1.4834**	**4.0000e-005**	**0.0000**	**1.4845**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	2.8000e-003	0.0122	0.1730	2.3000e-004		3.7000e-004	3.7000e-004		3.7000e-004	3.7000e-004	0.0000	20.0235	20.0235	6.4800e-003	0.0000	20.1854
Paving	1.7200e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**4.5200e-003**	**0.0122**	**0.1730**	**2.3000e-004**		**3.7000e-004**	**3.7000e-004**		**3.7000e-004**	**3.7000e-004**	**0.0000**	**20.0235**	**20.0235**	**6.4800e-003**	**0.0000**	**20.1854**

3.9 Paving p3 - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.5000e-004	5.0000e-004	5.6700e-003	2.0000e-005	1.6400e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.4834	1.4834	4.0000e-005	0.0000	1.4845
Total	**6.5000e-004**	**5.0000e-004**	**5.6700e-003**	**2.0000e-005**	**1.6400e-003**	**1.0000e-005**	**1.6600e-003**	**4.4000e-004**	**1.0000e-005**	**4.5000e-004**	**0.0000**	**1.4834**	**1.4834**	**4.0000e-005**	**0.0000**	**1.4845**

3.10 Building Construction p3 - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0627	0.5753	0.5470	8.9000e-004		0.0316	0.0316		0.0297	0.0297	0.0000	76.4403	76.4403	0.0184	0.0000	76.9013
Total	**0.0627**	**0.5753**	**0.5470**	**8.9000e-004**		**0.0316**	**0.0316**		**0.0297**	**0.0297**	**0.0000**	**76.4403**	**76.4403**	**0.0184**	**0.0000**	**76.9013**

3.10 Building Construction p3 - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	7.3800e-003	0.2345	0.0636	6.0000e-004	0.0150	4.8000e-004	0.0154	4.3200e-003	4.6000e-004	4.7800e-003	0.0000	58.5676	58.5676	3.5900e-003	0.0000	58.6574
Worker	0.0264	0.0206	0.2321	6.7000e-004	0.0673	5.5000e-004	0.0678	0.0179	5.1000e-004	0.0184	0.0000	60.6997	60.6997	1.7900e-003	0.0000	60.7444
Total	**0.0338**	**0.2551**	**0.2957**	**1.2700e-003**	**0.0822**	**1.0300e-003**	**0.0833**	**0.0222**	**9.7000e-004**	**0.0232**	**0.0000**	**119.2673**	**119.2673**	**5.3800e-003**	**0.0000**	**119.4018**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0108	0.0738	0.5762	8.9000e-004		1.3500e-003	1.3500e-003		1.3500e-003	1.3500e-003	0.0000	76.4402	76.4402	0.0184	0.0000	76.9013
Total	**0.0108**	**0.0738**	**0.5762**	**8.9000e-004**		**1.3500e-003**	**1.3500e-003**		**1.3500e-003**	**1.3500e-003**	**0.0000**	**76.4402**	**76.4402**	**0.0184**	**0.0000**	**76.9013**

3.10 Building Construction p3 - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	7.3800e-003	0.2345	0.0636	6.0000e-004	0.0150	4.8000e-004	0.0154	4.3200e-003	4.6000e-004	4.7800e-003	0.0000	58.5676	58.5676	3.5900e-003	0.0000	58.6574
Worker	0.0264	0.0206	0.2321	6.7000e-004	0.0673	5.5000e-004	0.0678	0.0179	5.1000e-004	0.0184	0.0000	60.6997	60.6997	1.7900e-003	0.0000	60.7444
Total	**0.0338**	**0.2551**	**0.2957**	**1.2700e-003**	**0.0822**	**1.0300e-003**	**0.0833**	**0.0222**	**9.7000e-004**	**0.0232**	**0.0000**	**119.2673**	**119.2673**	**5.3800e-003**	**0.0000**	**119.4018**

3.10 Building Construction p3 - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0913	0.8354	0.8754	1.4400e-003		0.0433	0.0433		0.0407	0.0407	0.0000	123.9730	123.9730	0.0297	0.0000	124.7155
Total	**0.0913**	**0.8354**	**0.8754**	**1.4400e-003**		**0.0433**	**0.0433**		**0.0407**	**0.0407**	**0.0000**	**123.9730**	**123.9730**	**0.0297**	**0.0000**	**124.7155**

3.10 Building Construction p3 - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0112	0.3612	0.0975	9.7000e-004	0.0243	6.8000e-004	0.0249	7.0000e-003	6.5000e-004	7.6500e-003	0.0000	94.1165	94.1165	5.6200e-003	0.0000	94.2570
Worker	0.0402	0.0301	0.3467	1.0500e-003	0.1090	8.7000e-004	0.1099	0.0290	8.0000e-004	0.0298	0.0000	94.9479	94.9479	2.6100e-003	0.0000	95.0133
Total	**0.0514**	**0.3913**	**0.4442**	**2.0200e-003**	**0.1333**	**1.5500e-003**	**0.1349**	**0.0360**	**1.4500e-003**	**0.0374**	**0.0000**	**189.0644**	**189.0644**	**8.2300e-003**	**0.0000**	**189.2704**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0175	0.1196	0.9341	1.4400e-003		2.1800e-003	2.1800e-003		2.1800e-003	2.1800e-003	0.0000	123.9729	123.9729	0.0297	0.0000	124.7154
Total	**0.0175**	**0.1196**	**0.9341**	**1.4400e-003**		**2.1800e-003**	**2.1800e-003**		**2.1800e-003**	**2.1800e-003**	**0.0000**	**123.9729**	**123.9729**	**0.0297**	**0.0000**	**124.7154**

3.10 Building Construction p3 - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0112	0.3612	0.0975	9.7000e-004	0.0243	6.8000e-004	0.0249	7.0000e-003	6.5000e-004	7.6500e-003	0.0000	94.1165	94.1165	5.6200e-003	0.0000	94.2570
Worker	0.0402	0.0301	0.3467	1.0500e-003	0.1090	8.7000e-004	0.1099	0.0290	8.0000e-004	0.0298	0.0000	94.9479	94.9479	2.6100e-003	0.0000	95.0133
Total	**0.0514**	**0.3913**	**0.4442**	**2.0200e-003**	**0.1333**	**1.5500e-003**	**0.1349**	**0.0360**	**1.4500e-003**	**0.0374**	**0.0000**	**189.0644**	**189.0644**	**8.2300e-003**	**0.0000**	**189.2704**

3.11 Architectural Coating P3 - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.5295					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.2500e-003	0.0155	0.0200	3.0000e-005		9.0000e-004	9.0000e-004		9.0000e-004	9.0000e-004	0.0000	2.8086	2.8086	1.8000e-004	0.0000	2.8132
Total	**0.5318**	**0.0155**	**0.0200**	**3.0000e-005**		**9.0000e-004**	**9.0000e-004**		**9.0000e-004**	**9.0000e-004**	**0.0000**	**2.8086**	**2.8086**	**1.8000e-004**	**0.0000**	**2.8132**

3.11 Architectural Coating P3 - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.6400e-003	1.2300e-003	0.0142	4.0000e-005	4.4600e-003	4.0000e-005	4.5000e-003	1.1800e-003	3.0000e-005	1.2200e-003	0.0000	3.8834	3.8834	1.1000e-004	0.0000	3.8861
Total	**1.6400e-003**	**1.2300e-003**	**0.0142**	**4.0000e-005**	**4.4600e-003**	**4.0000e-005**	**4.5000e-003**	**1.1800e-003**	**3.0000e-005**	**1.2200e-003**	**0.0000**	**3.8834**	**3.8834**	**1.1000e-004**	**0.0000**	**3.8861**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.5295					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.3000e-004	1.4200e-003	0.0202	3.0000e-005		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	2.8086	2.8086	1.8000e-004	0.0000	2.8132
Total	**0.5299**	**1.4200e-003**	**0.0202**	**3.0000e-005**		**4.0000e-005**	**4.0000e-005**		**4.0000e-005**	**4.0000e-005**	**0.0000**	**2.8086**	**2.8086**	**1.8000e-004**	**0.0000**	**2.8132**

3.11 Architectural Coating P3 - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.6400e-003	1.2300e-003	0.0142	4.0000e-005	4.4600e-003	4.0000e-005	4.5000e-003	1.1800e-003	3.0000e-005	1.2200e-003	0.0000	3.8834	3.8834	1.1000e-004	0.0000	3.8861
Total	**1.6400e-003**	**1.2300e-003**	**0.0142**	**4.0000e-005**	**4.4600e-003**	**4.0000e-005**	**4.5000e-003**	**1.1800e-003**	**3.0000e-005**	**1.2200e-003**	**0.0000**	**3.8834**	**3.8834**	**1.1000e-004**	**0.0000**	**3.8861**

3.12 Demolition p3 7_29_31 - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0151	0.0000	0.0151	2.2800e-003	0.0000	2.2800e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0567	0.5530	0.4428	8.3000e-004		0.0267	0.0267		0.0248	0.0248	0.0000	73.0790	73.0790	0.0205	0.0000	73.5922
Total	**0.0567**	**0.5530**	**0.4428**	**8.3000e-004**	**0.0151**	**0.0267**	**0.0418**	**2.2800e-003**	**0.0248**	**0.0271**	**0.0000**	**73.0790**	**73.0790**	**0.0205**	**0.0000**	**73.5922**

3.12 Demolition p3 7_29_31 - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.3000e-003	9.8000e-004	0.0112	3.0000e-005	3.5300e-003	3.0000e-005	3.5600e-003	9.4000e-004	3.0000e-005	9.6000e-004	0.0000	3.0772	3.0772	8.0000e-005	0.0000	3.0793
Total	**1.3000e-003**	**9.8000e-004**	**0.0112**	**3.0000e-005**	**3.5300e-003**	**3.0000e-005**	**3.5600e-003**	**9.4000e-004**	**3.0000e-005**	**9.6000e-004**	**0.0000**	**3.0772**	**3.0772**	**8.0000e-005**	**0.0000**	**3.0793**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					5.7600e-003	0.0000	5.7600e-003	8.7000e-004	0.0000	8.7000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.9400e-003	0.0431	0.5005	8.3000e-004		1.3300e-003	1.3300e-003		1.3300e-003	1.3300e-003	0.0000	73.0789	73.0789	0.0205	0.0000	73.5921
Total	**9.9400e-003**	**0.0431**	**0.5005**	**8.3000e-004**	**5.7600e-003**	**1.3300e-003**	**7.0900e-003**	**8.7000e-004**	**1.3300e-003**	**2.2000e-003**	**0.0000**	**73.0789**	**73.0789**	**0.0205**	**0.0000**	**73.5921**

3.12 Demolition p3 7_29_31 - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.3000e-003	9.8000e-004	0.0112	3.0000e-005	3.5300e-003	3.0000e-005	3.5600e-003	9.4000e-004	3.0000e-005	9.6000e-004	0.0000	3.0772	3.0772	8.0000e-005	0.0000	3.0793
Total	**1.3000e-003**	**9.8000e-004**	**0.0112**	**3.0000e-005**	**3.5300e-003**	**3.0000e-005**	**3.5600e-003**	**9.4000e-004**	**3.0000e-005**	**9.6000e-004**	**0.0000**	**3.0772**	**3.0772**	**8.0000e-005**	**0.0000**	**3.0793**

3.13 Site Preparation p2 - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.3913	0.0000	0.3913	0.2138	0.0000	0.2138	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0981	1.0363	0.4832	8.2000e-004		0.0554	0.0554		0.0510	0.0510	0.0000	74.7338	74.7338	0.0233	0.0000	75.3154
Total	**0.0981**	**1.0363**	**0.4832**	**8.2000e-004**	**0.3913**	**0.0554**	**0.4467**	**0.2138**	**0.0510**	**0.2648**	**0.0000**	**74.7338**	**74.7338**	**0.0233**	**0.0000**	**75.3154**

3.13 Site Preparation p2 - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.2400e-003	0.0414	8.5400e-003	1.0000e-004	3.3600e-003	1.5000e-004	3.5100e-003	8.9000e-004	1.5000e-004	1.0300e-003	0.0000	9.7734	9.7734	6.9000e-004	0.0000	9.7906
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.1400e-003	1.8300e-003	0.0197	5.0000e-005	4.2400e-003	4.0000e-005	4.2800e-003	1.1300e-003	4.0000e-005	1.1600e-003	0.0000	4.2136	4.2136	1.6000e-004	0.0000	4.2176
Total	**3.3800e-003**	**0.0432**	**0.0283**	**1.5000e-004**	**7.6000e-003**	**1.9000e-004**	**7.7900e-003**	**2.0200e-003**	**1.9000e-004**	**2.1900e-003**	**0.0000**	**13.9870**	**13.9870**	**8.5000e-004**	**0.0000**	**14.0082**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1497	0.0000	0.1497	0.0818	0.0000	0.0818	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0100	0.0434	0.4487	8.2000e-004		1.3300e-003	1.3300e-003		1.3300e-003	1.3300e-003	0.0000	74.7337	74.7337	0.0233	0.0000	75.3154
Total	**0.0100**	**0.0434**	**0.4487**	**8.2000e-004**	**0.1497**	**1.3300e-003**	**0.1510**	**0.0818**	**1.3300e-003**	**0.0831**	**0.0000**	**74.7337**	**74.7337**	**0.0233**	**0.0000**	**75.3154**

3.13 Site Preparation p2 - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.2400e-003	0.0414	8.5400e-003	1.0000e-004	3.3600e-003	1.5000e-004	3.5100e-003	8.9000e-004	1.5000e-004	1.0300e-003	0.0000	9.7734	9.7734	6.9000e-004	0.0000	9.7906
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.1400e-003	1.8300e-003	0.0197	5.0000e-005	4.2400e-003	4.0000e-005	4.2800e-003	1.1300e-003	4.0000e-005	1.1600e-003	0.0000	4.2136	4.2136	1.6000e-004	0.0000	4.2176
Total	**3.3800e-003**	**0.0432**	**0.0283**	**1.5000e-004**	**7.6000e-003**	**1.9000e-004**	**7.7900e-003**	**2.0200e-003**	**1.9000e-004**	**2.1900e-003**	**0.0000**	**13.9870**	**13.9870**	**8.5000e-004**	**0.0000**	**14.0082**

3.13 Site Preparation p2 - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.3009	0.0000	0.3009	0.1642	0.0000	0.1642	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0715	0.7520	0.3640	6.3000e-004		0.0394	0.0394		0.0363	0.0363	0.0000	56.3783	56.3783	0.0178	0.0000	56.8243
Total	**0.0715**	**0.7520**	**0.3640**	**6.3000e-004**	**0.3009**	**0.0394**	**0.3404**	**0.1642**	**0.0363**	**0.2005**	**0.0000**	**56.3783**	**56.3783**	**0.0178**	**0.0000**	**56.8243**

3.13 Site Preparation p2 - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	9.0000e-004	0.0301	6.3900e-003	8.0000e-005	3.2400e-003	1.1000e-004	3.3400e-003	8.4000e-004	1.0000e-004	9.4000e-004	0.0000	7.4047	7.4047	5.2000e-004	0.0000	7.4177
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.4900e-003	1.2400e-003	0.0135	3.0000e-005	3.2500e-003	3.0000e-005	3.2800e-003	8.6000e-004	3.0000e-005	8.9000e-004	0.0000	3.1285	3.1285	1.1000e-004	0.0000	3.1312
Total	**2.3900e-003**	**0.0313**	**0.0199**	**1.1000e-004**	**6.4900e-003**	**1.4000e-004**	**6.6200e-003**	**1.7000e-003**	**1.3000e-004**	**1.8300e-003**	**0.0000**	**10.5332**	**10.5332**	**6.3000e-004**	**0.0000**	**10.5489**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1151	0.0000	0.1151	0.0628	0.0000	0.0628	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.6800e-003	0.0333	0.3443	6.3000e-004		1.0200e-003	1.0200e-003		1.0200e-003	1.0200e-003	0.0000	56.3783	56.3783	0.0178	0.0000	56.8242
Total	**7.6800e-003**	**0.0333**	**0.3443**	**6.3000e-004**	**0.1151**	**1.0200e-003**	**0.1161**	**0.0628**	**1.0200e-003**	**0.0638**	**0.0000**	**56.3783**	**56.3783**	**0.0178**	**0.0000**	**56.8242**

3.13 Site Preparation p2 - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	9.0000e-004	0.0301	6.3900e-003	8.0000e-005	3.2400e-003	1.1000e-004	3.3400e-003	8.4000e-004	1.0000e-004	9.4000e-004	0.0000	7.4047	7.4047	5.2000e-004	0.0000	7.4177
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.4900e-003	1.2400e-003	0.0135	3.0000e-005	3.2500e-003	3.0000e-005	3.2800e-003	8.6000e-004	3.0000e-005	8.9000e-004	0.0000	3.1285	3.1285	1.1000e-004	0.0000	3.1312
Total	**2.3900e-003**	**0.0313**	**0.0199**	**1.1000e-004**	**6.4900e-003**	**1.4000e-004**	**6.6200e-003**	**1.7000e-003**	**1.3000e-004**	**1.8300e-003**	**0.0000**	**10.5332**	**10.5332**	**6.3000e-004**	**0.0000**	**10.5489**

3.14 Site Preparation p3 - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.0778	0.0000	1.0778	0.5912	0.0000	0.5912	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.2426	2.5238	1.2801	2.2600e-003		0.1308	0.1308		0.1203	0.1203	0.0000	198.9125	198.9125	0.0643	0.0000	200.5209
Total	**0.2426**	**2.5238**	**1.2801**	**2.2600e-003**	**1.0778**	**0.1308**	**1.2085**	**0.5912**	**0.1203**	**0.7115**	**0.0000**	**198.9125**	**198.9125**	**0.0643**	**0.0000**	**200.5209**

3.14 Site Preparation p3 - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.9300e-003	0.0650	0.0143	1.7000e-004	3.7600e-003	2.0000e-004	3.9700e-003	1.0300e-003	1.9000e-004	1.2300e-003	0.0000	16.8801	16.8801	1.1800e-003	0.0000	16.9095
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.9400e-003	3.9900e-003	0.0441	1.2000e-004	0.0117	1.0000e-004	0.0118	3.1200e-003	9.0000e-005	3.2100e-003	0.0000	10.9387	10.9387	3.4000e-004	0.0000	10.9473
Total	**6.8700e-003**	**0.0690**	**0.0584**	**2.9000e-004**	**0.0155**	**3.0000e-004**	**0.0158**	**4.1500e-003**	**2.8000e-004**	**4.4400e-003**	**0.0000**	**27.8188**	**27.8188**	**1.5200e-003**	**0.0000**	**27.8568**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.4123	0.0000	0.4123	0.2261	0.0000	0.2261	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0277	0.1200	1.2417	2.2600e-003		3.6900e-003	3.6900e-003		3.6900e-003	3.6900e-003	0.0000	198.9123	198.9123	0.0643	0.0000	200.5206
Total	**0.0277**	**0.1200**	**1.2417**	**2.2600e-003**	**0.4123**	**3.6900e-003**	**0.4160**	**0.2261**	**3.6900e-003**	**0.2298**	**0.0000**	**198.9123**	**198.9123**	**0.0643**	**0.0000**	**200.5206**

3.14 Site Preparation p3 - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.9300e-003	0.0650	0.0143	1.7000e-004	3.7600e-003	2.0000e-004	3.9700e-003	1.0300e-003	1.9000e-004	1.2300e-003	0.0000	16.8801	16.8801	1.1800e-003	0.0000	16.9095
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.9400e-003	3.9900e-003	0.0441	1.2000e-004	0.0117	1.0000e-004	0.0118	3.1200e-003	9.0000e-005	3.2100e-003	0.0000	10.9387	10.9387	3.4000e-004	0.0000	10.9473
Total	**6.8700e-003**	**0.0690**	**0.0584**	**2.9000e-004**	**0.0155**	**3.0000e-004**	**0.0158**	**4.1500e-003**	**2.8000e-004**	**4.4400e-003**	**0.0000**	**27.8188**	**27.8188**	**1.5200e-003**	**0.0000**	**27.8568**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.5473	8.3938	23.0754	0.0862	7.2049	0.0717	7.2766	1.9313	0.0669	1.9982	0.0000	7,964.1460	7,964.1460	0.4013	0.0000	7,974.1775
Unmitigated	1.5473	8.3938	23.0754	0.0862	7.2049	0.0717	7.2766	1.9313	0.0669	1.9982	0.0000	7,964.1460	7,964.1460	0.4013	0.0000	7,974.1775

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
High School	4,444.89	4,444.89	4444.89	18,983,149	18,983,149
Parking Lot	0.00	0.00	0.00		
Total	4,444.89	4,444.89	4,444.89	18,983,149	18,983,149

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	16.60	8.40	6.90	33.00	48.00	19.00	66	28	6
High School	16.60	8.40	6.90	77.80	17.20	5.00	75	19	6
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.546501	0.044961	0.204016	0.120355	0.015740	0.006196	0.020131	0.030678	0.002515	0.002201	0.005142	0.000687	0.000876
High School	0.546501	0.044961	0.204016	0.120355	0.015740	0.006196	0.020131	0.030678	0.002515	0.002201	0.005142	0.000687	0.000876
Parking Lot	0.546501	0.044961	0.204016	0.120355	0.015740	0.006196	0.020131	0.030678	0.002515	0.002201	0.005142	0.000687	0.000876

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	714.9371	714.9371	0.0169	3.4900e-003	716.4003
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	758.8922	758.8922	0.0179	3.7100e-003	760.4453
NaturalGas Mitigated	0.0104	0.0949	0.0797	5.7000e-004		7.2100e-003	7.2100e-003		7.2100e-003	7.2100e-003	0.0000	103.3013	103.3013	1.9800e-003	1.8900e-003	103.9152
NaturalGas Unmitigated	0.0127	0.1156	0.0971	6.9000e-004		8.7900e-003	8.7900e-003		8.7900e-003	8.7900e-003	0.0000	125.8592	125.8592	2.4100e-003	2.3100e-003	126.6071

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
High School	2.35851e+006	0.0127	0.1156	0.0971	6.9000e-004		8.7900e-003	8.7900e-003		8.7900e-003	8.7900e-003	0.0000	125.8592	125.8592	2.4100e-003	2.3100e-003	126.6071
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0127**	**0.1156**	**0.0971**	**6.9000e-004**		**8.7900e-003**	**8.7900e-003**		**8.7900e-003**	**8.7900e-003**	**0.0000**	**125.8592**	**125.8592**	**2.4100e-003**	**2.3100e-003**	**126.6071**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
High School	1.93579e+006	0.0104	0.0949	0.0797	5.7000e-004		7.2100e-003	7.2100e-003		7.2100e-003	7.2100e-003	0.0000	103.3013	103.3013	1.9800e-003	1.8900e-003	103.9152
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0104**	**0.0949**	**0.0797**	**5.7000e-004**		**7.2100e-003**	**7.2100e-003**		**7.2100e-003**	**7.2100e-003**	**0.0000**	**103.3013**	**103.3013**	**1.9800e-003**	**1.8900e-003**	**103.9152**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
High School	1.34254e+006	747.7418	0.0177	3.6500e-003	749.2721
Parking Lot	20020	11.1504	2.6000e-004	5.0000e-005	11.1732
Total		**758.8922**	**0.0179**	**3.7000e-003**	**760.4453**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
High School	1.26362e+006	703.7867	0.0166	3.4400e-003	705.2271
Parking Lot	20020	11.1504	2.6000e-004	5.0000e-005	11.1732
Total		**714.9371**	**0.0169**	**3.4900e-003**	**716.4003**

6.0 Area Detail

6.1 Mitigation Measures Area

Use Electric Leafblower

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.8780	3.0000e-005	3.6800e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	7.1400e-003	7.1400e-003	2.0000e-005	0.0000	7.6100e-003
Unmitigated	0.8780	3.0000e-005	3.6800e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	7.1400e-003	7.1400e-003	2.0000e-005	0.0000	7.6100e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0530					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.8247					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	3.4000e-004	3.0000e-005	3.6800e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	7.1400e-003	7.1400e-003	2.0000e-005	0.0000	7.6100e-003
Total	**0.8779**	**3.0000e-005**	**3.6800e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**	**0.0000**	**7.1400e-003**	**7.1400e-003**	**2.0000e-005**	**0.0000**	**7.6100e-003**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0530					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.8247					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	3.4000e-004	3.0000e-005	3.6800e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	7.1400e-003	7.1400e-003	2.0000e-005	0.0000	7.6100e-003
Total	**0.8779**	**3.0000e-005**	**3.6800e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**	**0.0000**	**7.1400e-003**	**7.1400e-003**	**2.0000e-005**	**0.0000**	**7.6100e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

Use Water Efficient Irrigation System

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	194.5681	0.2499	6.7300e-003	202.8222
Unmitigated	203.5049	0.2501	6.7800e-003	211.7773

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 4.31316	26.6892	6.3000e-004	1.3000e-004	26.7438
High School	7.53015 / 19.3632	176.8158	0.2495	6.6500e-003	185.0335
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**203.5049**	**0.2501**	**6.7800e-003**	**211.7773**

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 4.05006	25.0611	5.9000e-004	1.2000e-004	25.1124
High School	7.53015 / 18.1821	169.5069	0.2493	6.6100e-003	177.7097
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**194.5681**	**0.2499**	**6.7300e-003**	**202.8222**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	59.9067	3.5404	0.0000	148.4163
Unmitigated	59.9067	3.5404	0.0000	148.4163

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	0.31	0.0629	3.7200e-003	0.0000	0.1559
High School	294.81	59.8438	3.5367	0.0000	148.2604
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**59.9067**	**3.5404**	**0.0000**	**148.4163**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	0.31	0.0629	3.7200e-003	0.0000	0.1559
High School	294.81	59.8438	3.5367	0.0000	148.2604
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**59.9067**	**3.5404**	**0.0000**	**148.4163**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Roosevelt HS

Los Angeles-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
High School	226.78	1000sqft	5.21	226,780.00	2600
Parking Lot	57.20	1000sqft	1.31	57,200.00	0
City Park	3.62	Acre	3.62	157,687.20	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	12			**Operational Year**	2022
Utility Company	Los Angeles Department of Water & Power				
CO2 Intensity (lb/MWhr)	1227.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - The Roosevelt Program Approval document and traffic study state that the school capacity is 2,600.

Construction Phase - Based on LPA phasing plan.

Off-road Equipment - Data from Roosevelt High School Comprehensive Modernization Project Construction Schedule and Equipment.

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment - Data from Roosevelt High School Comprehensive Modernization Project Construction Schedule and Equipment.

Trips and VMT -

Demolition - Based on LPA phasing plan. Phase 1 building demo = building #1. Phase 3 Gym = #19. Phase 3 7_29_31 = #7, 29, 31.

Grading - Soil export from RAW on-going during construction.

Architectural Coating - Standard Condition SC-AQ-4 requires ultra-low VOC or zero VOC paint.

Vehicle Trips - Traffic study states 4,446 daily trips. Project size approximately 226.78 ksf.

Area Coating - Standard Condition SC-AQ-4 requires ultra-low VOC or zero VOC paint.

Construction Off-road Equipment Mitigation - Mitigation reflects LAUSD Standard Condition for Approval SC-AQ-4

Area Mitigation -

Energy Mitigation - Reflects SC-GHG-5

Water Mitigation -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Energy Use -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	100.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Exterior	100.00	50.00

tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	50.00
tblArchitecturalCoating	EF_Parking	100.00	50.00
tblArchitecturalCoating	EF_Parking	100.00	50.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	100	50
tblAreaCoating	Area_EF_Nonresidential_Interior	100	50
tblAreaCoating	Area_EF_Parking	100	50
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	11.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	16.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	20.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final

tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
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tblConstructionPhase	NumDays	10.00	66.00
tblConstructionPhase	NumDays	20.00	43.00
tblConstructionPhase	NumDays	300.00	173.00
tblConstructionPhase	NumDays	30.00	20.00
tblConstructionPhase	NumDays	300.00	391.00
tblConstructionPhase	NumDays	20.00	21.00
tblConstructionPhase	NumDays	20.00	22.00
tblConstructionPhase	NumDays	20.00	22.00
tblConstructionPhase	NumDays	10.00	76.00
tblConstructionPhase	NumDays	10.00	119.00
tblGrading	AcresOfGrading	0.00	5.00
tblGrading	AcresOfGrading	50.00	5.00
tblGrading	AcresOfGrading	0.00	5.00
tblGrading	AcresOfGrading	0.00	5.00
tblGrading	MaterialExported	0.00	3,500.00
tblGrading	MaterialExported	0.00	3,500.00

tblLandUse	Population	0.00	2,600.00
tblTripsAndVMT	HaulingTripNumber	492.00	596.00
tblTripsAndVMT	HaulingTripNumber	176.00	0.00
tblTripsAndVMT	HaulingTripNumber	139.00	0.00
tblVehicleTrips	ST_TR	22.75	0.00
tblVehicleTrips	ST_TR	4.37	19.60
tblVehicleTrips	SU_TR	16.74	0.00
tblVehicleTrips	SU_TR	1.79	19.60
tblVehicleTrips	WD_TR	1.89	0.00
tblVehicleTrips	WD_TR	12.89	19.60

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2018	8.5601	89.7875	47.2099	0.0889	19.4390	4.5307	23.9697	10.2038	4.1900	14.3938	0.0000	8,965.0716	8,965.0716	2.3335	0.0000	9,023.4077
2019	9.3179	101.9976	57.6484	0.1132	25.0533	4.7832	29.8364	13.4425	4.4007	17.8432	0.0000	11,338.1539	11,338.1539	3.1845	0.0000	11,389.9277
2020	55.0362	90.8994	60.2551	0.1106	20.9197	4.6168	25.2414	10.6911	4.2634	14.6485	0.0000	10,947.0163	10,947.0163	3.0031	0.0000	10,997.8537
2021	2.9171	24.9706	25.8943	0.0667	2.5400	0.9897	3.5297	0.6841	0.9304	1.6145	0.0000	6,650.6164	6,650.6164	0.7950	0.0000	6,670.4919
2022	48.4931	25.7593	25.0043	0.0658	2.5400	1.2440	3.3778	0.6841	1.1565	1.4722	0.0000	6,559.8369	6,559.8369	1.0570	0.0000	6,579.3603
Maximum	**55.0362**	**101.9976**	**60.2551**	**0.1132**	**25.0533**	**4.7832**	**29.8364**	**13.4425**	**4.4007**	**17.8432**	**0.0000**	**11,338.1539**	**11,338.1539**	**3.1845**	**0.0000**	**11,389.9277**

2.1 Overall Construction (Maximum Daily Emission)

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2018	1.2063	7.2869	46.5784	0.0889	7.8039	0.1389	7.9428	4.0009	0.1381	4.1390	0.0000	8,965.0716	8,965.0716	2.3335	0.0000	9,023.4077
2019	2.1658	15.0989	56.0767	0.1132	9.9687	0.1821	10.1424	5.2434	0.1780	5.4166	0.0000	11,338.1539	11,338.1539	3.1845	0.0000	11,389.9277
2020	51.2129	13.6372	63.7807	0.1106	9.7342	0.1690	9.8956	4.5556	0.1685	4.7138	0.0000	10,947.0163	10,947.0163	3.0031	0.0000	10,997.8537
2021	1.3440	9.7732	26.7793	0.0667	2.5400	0.0719	2.6119	0.6841	0.0699	0.7540	0.0000	6,650.6164	6,650.6164	0.7950	0.0000	6,670.4919
2022	48.3182	9.3775	26.1011	0.0658	2.5400	0.0696	2.6096	0.6841	0.0677	0.7518	0.0000	6,559.8369	6,559.8369	1.0570	0.0000	6,579.3603
Maximum	**51.2129**	**15.0989**	**63.7807**	**0.1132**	**9.9687**	**0.1821**	**10.1424**	**5.2434**	**0.1780**	**5.4166**	**0.0000**	**11,338.1539**	**11,338.1539**	**3.1845**	**0.0000**	**11,389.9277**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**16.15**	**83.45**	**-1.53**	**0.00**	**53.77**	**96.09**	**61.37**	**57.52**	**95.84**	**68.43**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	4.8115	2.7000e-004	0.0294	0.0000		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004		0.0629	0.0629	1.7000e-004		0.0671
Energy	0.0697	0.6335	0.5321	3.8000e-003		0.0482	0.0482		0.0482	0.0482		760.1973	760.1973	0.0146	0.0139	764.7147
Mobile	8.9280	43.9952	132.6360	0.4912	40.3666	0.3936	40.7602	10.8028	0.3672	11.1700		49,970.8526	49,970.8526	2.4539		50,032.1994
Total	**13.8092**	**44.6289**	**133.1975**	**0.4950**	**40.3666**	**0.4418**	**40.8085**	**10.8028**	**0.4155**	**11.2183**		**50,731.1128**	**50,731.1128**	**2.4686**	**0.0139**	**50,796.9812**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	4.8115	2.7000e-004	0.0294	0.0000		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004		0.0629	0.0629	1.7000e-004		0.0671
Energy	0.0572	0.5200	0.4368	3.1200e-003		0.0395	0.0395		0.0395	0.0395		623.9465	623.9465	0.0120	0.0114	627.6543
Mobile	8.9280	43.9952	132.6360	0.4912	40.3666	0.3936	40.7602	10.8028	0.3672	11.1700		49,970.8526	49,970.8526	2.4539		50,032.1994
Total	**13.7967**	**44.5154**	**133.1022**	**0.4943**	**40.3666**	**0.4332**	**40.7998**	**10.8028**	**0.4068**	**11.2096**		**50,594.8621**	**50,594.8621**	**2.4660**	**0.0114**	**50,659.9208**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.09**	**0.25**	**0.07**	**0.14**	**0.00**	**1.95**	**0.02**	**0.00**	**2.08**	**0.08**	**0.00**	**0.27**	**0.27**	**0.11**	**17.93**	**0.27**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition p1	Demolition	6/1/2018	12/31/2018	5	152	
2	Site Preparation p1	Site Preparation	6/1/2018	8/31/2018	5	66	
3	Grading p2	Grading	1/1/2019	1/28/2019	5	20	
4	Building Construction p2	Building Construction	2/1/2019	7/31/2020	5	391	
5	Architectural Coating p2	Architectural Coating	8/1/2020	8/31/2020	5	21	
6	Paving p2	Paving	9/1/2020	9/30/2020	5	22	
7	Demolition p3 gym	Demolition	9/1/2020	9/28/2020	5	20	
8	Paving p3	Paving	8/1/2021	8/27/2021	5	20	
9	Building Construction p3	Building Construction	10/1/2021	5/31/2022	5	173	
10	Architectural Coating P3	Architectural Coating	6/1/2022	6/30/2022	5	22	
11	Demolition p3 7_29_31	Demolition	9/1/2022	10/31/2022	5	43	
12	Site Preparation p2	Site Preparation	11/1/2018	2/14/2019	5	76	
13	Site Preparation p3	Site Preparation	6/1/2020	11/12/2020	5	119	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 1.31

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 340,170; Non-Residential Outdoor: 113,390; Striped Parking Area: 3,432 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation p2	Rubber Tired Dozers	3	8.00	247	0.40
Demolition p1	Concrete/Industrial Saws	1	8.00	81	0.73
Site Preparation p3	Rubber Tired Dozers	3	8.00	247	0.40
Demolition p1	Excavators	3	8.00	158	0.38
Demolition p1	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation p2	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Site Preparation p3	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Site Preparation p1	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation p1	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Architectural Coating P3	Air Compressors	1	6.00	78	0.48
Demolition p3 gym	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition p3 7_29_31	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction p3	Cranes	1	7.00	231	0.29
Demolition p3 gym	Excavators	3	8.00	158	0.38
Demolition p3 7_29_31	Excavators	3	8.00	158	0.38
Building Construction p3	Forklifts	3	8.00	89	0.20
Building Construction p3	Generator Sets	1	8.00	84	0.74
Grading p2	Graders	1	8.00	187	0.41
Paving p3	Pavers	2	8.00	130	0.42
Paving p3	Paving Equipment	2	8.00	132	0.36
Paving p3	Rollers	2	8.00	80	0.38
Demolition p3 gym	Rubber Tired Dozers	2	8.00	247	0.40
Demolition p3 7_29_31	Rubber Tired Dozers	2	8.00	247	0.40
Grading p2	Scrapers	2	8.00	367	0.48

Building Construction p3	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction p3	Welders	1	8.00	46	0.45
Grading p2	Excavators	2	8.00	158	0.38
Grading p2	Rubber Tired Dozers	1	8.00	247	0.40
Grading p2	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction p2	Cranes	1	7.00	231	0.29
Building Construction p2	Forklifts	3	8.00	89	0.20
Building Construction p2	Generator Sets	1	8.00	84	0.74
Building Construction p2	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction p2	Welders	1	8.00	46	0.45
Architectural Coating p2	Air Compressors	1	6.00	78	0.48
Paving p2	Pavers	2	8.00	130	0.42
Paving p2	Paving Equipment	2	8.00	132	0.36
Paving p2	Rollers	2	8.00	80	0.38

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition p1	6	15.00	0.00	596.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation p1	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating p3	1	37.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction p3	9	186.00	72.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Demolition p3 gym	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Demolition p3 7, 29, 31	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading p2	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction p2	9	186.00	72.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating p2	1	37.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving p2	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving p3	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation p2	7	18.00	0.00	438.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation p3	7	18.00	0.00	438.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use Soil Stabilizer

Replace Ground Cover

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition p1 - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.7012	0.0000	0.7012	0.1062	0.0000	0.1062			0.0000			0.0000
Off-Road	3.7190	38.3225	22.3040	0.0388		1.9386	1.9386		1.8048	1.8048		3,871.7665	3,871.7665	1.0667		3,898.4344
Total	**3.7190**	**38.3225**	**22.3040**	**0.0388**	**0.7012**	**1.9386**	**2.6397**	**0.1062**	**1.8048**	**1.9110**		**3,871.7665**	**3,871.7665**	**1.0667**		**3,898.4344**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0389	1.2668	0.2621	3.1800e-003	0.0686	4.8200e-003	0.0734	0.0188	4.6100e-003	0.0234		343.3331	343.3331	0.0236		343.9240
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0829	0.0625	0.8101	1.8900e-003	0.1677	1.4900e-003	0.1692	0.0445	1.3800e-003	0.0458		188.0535	188.0535	7.0500e-003		188.2298
Total	**0.1218**	**1.3293**	**1.0722**	**5.0700e-003**	**0.2362**	**6.3100e-003**	**0.2425**	**0.0633**	**5.9900e-003**	**0.0692**		**531.3866**	**531.3866**	**0.0307**		**532.1538**

3.2 Demolition p1 - 2018

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.2682	0.0000	0.2682	0.0406	0.0000	0.0406			0.0000			0.0000
Off-Road	0.4623	2.0032	23.2798	0.0388		0.0616	0.0616		0.0616	0.0616	0.0000	3,871.7665	3,871.7665	1.0667		3,898.4344
Total	**0.4623**	**2.0032**	**23.2798**	**0.0388**	**0.2682**	**0.0616**	**0.3298**	**0.0406**	**0.0616**	**0.1023**	**0.0000**	**3,871.7665**	**3,871.7665**	**1.0667**		**3,898.4344**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0389	1.2668	0.2621	3.1800e-003	0.0686	4.8200e-003	0.0734	0.0188	4.6100e-003	0.0234		343.3331	343.3331	0.0236		343.9240
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0829	0.0625	0.8101	1.8900e-003	0.1677	1.4900e-003	0.1692	0.0445	1.3800e-003	0.0458		188.0535	188.0535	7.0500e-003		188.2298
Total	**0.1218**	**1.3293**	**1.0722**	**5.0700e-003**	**0.2362**	**6.3100e-003**	**0.2425**	**0.0633**	**5.9900e-003**	**0.0692**		**531.3866**	**531.3866**	**0.0307**		**532.1538**

3.3 Site Preparation p1 - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.1466	0.0000	18.1466	9.9394	0.0000	9.9394			0.0000			0.0000
Off-Road	4.5627	48.1988	22.4763	0.0380		2.5769	2.5769		2.3708	2.3708		3,831.6239	3,831.6239	1.1928		3,861.4448
Total	**4.5627**	**48.1988**	**22.4763**	**0.0380**	**18.1466**	**2.5769**	**20.7235**	**9.9394**	**2.3708**	**12.3101**		**3,831.6239**	**3,831.6239**	**1.1928**		**3,861.4448**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0995	0.0751	0.9721	2.2700e-003	0.2012	1.7900e-003	0.2030	0.0534	1.6500e-003	0.0550		225.6642	225.6642	8.4600e-003		225.8758
Total	**0.0995**	**0.0751**	**0.9721**	**2.2700e-003**	**0.2012**	**1.7900e-003**	**0.2030**	**0.0534**	**1.6500e-003**	**0.0550**		**225.6642**	**225.6642**	**8.4600e-003**		**225.8758**

3.3 Site Preparation p1 - 2018

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.9411	0.0000	6.9411	3.8018	0.0000	3.8018			0.0000			0.0000
Off-Road	0.4656	2.0175	20.8690	0.0380		0.0621	0.0621		0.0621	0.0621	0.0000	3,831.6239	3,831.6239	1.1928		3,861.4448
Total	**0.4656**	**2.0175**	**20.8690**	**0.0380**	**6.9411**	**0.0621**	**7.0032**	**3.8018**	**0.0621**	**3.8639**	**0.0000**	**3,831.6239**	**3,831.6239**	**1.1928**		**3,861.4448**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0995	0.0751	0.9721	2.2700e-003	0.2012	1.7900e-003	0.2030	0.0534	1.6500e-003	0.0550		225.6642	225.6642	8.4600e-003		225.8758
Total	**0.0995**	**0.0751**	**0.9721**	**2.2700e-003**	**0.2012**	**1.7900e-003**	**0.2030**	**0.0534**	**1.6500e-003**	**0.0550**		**225.6642**	**225.6642**	**8.4600e-003**		**225.8758**

3.4 Grading p2 - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.2872	0.0000	6.2872	3.3389	0.0000	3.3389			0.0000			0.0000
Off-Road	4.7389	54.5202	33.3768	0.0620		2.3827	2.3827		2.1920	2.1920		6,140.0195	6,140.0195	1.9426		6,188.5854
Total	**4.7389**	**54.5202**	**33.3768**	**0.0620**	**6.2872**	**2.3827**	**8.6699**	**3.3389**	**2.1920**	**5.5309**		**6,140.0195**	**6,140.0195**	**1.9426**		**6,188.5854**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0999	0.0734	0.9643	2.4400e-003	0.2236	1.9300e-003	0.2255	0.0593	1.7800e-003	0.0611		242.5906	242.5906	8.3300e-003		242.7989
Total	**0.0999**	**0.0734**	**0.9643**	**2.4400e-003**	**0.2236**	**1.9300e-003**	**0.2255**	**0.0593**	**1.7800e-003**	**0.0611**		**242.5906**	**242.5906**	**8.3300e-003**		**242.7989**

3.4 Grading p2 - 2019

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.4049	0.0000	2.4049	1.2771	0.0000	1.2771			0.0000			0.0000
Off-Road	0.7616	3.3000	32.9991	0.0620		0.1015	0.1015		0.1015	0.1015	0.0000	6,140.0195	6,140.0195	1.9426		6,188.5854
Total	**0.7616**	**3.3000**	**32.9991**	**0.0620**	**2.4049**	**0.1015**	**2.5064**	**1.2771**	**0.1015**	**1.3787**	**0.0000**	**6,140.0195**	**6,140.0195**	**1.9426**		**6,188.5854**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0999	0.0734	0.9643	2.4400e-003	0.2236	1.9300e-003	0.2255	0.0593	1.7800e-003	0.0611		242.5906	242.5906	8.3300e-003		242.7989
Total	**0.0999**	**0.0734**	**0.9643**	**2.4400e-003**	**0.2236**	**1.9300e-003**	**0.2255**	**0.0593**	**1.7800e-003**	**0.0611**		**242.5906**	**242.5906**	**8.3300e-003**		**242.7989**

3.5 Building Construction p2 - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.3612	21.0788	17.1638	0.0269		1.2899	1.2899		1.2127	1.2127		2,591.5802	2,591.5802	0.6313		2,607.3635
Total	**2.3612**	**21.0788**	**17.1638**	**0.0269**		**1.2899**	**1.2899**		**1.2127**	**1.2127**		**2,591.5802**	**2,591.5802**	**0.6313**		**2,607.3635**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2992	8.3325	2.2110	0.0188	0.4609	0.0531	0.5141	0.1327	0.0508	0.1835		2,007.4653	2,007.4653	0.1286		2,010.6814
Worker	0.9292	0.6829	8.9683	0.0227	2.0790	0.0179	2.0970	0.5514	0.0165	0.5679		2,256.0924	2,256.0924	0.0775		2,258.0297
Total	**1.2284**	**9.0154**	**11.1792**	**0.0415**	**2.5400**	**0.0711**	**2.6110**	**0.6841**	**0.0673**	**0.7514**		**4,263.5576**	**4,263.5576**	**0.2061**		**4,268.7111**

3.5 Building Construction p2 - 2019

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3278	2.2347	17.4603	0.0269		0.0408	0.0408		0.0408	0.0408	0.0000	2,591.5802	2,591.5802	0.6313		2,607.3635
Total	**0.3278**	**2.2347**	**17.4603**	**0.0269**		**0.0408**	**0.0408**		**0.0408**	**0.0408**	**0.0000**	**2,591.5802**	**2,591.5802**	**0.6313**		**2,607.3635**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2992	8.3325	2.2110	0.0188	0.4609	0.0531	0.5141	0.1327	0.0508	0.1835		2,007.4653	2,007.4653	0.1286		2,010.6814
Worker	0.9292	0.6829	8.9683	0.0227	2.0790	0.0179	2.0970	0.5514	0.0165	0.5679		2,256.0924	2,256.0924	0.0775		2,258.0297
Total	**1.2284**	**9.0154**	**11.1792**	**0.0415**	**2.5400**	**0.0711**	**2.6110**	**0.6841**	**0.0673**	**0.7514**		**4,263.5576**	**4,263.5576**	**0.2061**		**4,268.7111**

3.5 Building Construction p2 - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503		2,553.0631	2,553.0631	0.6229		2,568.6345
Total	**2.1198**	**19.1860**	**16.8485**	**0.0269**		**1.1171**	**1.1171**		**1.0503**	**1.0503**		**2,553.0631**	**2,553.0631**	**0.6229**		**2,568.6345**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2561	7.6588	2.0067	0.0187	0.4609	0.0361	0.4970	0.1327	0.0345	0.1672		1,994.5778	1,994.5778	0.1217		1,997.6207
Worker	0.8560	0.6089	8.1439	0.0220	2.0790	0.0174	2.0964	0.5514	0.0160	0.5674		2,187.5699	2,187.5699	0.0690		2,189.2942
Total	**1.1121**	**8.2678**	**10.1506**	**0.0407**	**2.5400**	**0.0534**	**2.5934**	**0.6841**	**0.0505**	**0.7346**		**4,182.1478**	**4,182.1478**	**0.1907**		**4,186.9149**

3.5 Building Construction p2 - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3278	2.2347	17.4603	0.0269		0.0408	0.0408		0.0408	0.0408	0.0000	2,553.0631	2,553.0631	0.6229		2,568.6345
Total	**0.3278**	**2.2347**	**17.4603**	**0.0269**		**0.0408**	**0.0408**		**0.0408**	**0.0408**	**0.0000**	**2,553.0631**	**2,553.0631**	**0.6229**		**2,568.6345**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2561	7.6588	2.0067	0.0187	0.4609	0.0361	0.4970	0.1327	0.0345	0.1672		1,994.5778	1,994.5778	0.1217		1,997.6207
Worker	0.8560	0.6089	8.1439	0.0220	2.0790	0.0174	2.0964	0.5514	0.0160	0.5674		2,187.5699	2,187.5699	0.0690		2,189.2942
Total	**1.1121**	**8.2678**	**10.1506**	**0.0407**	**2.5400**	**0.0534**	**2.5934**	**0.6841**	**0.0505**	**0.7346**		**4,182.1478**	**4,182.1478**	**0.1907**		**4,186.9149**

3.6 Architectural Coating p2 - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	50.4323					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2422	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109		281.4481	281.4481	0.0218		281.9928
Total	**50.6745**	**1.6838**	**1.8314**	**2.9700e-003**		**0.1109**	**0.1109**		**0.1109**	**0.1109**		**281.4481**	**281.4481**	**0.0218**		**281.9928**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1703	0.1211	1.6200	4.3700e-003	0.4136	3.4600e-003	0.4170	0.1097	3.1900e-003	0.1129		435.1618	435.1618	0.0137		435.5048
Total	**0.1703**	**0.1211**	**1.6200**	**4.3700e-003**	**0.4136**	**3.4600e-003**	**0.4170**	**0.1097**	**3.1900e-003**	**0.1129**		**435.1618**	**435.1618**	**0.0137**		**435.5048**

3.6 Architectural Coating p2 - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	50.4323					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0297	0.1288	1.8324	2.9700e-003		3.9600e-003	3.9600e-003		3.9600e-003	3.9600e-003	0.0000	281.4481	281.4481	0.0218		281.9928
Total	**50.4620**	**0.1288**	**1.8324**	**2.9700e-003**		**3.9600e-003**	**3.9600e-003**		**3.9600e-003**	**3.9600e-003**	**0.0000**	**281.4481**	**281.4481**	**0.0218**		**281.9928**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1703	0.1211	1.6200	4.3700e-003	0.4136	3.4600e-003	0.4170	0.1097	3.1900e-003	0.1129		435.1618	435.1618	0.0137		435.5048
Total	**0.1703**	**0.1211**	**1.6200**	**4.3700e-003**	**0.4136**	**3.4600e-003**	**0.4170**	**0.1097**	**3.1900e-003**	**0.1129**		**435.1618**	**435.1618**	**0.0137**		**435.5048**

3.7 Paving p2 - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3566	14.0656	14.6521	0.0228		0.7528	0.7528		0.6926	0.6926		2,207.7334	2,207.7334	0.7140		2,225.5841
Paving	0.1560					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.5126**	**14.0656**	**14.6521**	**0.0228**		**0.7528**	**0.7528**		**0.6926**	**0.6926**		**2,207.7334**	**2,207.7334**	**0.7140**		**2,225.5841**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0690	0.0491	0.6568	1.7700e-003	0.1677	1.4000e-003	0.1691	0.0445	1.2900e-003	0.0458		176.4169	176.4169	5.5600e-003		176.5560
Total	**0.0690**	**0.0491**	**0.6568**	**1.7700e-003**	**0.1677**	**1.4000e-003**	**0.1691**	**0.0445**	**1.2900e-003**	**0.0458**		**176.4169**	**176.4169**	**5.5600e-003**		**176.5560**

3.7 Paving p2 - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2805	1.2154	17.2957	0.0228		0.0374	0.0374		0.0374	0.0374	0.0000	2,207.7334	2,207.7334	0.7140		2,225.5841
Paving	0.1560					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.4365**	**1.2154**	**17.2957**	**0.0228**		**0.0374**	**0.0374**		**0.0374**	**0.0374**	**0.0000**	**2,207.7334**	**2,207.7334**	**0.7140**		**2,225.5841**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0690	0.0491	0.6568	1.7700e-003	0.1677	1.4000e-003	0.1691	0.0445	1.2900e-003	0.0458		176.4169	176.4169	5.5600e-003		176.5560
Total	**0.0690**	**0.0491**	**0.6568**	**1.7700e-003**	**0.1677**	**1.4000e-003**	**0.1691**	**0.0445**	**1.2900e-003**	**0.0458**		**176.4169**	**176.4169**	**5.5600e-003**		**176.5560**

3.8 Demolition p3 gym - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.9096	0.0000	1.9096	0.2891	0.0000	0.2891			0.0000			0.0000
Off-Road	3.3121	33.2010	21.7532	0.0388		1.6587	1.6587		1.5419	1.5419		3,747.7049	3,747.7049	1.0580		3,774.1536
Total	**3.3121**	**33.2010**	**21.7532**	**0.0388**	**1.9096**	**1.6587**	**3.5683**	**0.2891**	**1.5419**	**1.8310**		**3,747.7049**	**3,747.7049**	**1.0580**		**3,774.1536**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0690	0.0491	0.6568	1.7700e-003	0.1677	1.4000e-003	0.1691	0.0445	1.2900e-003	0.0458		176.4169	176.4169	5.5600e-003		176.5560
Total	**0.0690**	**0.0491**	**0.6568**	**1.7700e-003**	**0.1677**	**1.4000e-003**	**0.1691**	**0.0445**	**1.2900e-003**	**0.0458**		**176.4169**	**176.4169**	**5.5600e-003**		**176.5560**

3.8 Demolition p3 gym - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.7304	0.0000	0.7304	0.1106	0.0000	0.1106			0.0000			0.0000
Off-Road	0.4623	2.0032	23.2798	0.0388		0.0616	0.0616		0.0616	0.0616	0.0000	3,747.7049	3,747.7049	1.0580		3,774.1536
Total	**0.4623**	**2.0032**	**23.2798**	**0.0388**	**0.7304**	**0.0616**	**0.7921**	**0.1106**	**0.0616**	**0.1722**	**0.0000**	**3,747.7049**	**3,747.7049**	**1.0580**		**3,774.1536**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0690	0.0491	0.6568	1.7700e-003	0.1677	1.4000e-003	0.1691	0.0445	1.2900e-003	0.0458		176.4169	176.4169	5.5600e-003		176.5560
Total	**0.0690**	**0.0491**	**0.6568**	**1.7700e-003**	**0.1677**	**1.4000e-003**	**0.1691**	**0.0445**	**1.2900e-003**	**0.0458**		**176.4169**	**176.4169**	**5.5600e-003**		**176.5560**

3.9 Paving p3 - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.2556	12.9191	14.6532	0.0228		0.6777	0.6777		0.6235	0.6235		2,207.2109	2,207.2109	0.7139		2,225.0573
Paving	0.1716					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.4272**	**12.9191**	**14.6532**	**0.0228**		**0.6777**	**0.6777**		**0.6235**	**0.6235**		**2,207.2109**	**2,207.2109**	**0.7139**		**2,225.0573**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0643	0.0442	0.6042	1.7100e-003	0.1677	1.3500e-003	0.1690	0.0445	1.2500e-003	0.0457		170.8155	170.8155	5.0300e-003		170.9413
Total	**0.0643**	**0.0442**	**0.6042**	**1.7100e-003**	**0.1677**	**1.3500e-003**	**0.1690**	**0.0445**	**1.2500e-003**	**0.0457**		**170.8155**	**170.8155**	**5.0300e-003**		**170.9413**

3.9 Paving p3 - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2805	1.2154	17.2957	0.0228		0.0374	0.0374		0.0374	0.0374	0.0000	2,207.2109	2,207.2109	0.7139		2,225.0573
Paving	0.1716					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.4521**	**1.2154**	**17.2957**	**0.0228**		**0.0374**	**0.0374**		**0.0374**	**0.0374**	**0.0000**	**2,207.2109**	**2,207.2109**	**0.7139**		**2,225.0573**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0643	0.0442	0.6042	1.7100e-003	0.1677	1.3500e-003	0.1690	0.0445	1.2500e-003	0.0457		170.8155	170.8155	5.0300e-003		170.9413
Total	**0.0643**	**0.0442**	**0.6042**	**1.7100e-003**	**0.1677**	**1.3500e-003**	**0.1690**	**0.0445**	**1.2500e-003**	**0.0457**		**170.8155**	**170.8155**	**5.0300e-003**		**170.9413**

3.10 Building Construction p3 - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013		2,553.3639	2,553.3639	0.6160		2,568.7643
Total	**1.9009**	**17.4321**	**16.5752**	**0.0269**		**0.9586**	**0.9586**		**0.9013**	**0.9013**		**2,553.3639**	**2,553.3639**	**0.6160**		**2,568.7643**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2189	6.9904	1.8275	0.0185	0.4610	0.0143	0.4753	0.1327	0.0137	0.1464		1,979.1405	1,979.1405	0.1166		1,982.0555
Worker	0.7973	0.5480	7.4916	0.0213	2.0790	0.0168	2.0958	0.5514	0.0155	0.5669		2,118.1119	2,118.1119	0.0624		2,119.6722
Total	**1.0162**	**7.5385**	**9.3191**	**0.0398**	**2.5400**	**0.0311**	**2.5711**	**0.6841**	**0.0291**	**0.7132**		**4,097.2525**	**4,097.2525**	**0.1790**		**4,101.7276**

3.10 Building Construction p3 - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3278	2.2347	17.4603	0.0269		0.0408	0.0408		0.0408	0.0408	0.0000	2,553.3639	2,553.3639	0.6160		2,568.7643
Total	**0.3278**	**2.2347**	**17.4603**	**0.0269**		**0.0408**	**0.0408**		**0.0408**	**0.0408**	**0.0000**	**2,553.3639**	**2,553.3639**	**0.6160**		**2,568.7643**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2189	6.9904	1.8275	0.0185	0.4610	0.0143	0.4753	0.1327	0.0137	0.1464		1,979.1405	1,979.1405	0.1166		1,982.0555
Worker	0.7973	0.5480	7.4916	0.0213	2.0790	0.0168	2.0958	0.5514	0.0155	0.5669		2,118.1119	2,118.1119	0.0624		2,119.6722
Total	**1.0162**	**7.5385**	**9.3191**	**0.0398**	**2.5400**	**0.0311**	**2.5711**	**0.6841**	**0.0291**	**0.7132**		**4,097.2525**	**4,097.2525**	**0.1790**		**4,101.7276**

3.10 Building Construction p3 - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322
Total	**1.7062**	**15.6156**	**16.3634**	**0.0269**		**0.8090**	**0.8090**		**0.7612**	**0.7612**		**2,554.3336**	**2,554.3336**	**0.6120**		**2,569.6322**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2054	6.6478	1.7291	0.0183	0.4610	0.0125	0.4735	0.1327	0.0120	0.1447		1,961.8984	1,961.8984	0.1126		1,964.7130
Worker	0.7468	0.4950	6.9118	0.0205	2.0790	0.0163	2.0953	0.5514	0.0150	0.5664		2,043.6049	2,043.6049	0.0564		2,045.0150
Total	**0.9522**	**7.1428**	**8.6409**	**0.0389**	**2.5400**	**0.0288**	**2.5688**	**0.6841**	**0.0269**	**0.7110**		**4,005.5033**	**4,005.5033**	**0.1690**		**4,009.7281**

3.10 Building Construction p3 - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3278	2.2347	17.4603	0.0269		0.0408	0.0408		0.0408	0.0408	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322
Total	**0.3278**	**2.2347**	**17.4603**	**0.0269**		**0.0408**	**0.0408**		**0.0408**	**0.0408**	**0.0000**	**2,554.3336**	**2,554.3336**	**0.6120**		**2,569.6322**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2054	6.6478	1.7291	0.0183	0.4610	0.0125	0.4735	0.1327	0.0120	0.1447		1,961.8984	1,961.8984	0.1126		1,964.7130
Worker	0.7468	0.4950	6.9118	0.0205	2.0790	0.0163	2.0953	0.5514	0.0150	0.5664		2,043.6049	2,043.6049	0.0564		2,045.0150
Total	**0.9522**	**7.1428**	**8.6409**	**0.0389**	**2.5400**	**0.0288**	**2.5688**	**0.6841**	**0.0269**	**0.7110**		**4,005.5033**	**4,005.5033**	**0.1690**		**4,009.7281**

3.11 Architectural Coating P3 - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	48.1400					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0183		281.9062
Total	**48.3445**	**1.4085**	**1.8136**	**2.9700e-003**		**0.0817**	**0.0817**		**0.0817**	**0.0817**		**281.4481**	**281.4481**	**0.0183**		**281.9062**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1486	0.0985	1.3749	4.0800e-003	0.4136	3.2400e-003	0.4168	0.1097	2.9800e-003	0.1127		406.5236	406.5236	0.0112		406.8041
Total	**0.1486**	**0.0985**	**1.3749**	**4.0800e-003**	**0.4136**	**3.2400e-003**	**0.4168**	**0.1097**	**2.9800e-003**	**0.1127**		**406.5236**	**406.5236**	**0.0112**		**406.8041**

3.11 Architectural Coating P3 - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	48.1400					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0297	0.1288	1.8324	2.9700e-003		3.9600e-003	3.9600e-003		3.9600e-003	3.9600e-003	0.0000	281.4481	281.4481	0.0183		281.9062
Total	**48.1697**	**0.1288**	**1.8324**	**2.9700e-003**		**3.9600e-003**	**3.9600e-003**		**3.9600e-003**	**3.9600e-003**	**0.0000**	**281.4481**	**281.4481**	**0.0183**		**281.9062**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1486	0.0985	1.3749	4.0800e-003	0.4136	3.2400e-003	0.4168	0.1097	2.9800e-003	0.1127		406.5236	406.5236	0.0112		406.8041
Total	**0.1486**	**0.0985**	**1.3749**	**4.0800e-003**	**0.4136**	**3.2400e-003**	**0.4168**	**0.1097**	**2.9800e-003**	**0.1127**		**406.5236**	**406.5236**	**0.0112**		**406.8041**

3.12 Demolition p3 7_29_31 - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.7000	0.0000	0.7000	0.1060	0.0000	0.1060			0.0000			0.0000
Off-Road	2.6392	25.7194	20.5941	0.0388		1.2427	1.2427		1.1553	1.1553		3,746.7812	3,746.7812	1.0524		3,773.0920
Total	**2.6392**	**25.7194**	**20.5941**	**0.0388**	**0.7000**	**1.2427**	**1.9426**	**0.1060**	**1.1553**	**1.2612**		**3,746.7812**	**3,746.7812**	**1.0524**		**3,773.0920**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0602	0.0399	0.5574	1.6500e-003	0.1677	1.3100e-003	0.1690	0.0445	1.2100e-003	0.0457		164.8069	164.8069	4.5500e-003		164.9206
Total	**0.0602**	**0.0399**	**0.5574**	**1.6500e-003**	**0.1677**	**1.3100e-003**	**0.1690**	**0.0445**	**1.2100e-003**	**0.0457**		**164.8069**	**164.8069**	**4.5500e-003**		**164.9206**

3.12 Demolition p3 7_29_31 - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.2677	0.0000	0.2677	0.0405	0.0000	0.0405			0.0000			0.0000
Off-Road	0.4623	2.0032	23.2798	0.0388		0.0616	0.0616		0.0616	0.0616	0.0000	3,746.7812	3,746.7812	1.0524		3,773.0920
Total	**0.4623**	**2.0032**	**23.2798**	**0.0388**	**0.2677**	**0.0616**	**0.3294**	**0.0405**	**0.0616**	**0.1022**	**0.0000**	**3,746.7812**	**3,746.7812**	**1.0524**		**3,773.0920**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0602	0.0399	0.5574	1.6500e-003	0.1677	1.3100e-003	0.1690	0.0445	1.2100e-003	0.0457		164.8069	164.8069	4.5500e-003		164.9206
Total	**0.0602**	**0.0399**	**0.5574**	**1.6500e-003**	**0.1677**	**1.3100e-003**	**0.1690**	**0.0445**	**1.2100e-003**	**0.0457**		**164.8069**	**164.8069**	**4.5500e-003**		**164.9206**

3.13 Site Preparation p2 - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.1412	0.0000	18.1412	9.9390	0.0000	9.9390			0.0000			0.0000
Off-Road	4.5627	48.1988	22.4763	0.0380		2.5769	2.5769		2.3708	2.3708		3,831.6239	3,831.6239	1.1928		3,861.4448
Total	**4.5627**	**48.1988**	**22.4763**	**0.0380**	**18.1412**	**2.5769**	**20.7182**	**9.9390**	**2.3708**	**12.3098**		**3,831.6239**	**3,831.6239**	**1.1928**		**3,861.4448**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0572	1.8619	0.3853	4.6700e-003	0.1592	7.0800e-003	0.1663	0.0420	6.7800e-003	0.0488		504.6305	504.6305	0.0347		505.4990
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0995	0.0751	0.9721	2.2700e-003	0.2012	1.7900e-003	0.2030	0.0534	1.6500e-003	0.0550		225.6642	225.6642	8.4600e-003		225.8758
Total	**0.1567**	**1.9369**	**1.3574**	**6.9400e-003**	**0.3604**	**8.8700e-003**	**0.3693**	**0.0953**	**8.4300e-003**	**0.1038**		**730.2947**	**730.2947**	**0.0432**		**731.3748**

3.13 Site Preparation p2 - 2018

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.9390	0.0000	6.9390	3.8017	0.0000	3.8017			0.0000			0.0000
Off-Road	0.4656	2.0175	20.8690	0.0380		0.0621	0.0621		0.0621	0.0621	0.0000	3,831.6239	3,831.6239	1.1928		3,861.4448
Total	**0.4656**	**2.0175**	**20.8690**	**0.0380**	**6.9390**	**0.0621**	**7.0011**	**3.8017**	**0.0621**	**3.8638**	**0.0000**	**3,831.6239**	**3,831.6239**	**1.1928**		**3,861.4448**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0572	1.8619	0.3853	4.6700e-003	0.1592	7.0800e-003	0.1663	0.0420	6.7800e-003	0.0488		504.6305	504.6305	0.0347		505.4990
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0995	0.0751	0.9721	2.2700e-003	0.2012	1.7900e-003	0.2030	0.0534	1.6500e-003	0.0550		225.6642	225.6642	8.4600e-003		225.8758
Total	**0.1567**	**1.9369**	**1.3574**	**6.9400e-003**	**0.3604**	**8.8700e-003**	**0.3693**	**0.0953**	**8.4300e-003**	**0.1038**		**730.2947**	**730.2947**	**0.0432**		**731.3748**

3.13 Site Preparation p2 - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.1412	0.0000	18.1412	9.9390	0.0000	9.9390			0.0000			0.0000
Off-Road	4.3350	45.5727	22.0630	0.0380		2.3904	2.3904		2.1991	2.1991		3,766.4529	3,766.4529	1.1917		3,796.2445
Total	**4.3350**	**45.5727**	**22.0630**	**0.0380**	**18.1412**	**2.3904**	**20.5316**	**9.9390**	**2.1991**	**12.1381**		**3,766.4529**	**3,766.4529**	**1.1917**		**3,796.2445**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0542	1.7652	0.3764	4.6000e-003	0.2001	6.4800e-003	0.2065	0.0520	6.2000e-003	0.0582		498.2318	498.2318	0.0343		499.0896
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0899	0.0661	0.8679	2.1900e-003	0.2012	1.7300e-003	0.2029	0.0534	1.6000e-003	0.0550		218.3315	218.3315	7.5000e-003		218.5190
Total	**0.1441**	**1.8313**	**1.2443**	**6.7900e-003**	**0.4013**	**8.2100e-003**	**0.4095**	**0.1054**	**7.8000e-003**	**0.1132**		**716.5633**	**716.5633**	**0.0418**		**717.6086**

3.13 Site Preparation p2 - 2019

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.9390	0.0000	6.9390	3.8017	0.0000	3.8017			0.0000			0.0000
Off-Road	0.4656	2.0175	20.8690	0.0380		0.0621	0.0621		0.0621	0.0621	0.0000	3,766.4529	3,766.4529	1.1917		3,796.2445
Total	**0.4656**	**2.0175**	**20.8690**	**0.0380**	**6.9390**	**0.0621**	**7.0011**	**3.8017**	**0.0621**	**3.8638**	**0.0000**	**3,766.4529**	**3,766.4529**	**1.1917**		**3,796.2445**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0542	1.7652	0.3764	4.6000e-003	0.2001	6.4800e-003	0.2065	0.0520	6.2000e-003	0.0582		498.2318	498.2318	0.0343		499.0896
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0899	0.0661	0.8679	2.1900e-003	0.2012	1.7300e-003	0.2029	0.0534	1.6000e-003	0.0550		218.3315	218.3315	7.5000e-003		218.5190
Total	**0.1441**	**1.8313**	**1.2443**	**6.7900e-003**	**0.4013**	**8.2100e-003**	**0.4095**	**0.1054**	**7.8000e-003**	**0.1132**		**716.5633**	**716.5633**	**0.0418**		**717.6086**

3.14 Site Preparation p3 - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.1141	0.0000	18.1141	9.9360	0.0000	9.9360			0.0000			0.0000
Off-Road	4.0765	42.4173	21.5136	0.0380		2.1974	2.1974		2.0216	2.0216		3,685.1016	3,685.1016	1.1918		3,714.8975
Total	**4.0765**	**42.4173**	**21.5136**	**0.0380**	**18.1141**	**2.1974**	**20.3116**	**9.9360**	**2.0216**	**11.9576**		**3,685.1016**	**3,685.1016**	**1.1918**		**3,714.8975**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0322	1.0583	0.2345	2.9100e-003	0.0644	3.3800e-003	0.0677	0.0176	3.2300e-003	0.0209		315.0036	315.0036	0.0214		315.5397
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0828	0.0589	0.7881	2.1300e-003	0.2012	1.6800e-003	0.2029	0.0534	1.5500e-003	0.0549		211.7003	211.7003	6.6700e-003		211.8672
Total	**0.1150**	**1.1173**	**1.0226**	**5.0400e-003**	**0.2656**	**5.0600e-003**	**0.2706**	**0.0710**	**4.7800e-003**	**0.0758**		**526.7040**	**526.7040**	**0.0281**		**527.4069**

3.14 Site Preparation p3 - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.9287	0.0000	6.9287	3.8005	0.0000	3.8005			0.0000			0.0000
Off-Road	0.4656	2.0175	20.8690	0.0380		0.0621	0.0621		0.0621	0.0621	0.0000	3,685.1016	3,685.1016	1.1918		3,714.8975
Total	**0.4656**	**2.0175**	**20.8690**	**0.0380**	**6.9287**	**0.0621**	**6.9907**	**3.8005**	**0.0621**	**3.8626**	**0.0000**	**3,685.1016**	**3,685.1016**	**1.1918**		**3,714.8975**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0322	1.0583	0.2345	2.9100e-003	0.0644	3.3800e-003	0.0677	0.0176	3.2300e-003	0.0209		315.0036	315.0036	0.0214		315.5397
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0828	0.0589	0.7881	2.1300e-003	0.2012	1.6800e-003	0.2029	0.0534	1.5500e-003	0.0549		211.7003	211.7003	6.6700e-003		211.8672
Total	**0.1150**	**1.1173**	**1.0226**	**5.0400e-003**	**0.2656**	**5.0600e-003**	**0.2706**	**0.0710**	**4.7800e-003**	**0.0758**		**526.7040**	**526.7040**	**0.0281**		**527.4069**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	8.9280	43.9952	132.6360	0.4912	40.3666	0.3936	40.7602	10.8028	0.3672	11.1700		49,970.8526	49,970.8526	2.4539		50,032.1994
Unmitigated	8.9280	43.9952	132.6360	0.4912	40.3666	0.3936	40.7602	10.8028	0.3672	11.1700		49,970.8526	49,970.8526	2.4539		50,032.1994

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
High School	4,444.89	4,444.89	4444.89	18,983,149	18,983,149
Parking Lot	0.00	0.00	0.00		
Total	4,444.89	4,444.89	4,444.89	18,983,149	18,983,149

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	16.60	8.40	6.90	33.00	48.00	19.00	66	28	6
High School	16.60	8.40	6.90	77.80	17.20	5.00	75	19	6
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.546501	0.044961	0.204016	0.120355	0.015740	0.006196	0.020131	0.030678	0.002515	0.002201	0.005142	0.000687	0.000876
High School	0.546501	0.044961	0.204016	0.120355	0.015740	0.006196	0.020131	0.030678	0.002515	0.002201	0.005142	0.000687	0.000876
Parking Lot	0.546501	0.044961	0.204016	0.120355	0.015740	0.006196	0.020131	0.030678	0.002515	0.002201	0.005142	0.000687	0.000876

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0572	0.5200	0.4368	3.1200e-003		0.0395	0.0395		0.0395	0.0395		623.9465	623.9465	0.0120	0.0114	627.6543
NaturalGas Unmitigated	0.0697	0.6335	0.5321	3.8000e-003		0.0482	0.0482		0.0482	0.0482		760.1973	760.1973	0.0146	0.0139	764.7147

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
High School	6461.68	0.0697	0.6335	0.5321	3.8000e-003		0.0482	0.0482		0.0482	0.0482		760.1973	760.1973	0.0146	0.0139	764.7147
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0697**	**0.6335**	**0.5321**	**3.8000e-003**		**0.0482**	**0.0482**		**0.0482**	**0.0482**		**760.1973**	**760.1973**	**0.0146**	**0.0139**	**764.7147**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
High School	5.30355	0.0572	0.5200	0.4368	3.1200e-003		0.0395	0.0395		0.0395	0.0395		623.9465	623.9465	0.0120	0.0114	627.6543
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0572**	**0.5200**	**0.4368**	**3.1200e-003**		**0.0395**	**0.0395**		**0.0395**	**0.0395**		**623.9465**	**623.9465**	**0.0120**	**0.0114**	**627.6543**

6.0 Area Detail

6.1 Mitigation Measures Area

Use Electric Leafblower

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	4.8115	2.7000e-004	0.0294	0.0000		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004		0.0629	0.0629	1.7000e-004		0.0671
Unmitigated	4.8115	2.7000e-004	0.0294	0.0000		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004		0.0629	0.0629	1.7000e-004		0.0671

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.2902					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	4.5186					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.7400e-003	2.7000e-004	0.0294	0.0000		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004		0.0629	0.0629	1.7000e-004		0.0671
Total	**4.8115**	**2.7000e-004**	**0.0294**	**0.0000**		**1.1000e-004**	**1.1000e-004**		**1.1000e-004**	**1.1000e-004**		**0.0629**	**0.0629**	**1.7000e-004**		**0.0671**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.2902					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	4.5186					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.7400e-003	2.7000e-004	0.0294	0.0000		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004		0.0629	0.0629	1.7000e-004		0.0671
Total	**4.8115**	**2.7000e-004**	**0.0294**	**0.0000**		**1.1000e-004**	**1.1000e-004**		**1.1000e-004**	**1.1000e-004**		**0.0629**	**0.0629**	**1.7000e-004**		**0.0671**

7.0 Water Detail

7.1 Mitigation Measures Water

Use Water Efficient Irrigation System

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Roosevelt HS Existing Conditions

Los Angeles-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
High School	262.10	1000sqft	6.02	262,103.00	0
Parking Lot	57.20	1000sqft	1.31	57,200.00	0
City Park	3.62	Acre	3.62	157,687.20	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	12			**Operational Year**	2017
Utility Company	Los Angeles Department of Water & Power				
CO2 Intensity (lb/MWhr)	1227.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Existing Conditions

Land Use - The Roosevelt Program Approval document states that the school capacity is 2,600.

Construction Phase - Existing conditions

Off-road Equipment - Data from Roosevelt High School Comprehensive Modernization Project Construction Schedule and Equipment.

Off-road Equipment -

Grading -

Demolition -

Trips and VMT -

Architectural Coating -

Vehicle Trips - Student body would not be increased. Overall building square footage would slightly decrease over existing conditions.

Area Coating - Standard Condition SC-AQ-4 requires ultra-low VOC or zero VOC paint.

Construction Off-road Equipment Mitigation -

Area Mitigation -

Energy Mitigation -

Water Mitigation -

Energy Use -

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_EF_Nonresidential_Exterior	100	50
tblAreaCoating	Area_EF_Nonresidential_Interior	100	50
tblAreaCoating	Area_EF_Parking	100	50
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	15
tblConstructionPhase	NumDays	20.00	1.00
tblConstructionPhase	PhaseEndDate	9/29/2017	1/1/2016
tblConstructionPhase	PhaseStartDate	8/1/2017	1/1/2016
tblProjectCharacteristics	OperationalYear	2018	2017
tblVehicleTrips	ST_TR	22.75	0.00
tblVehicleTrips	SU_TR	16.74	0.00
tblVehicleTrips	WD_TR	1.89	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2016	1.2243	0.0129	0.0112	2.0000e-005	8.2000e-004	7.4000e-004	1.5600e-003	2.1000e-004	6.9000e-004	9.0000e-004	0.0000	1.6605	1.6605	3.6000e-004	0.0000	1.6696
Maximum	**1.2243**	**0.0129**	**0.0112**	**2.0000e-005**	**8.2000e-004**	**7.4000e-004**	**1.5600e-003**	**2.1000e-004**	**6.9000e-004**	**9.0000e-004**	**0.0000**	**1.6605**	**1.6605**	**3.6000e-004**	**0.0000**	**1.6696**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2016	1.2243	0.0129	0.0112	2.0000e-005	8.2000e-004	7.4000e-004	1.5600e-003	2.1000e-004	6.9000e-004	9.0000e-004	0.0000	1.6605	1.6605	3.6000e-004	0.0000	1.6696
Maximum	**1.2243**	**0.0129**	**0.0112**	**2.0000e-005**	**8.2000e-004**	**7.4000e-004**	**1.5600e-003**	**2.1000e-004**	**6.9000e-004**	**9.0000e-004**	**0.0000**	**1.6605**	**1.6605**	**3.6000e-004**	**0.0000**	**1.6696**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.08**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
6	1-1-2016	3-31-2016	0.8837	0.8837
		Highest	0.8837	0.8837

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.0138	4.0000e-005	4.2000e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	8.0100e-003	8.0100e-003	2.0000e-005	0.0000	8.5700e-003
Energy	0.0148	0.1343	0.1128	8.1000e-004		0.0102	0.0102		0.0102	0.0102	0.0000	1,061.7637	1,061.7637	0.0244	7.1500e-003	1,064.5061
Mobile	1.4635	7.2845	21.9605	0.0582	4.2873	0.0791	4.3665	1.1498	0.0746	1.2244	0.0000	5,349.3929	5,349.3929	0.3448	0.0000	5,358.0140
Waste						0.0000	0.0000		0.0000	0.0000	69.2280	0.0000	69.2280	4.0913	0.0000	171.5095
Water						0.0000	0.0000		0.0000	0.0000	2.7610	228.2822	231.0432	0.2890	7.8100e-003	240.5955
Total	**2.4921**	**7.4188**	**22.0775**	**0.0590**	**4.2873**	**0.0893**	**4.3767**	**1.1498**	**0.0848**	**1.2346**	**71.9891**	**6,639.4467**	**6,711.4358**	**4.7495**	**0.0150**	**6,834.6336**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.0138	4.0000e-005	4.2000e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	8.0100e-003	8.0100e-003	2.0000e-005	0.0000	8.5700e-003
Energy	0.0148	0.1343	0.1128	8.1000e-004		0.0102	0.0102		0.0102	0.0102	0.0000	1,061.7637	1,061.7637	0.0244	7.1500e-003	1,064.5061
Mobile	1.4635	7.2845	21.9605	0.0582	4.2873	0.0791	4.3665	1.1498	0.0746	1.2244	0.0000	5,349.3929	5,349.3929	0.3448	0.0000	5,358.0140
Waste						0.0000	0.0000		0.0000	0.0000	69.2280	0.0000	69.2280	4.0913	0.0000	171.5095
Water						0.0000	0.0000		0.0000	0.0000	2.7610	228.2822	231.0432	0.2890	7.8100e-003	240.5955
Total	**2.4921**	**7.4188**	**22.0775**	**0.0590**	**4.2873**	**0.0893**	**4.3767**	**1.1498**	**0.0848**	**1.2346**	**71.9891**	**6,639.4467**	**6,711.4358**	**4.7495**	**0.0150**	**6,834.6336**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Architectural Coating p2	Architectural Coating	1/1/2016	1/1/2016	5	1	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 1.31

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 393,155; Non-Residential Outdoor: 131,052; Striped Parking Area: 3,432 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating p2	Air Compressors	1	6.00	78	0.48
Architectural Coating p2	Pavers	2	8.00	130	0.42
Architectural Coating p2	Rollers	2	8.00	80	0.38
Architectural Coating p2	Paving Equipment	2	8.00	132	0.36

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Architectural Coating p2	7	40.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating p2	7	40.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Clean Paved Roads

3.2 Architectural Coating p2 - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.2228					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.2500e-003	0.0126	8.5000e-003	1.0000e-005		7.4000e-004	7.4000e-004		6.9000e-004	6.9000e-004	0.0000	1.2012	1.2012	3.4000e-004	0.0000	1.2097
Total	**1.2241**	**0.0126**	**8.5000e-003**	**1.0000e-005**		**7.4000e-004**	**7.4000e-004**		**6.9000e-004**	**6.9000e-004**	**0.0000**	**1.2012**	**1.2012**	**3.4000e-004**	**0.0000**	**1.2097**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.9000e-004	2.5000e-004	2.6700e-003	1.0000e-005	8.2000e-004	0.0000	8.2000e-004	2.1000e-004	0.0000	2.1000e-004	0.0000	0.4594	0.4594	2.0000e-005	0.0000	0.4599
Total	**2.9000e-004**	**2.5000e-004**	**2.6700e-003**	**1.0000e-005**	**8.2000e-004**	**0.0000**	**8.2000e-004**	**2.1000e-004**	**0.0000**	**2.1000e-004**	**0.0000**	**0.4594**	**0.4594**	**2.0000e-005**	**0.0000**	**0.4599**

3.2 Architectural Coating p2 - 2016

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.2228					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.2500e-003	0.0126	8.5000e-003	1.0000e-005		7.4000e-004	7.4000e-004		6.9000e-004	6.9000e-004	0.0000	1.2012	1.2012	3.4000e-004	0.0000	1.2097
Total	**1.2241**	**0.0126**	**8.5000e-003**	**1.0000e-005**		**7.4000e-004**	**7.4000e-004**		**6.9000e-004**	**6.9000e-004**	**0.0000**	**1.2012**	**1.2012**	**3.4000e-004**	**0.0000**	**1.2097**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.9000e-004	2.5000e-004	2.6700e-003	1.0000e-005	8.2000e-004	0.0000	8.2000e-004	2.1000e-004	0.0000	2.1000e-004	0.0000	0.4594	0.4594	2.0000e-005	0.0000	0.4599
Total	**2.9000e-004**	**2.5000e-004**	**2.6700e-003**	**1.0000e-005**	**8.2000e-004**	**0.0000**	**8.2000e-004**	**2.1000e-004**	**0.0000**	**2.1000e-004**	**0.0000**	**0.4594**	**0.4594**	**2.0000e-005**	**0.0000**	**0.4599**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.4635	7.2845	21.9605	0.0582	4.2873	0.0791	4.3665	1.1498	0.0746	1.2244	0.0000	5,349.3929	5,349.3929	0.3448	0.0000	5,358.0140
Unmitigated	1.4635	7.2845	21.9605	0.0582	4.2873	0.0791	4.3665	1.1498	0.0746	1.2244	0.0000	5,349.3929	5,349.3929	0.3448	0.0000	5,358.0140

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
High School	3,378.51	1,145.39	469.16	11,291,395	11,291,395
Parking Lot	0.00	0.00	0.00		
Total	3,378.51	1,145.39	469.16	11,291,395	11,291,395

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	16.60	8.40	6.90	33.00	48.00	19.00	66	28	6
High School	16.60	8.40	6.90	77.80	17.20	5.00	75	19	6
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
High School	0.547512	0.046663	0.198227	0.127154	0.018333	0.005870	0.017956	0.026928	0.002295	0.002753	0.004678	0.000662	0.000968
Parking Lot	0.547512	0.046663	0.198227	0.127154	0.018333	0.005870	0.017956	0.026928	0.002295	0.002753	0.004678	0.000662	0.000968
City Park	0.547512	0.046663	0.198227	0.127154	0.018333	0.005870	0.017956	0.026928	0.002295	0.002753	0.004678	0.000662	0.000968

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	915.6015	915.6015	0.0216	4.4700e-003	917.4753
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	915.6015	915.6015	0.0216	4.4700e-003	917.4753
NaturalGas Mitigated	0.0148	0.1343	0.1128	8.1000e-004		0.0102	0.0102		0.0102	0.0102	0.0000	146.1622	146.1622	2.8000e-003	2.6800e-003	147.0308
NaturalGas Unmitigated	0.0148	0.1343	0.1128	8.1000e-004		0.0102	0.0102		0.0102	0.0102	0.0000	146.1622	146.1622	2.8000e-003	2.6800e-003	147.0308

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
High School	2.73898e+006	0.0148	0.1343	0.1128	8.1000e-004		0.0102	0.0102		0.0102	0.0102	0.0000	146.1622	146.1622	2.8000e-003	2.6800e-003	147.0308
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0148**	**0.1343**	**0.1128**	**8.1000e-004**		**0.0102**	**0.0102**		**0.0102**	**0.0102**	**0.0000**	**146.1622**	**146.1622**	**2.8000e-003**	**2.6800e-003**	**147.0308**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
High School	2.73898e+006	0.0148	0.1343	0.1128	8.1000e-004		0.0102	0.0102		0.0102	0.0102	0.0000	146.1622	146.1622	2.8000e-003	2.6800e-003	147.0308
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0148**	**0.1343**	**0.1128**	**8.1000e-004**		**0.0102**	**0.0102**		**0.0102**	**0.0102**	**0.0000**	**146.1622**	**146.1622**	**2.8000e-003**	**2.6800e-003**	**147.0308**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
High School	1.59359e+006	887.5662	0.0210	4.3400e-003	889.3827
Parking Lot	50336	28.0352	6.6000e-004	1.4000e-004	28.0926
Total		**915.6015**	**0.0216**	**4.4800e-003**	**917.4753**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
High School	1.59359e+006	887.5662	0.0210	4.3400e-003	889.3827
Parking Lot	50336	28.0352	6.6000e-004	1.4000e-004	28.0926
Total		**915.6015**	**0.0216**	**4.4800e-003**	**917.4753**

6.0 Area Detail

6.1 Mitigation Measures Area

Use Electric Leafblower

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.0138	4.0000e-005	4.2000e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	8.0100e-003	8.0100e-003	2.0000e-005	0.0000	8.5700e-003
Unmitigated	1.0138	4.0000e-005	4.2000e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	8.0100e-003	8.0100e-003	2.0000e-005	0.0000	8.5700e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0611					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.9523					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	4.1000e-004	4.0000e-005	4.2000e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	8.0100e-003	8.0100e-003	2.0000e-005	0.0000	8.5700e-003
Total	**1.0138**	**4.0000e-005**	**4.2000e-003**	**0.0000**		**2.0000e-005**	**2.0000e-005**		**2.0000e-005**	**2.0000e-005**	**0.0000**	**8.0100e-003**	**8.0100e-003**	**2.0000e-005**	**0.0000**	**8.5700e-003**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0611					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.9523					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	4.1000e-004	4.0000e-005	4.2000e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	8.0100e-003	8.0100e-003	2.0000e-005	0.0000	8.5700e-003
Total	**1.0138**	**4.0000e-005**	**4.2000e-003**	**0.0000**		**2.0000e-005**	**2.0000e-005**		**2.0000e-005**	**2.0000e-005**	**0.0000**	**8.0100e-003**	**8.0100e-003**	**2.0000e-005**	**0.0000**	**8.5700e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	231.0432	0.2890	7.8100e-003	240.5955
Unmitigated	231.0432	0.2890	7.8100e-003	240.5955

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 4.31316	26.6892	6.3000e-004	1.3000e-004	26.7438
High School	8.70294 / 22.379	204.3540	0.2884	7.6800e-003	213.8517
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**231.0432**	**0.2890**	**7.8100e-003**	**240.5955**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 4.31316	26.6892	6.3000e-004	1.3000e-004	26.7438
High School	8.70294 / 22.379	204.3540	0.2884	7.6800e-003	213.8517
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**231.0432**	**0.2890**	**7.8100e-003**	**240.5955**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	69.2280	4.0913	0.0000	171.5095
Unmitigated	69.2280	4.0913	0.0000	171.5095

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	0.31	0.0629	3.7200e-003	0.0000	0.1559
High School	340.73	69.1651	4.0875	0.0000	171.3536
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**69.2280**	**4.0913**	**0.0000**	**171.5095**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	0.31	0.0629	3.7200e-003	0.0000	0.1559
High School	340.73	69.1651	4.0875	0.0000	171.3536
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**69.2280**	**4.0913**	**0.0000**	**171.5095**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Roosevelt HS Existing Conditions

Los Angeles-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
High School	262.10	1000sqft	6.02	262,103.00	0
Parking Lot	57.20	1000sqft	1.31	57,200.00	0
City Park	3.62	Acre	3.62	157,687.20	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	12			**Operational Year**	2017
Utility Company	Los Angeles Department of Water & Power				
CO2 Intensity (lb/MWhr)	1227.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Roosevelt HS Existing Conditions - Los Angeles-South Coast County, Summer

Project Characteristics - Existing Conditions

Land Use - The Roosevelt Program Approval document states that the school capacity is 2,600.

Construction Phase - Existing conditions

Off-road Equipment - Data from Roosevelt High School Comprehensive Modernization Project Construction Schedule and Equipment.

Off-road Equipment -

Grading -

Demolition -

Trips and VMT -

Architectural Coating -

Vehicle Trips - Student body would not be increased. Overall building square footage would slightly decrease over existing conditions.

Area Coating - Standard Condition SC-AQ-4 requires ultra-low VOC or zero VOC paint.

Construction Off-road Equipment Mitigation -

Area Mitigation -

Energy Mitigation -

Water Mitigation -

Energy Use -

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_EF_Nonresidential_Exterior	100	50
tblAreaCoating	Area_EF_Nonresidential_Interior	100	50
tblAreaCoating	Area_EF_Parking	100	50
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	15
tblConstructionPhase	NumDays	20.00	1.00
tblConstructionPhase	PhaseEndDate	9/29/2017	1/1/2016
tblConstructionPhase	PhaseStartDate	8/1/2017	1/1/2016
tblProjectCharacteristics	OperationalYear	2018	2017
tblVehicleTrips	ST_TR	22.75	0.00
tblVehicleTrips	SU_TR	16.74	0.00
tblVehicleTrips	WD_TR	1.89	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2016	2,448.6746	25.6697	22.6164	0.0364	1.6716	1.4897	3.1613	0.4280	1.3863	1.8143	0.0000	3,705.7732	3,705.7732	0.7958	0.0000	3,725.6683
Maximum	**2,448.6746**	**25.6697**	**22.6164**	**0.0364**	**1.6716**	**1.4897**	**3.1613**	**0.4280**	**1.3863**	**1.8143**	**0.0000**	**3,705.7732**	**3,705.7732**	**0.7958**	**0.0000**	**3,725.6683**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2016	2,448.6746	25.6697	22.6164	0.0364	1.6716	1.4897	3.1613	0.4280	1.3863	1.8143	0.0000	3,705.7732	3,705.7732	0.7958	0.0000	3,725.6683
Maximum	**2,448.6746**	**25.6697**	**22.6164**	**0.0364**	**1.6716**	**1.4897**	**3.1613**	**0.4280**	**1.3863**	**1.8143**	**0.0000**	**3,705.7732**	**3,705.7732**	**0.7958**	**0.0000**	**3,725.6683**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	5.5563	3.2000e-004	0.0336	0.0000		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004		0.0707	0.0707	2.0000e-004		0.0756
Energy	0.0809	0.7357	0.6180	4.4100e-003		0.0559	0.0559		0.0559	0.0559		882.8288	882.8288	0.0169	0.0162	888.0750
Mobile	10.7029	48.3097	160.3457	0.4241	30.6947	0.5549	31.2496	8.2182	0.5233	8.7415		42,941.4859	42,941.4859	2.7017		43,009.0285
Total	**16.3401**	**49.0457**	**160.9973**	**0.4285**	**30.6947**	**0.6109**	**31.3056**	**8.2182**	**0.5793**	**8.7976**		**43,824.3854**	**43,824.3854**	**2.7188**	**0.0162**	**43,897.1791**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	5.5563	3.2000e-004	0.0336	0.0000		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004		0.0707	0.0707	2.0000e-004		0.0756
Energy	0.0809	0.7357	0.6180	4.4100e-003		0.0559	0.0559		0.0559	0.0559		882.8288	882.8288	0.0169	0.0162	888.0750
Mobile	10.7029	48.3097	160.3457	0.4241	30.6947	0.5549	31.2496	8.2182	0.5233	8.7415		42,941.4859	42,941.4859	2.7017		43,009.0285
Total	**16.3401**	**49.0457**	**160.9973**	**0.4285**	**30.6947**	**0.6109**	**31.3056**	**8.2182**	**0.5793**	**8.7976**		**43,824.3854**	**43,824.3854**	**2.7188**	**0.0162**	**43,897.1791**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Architectural Coating p2	Architectural Coating	1/1/2016	1/1/2016	5	1	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 1.31

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 393,155; Non-Residential Outdoor: 131,052; Striped Parking Area: 3,432 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating p2	Air Compressors	1	6.00	78	0.48
Architectural Coating p2	Pavers	2	8.00	130	0.42
Architectural Coating p2	Rollers	2	8.00	80	0.38
Architectural Coating p2	Paving Equipment	2	8.00	132	0.36

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Architectural Coating p2	7	40.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating p2	7	40.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Clean Paved Roads

3.2 Architectural Coating p2 - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	2,445.6068					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	2.4998	25.2290	17.0080	0.0258		1.4810	1.4810		1.3782	1.3782		2,648.1680	2,648.1680	0.7471		2,666.8447
Total	**2,448.1065**	**25.2290**	**17.0080**	**0.0258**		**1.4810**	**1.4810**		**1.3782**	**1.3782**		**2,648.1680**	**2,648.1680**	**0.7471**		**2,666.8447**

3.2 Architectural Coating p2 - 2016

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.5681	0.4408	5.6085	0.0107	1.6716	8.7700e-003	1.6804	0.4280	8.1000e-003	0.4361		1,057.6053	1,057.6053	0.0487		1,058.8236
Total	**0.5681**	**0.4408**	**5.6085**	**0.0107**	**1.6716**	**8.7700e-003**	**1.6804**	**0.4280**	**8.1000e-003**	**0.4361**		**1,057.6053**	**1,057.6053**	**0.0487**		**1,058.8236**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	2,445.6068					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	2.4998	25.2290	17.0080	0.0258		1.4810	1.4810		1.3782	1.3782	0.0000	2,648.1680	2,648.1680	0.7471		2,666.8447
Total	**2,448.1065**	**25.2290**	**17.0080**	**0.0258**		**1.4810**	**1.4810**		**1.3782**	**1.3782**	**0.0000**	**2,648.1680**	**2,648.1680**	**0.7471**		**2,666.8447**

3.2 Architectural Coating p2 - 2016

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.5681	0.4408	5.6085	0.0107	1.6716	8.7700e-003	1.6804	0.4280	8.1000e-003	0.4361		1,057.6053	1,057.6053	0.0487		1,058.8236
Total	**0.5681**	**0.4408**	**5.6085**	**0.0107**	**1.6716**	**8.7700e-003**	**1.6804**	**0.4280**	**8.1000e-003**	**0.4361**		**1,057.6053**	**1,057.6053**	**0.0487**		**1,058.8236**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	10.7029	48.3097	160.3457	0.4241	30.6947	0.5549	31.2496	8.2182	0.5233	8.7415		42,941.4859	42,941.4859	2.7017		43,009.0285
Unmitigated	10.7029	48.3097	160.3457	0.4241	30.6947	0.5549	31.2496	8.2182	0.5233	8.7415		42,941.4859	42,941.4859	2.7017		43,009.0285

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
High School	3,378.51	1,145.39	469.16	11,291,395	11,291,395
Parking Lot	0.00	0.00	0.00		
Total	3,378.51	1,145.39	469.16	11,291,395	11,291,395

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	16.60	8.40	6.90	33.00	48.00	19.00	66	28	6
High School	16.60	8.40	6.90	77.80	17.20	5.00	75	19	6
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
High School	0.547512	0.046663	0.198227	0.127154	0.018333	0.005870	0.017956	0.026928	0.002295	0.002753	0.004678	0.000662	0.000968
Parking Lot	0.547512	0.046663	0.198227	0.127154	0.018333	0.005870	0.017956	0.026928	0.002295	0.002753	0.004678	0.000662	0.000968
City Park	0.547512	0.046663	0.198227	0.127154	0.018333	0.005870	0.017956	0.026928	0.002295	0.002753	0.004678	0.000662	0.000968

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0809	0.7357	0.6180	4.4100e-003		0.0559	0.0559		0.0559	0.0559		882.8288	882.8288	0.0169	0.0162	888.0750
NaturalGas Unmitigated	0.0809	0.7357	0.6180	4.4100e-003		0.0559	0.0559		0.0559	0.0559		882.8288	882.8288	0.0169	0.0162	888.0750

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
High School	7504.04	0.0809	0.7357	0.6180	4.4100e-003		0.0559	0.0559		0.0559	0.0559		882.8288	882.8288	0.0169	0.0162	888.0750
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0809**	**0.7357**	**0.6180**	**4.4100e-003**		**0.0559**	**0.0559**		**0.0559**	**0.0559**		**882.8288**	**882.8288**	**0.0169**	**0.0162**	**888.0750**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
High School	7.50404	0.0809	0.7357	0.6180	4.4100e-003		0.0559	0.0559		0.0559	0.0559		882.8288	882.8288	0.0169	0.0162	888.0750
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0809**	**0.7357**	**0.6180**	**4.4100e-003**		**0.0559**	**0.0559**		**0.0559**	**0.0559**		**882.8288**	**882.8288**	**0.0169**	**0.0162**	**888.0750**

6.0 Area Detail

6.1 Mitigation Measures Area

Use Electric Leafblower

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	5.5563	3.2000e-004	0.0336	0.0000		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004		0.0707	0.0707	2.0000e-004		0.0756
Unmitigated	5.5563	3.2000e-004	0.0336	0.0000		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004		0.0707	0.0707	2.0000e-004		0.0756

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.3350					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	5.2180					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.2400e-003	3.2000e-004	0.0336	0.0000		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004		0.0707	0.0707	2.0000e-004		0.0756
Total	**5.5563**	**3.2000e-004**	**0.0336**	**0.0000**		**1.2000e-004**	**1.2000e-004**		**1.2000e-004**	**1.2000e-004**		**0.0707**	**0.0707**	**2.0000e-004**		**0.0756**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.3350					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	5.2180					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.2400e-003	3.2000e-004	0.0336	0.0000		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004		0.0707	0.0707	2.0000e-004		0.0756
Total	**5.5563**	**3.2000e-004**	**0.0336**	**0.0000**		**1.2000e-004**	**1.2000e-004**		**1.2000e-004**	**1.2000e-004**		**0.0707**	**0.0707**	**2.0000e-004**		**0.0756**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

APPENDIX 3.2

Cultural Resources

Memorandum

TO: Gwenn Godek, Contract Professional/CEQA Project Manager, Los Angeles Unified School District (LAUSD)

DATE: June 19, 2015

CC:

FROM: Margarita Jerabek, Ph.D., Director of Historic Resources,
Amanda Kainer, M.S., Senior Architectural Historian,
Virginia Harness M.A., Architectural Historian

RE: **Preliminary Historic Resource Evaluation Report (HRE) for Theodore Roosevelt Senior High School, 456 South Mathews Street, Los Angeles, California, 90033**

INTRODUCTION

PCR Services Corporation (PCR) appreciates the opportunity to prepare a Preliminary Historic Resource Evaluation Report ("HRE") for Theodore Roosevelt Senior High School ("Roosevelt High") located at 456 South Mathews Street in Los Angeles, Los Angeles County, California. Constructed in phases, Roosevelt High was initially constructed in 1922, later retrofit following the Long Beach earthquake, and improved with Contemporary buildings up to 1990, therefore, Roosevelt High meets the age threshold for consideration as a historical resource under CEQA. PCR's Historic Resources Division conducted an intensive pedestrian survey, research and evaluation of Roosevelt High in May and June 2015. This HRE includes a discussion of the methodology used, a brief historic context, description of existing conditions and integrity, and a significance evaluation of the subject school.

PROPERTY DESCRIPTION

The subject property is improved with a multiple-building school campus constructed between 1922 and 1990. Roosevelt High is located on a 22.7 acre site bounded by East 4th Street to the north, East 6th Street to the south, South Mathews Street to the west, and South Mott Street to the east. The legal description of the subject property is Lot 1 of Tract 34758 on Assessor Parcel Number ("APN") 5185-004-929. The neighborhood surrounding the school is primarily developed with modest early-twentieth century single-family homes and Hollenbeck Middle School is located due south of the subject school.

METHODOLOGY

The HRE was conducted by PCR's Historic Resources Division personnel Margarita Jerabek, Ph.D., Director of Historic Resources, Amanda Y. Kainer, M.S., Senior Architectural Historian, and Virginia E. Harness, Architectural Historian Technician, all of whom meet and exceed the Secretary of the Interior's Professional Qualification Standards in history and architectural history.[1] Professional qualifications are provided in Attachment D of this report.

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[1] *The Professional Qualification Standards are requirements used by the National Park Service and have been published in the Code of Federal Regulations ("CFR"), 36 CFR Part 61.*

The following tasks were performed by PCR for the study:

- A pedestrian survey and digital photography was undertaken to document the existing conditions of the subject property. PCR utilized the survey methodology of the State Office of Historic Preservation ("OHP").

- Conducted site-specific research on the school sites utilizing Sanborn fire insurance maps, historical photographs and plans, California Index, Avery Index, Online Archive of California, USC Digital Collections, historical *Los Angeles Times*, American Institute of Architects ("AIA") historical directory, and other published sources.

- Reviewed and applied methodology, eligibility standards and integrity considerations presented in the LAUSD Historic Context Statement.[2]

- Reviewed and analyzed ordinances, statutes, regulations, bulletins, and technical materials relating to federal, state, and local historic preservation, designation assessment processes, and related programs.

- Conducted a preliminary evaluation of the potential historic resource based upon criteria used by the National Register of Historic Places ("National Register") and California Register of Historical Resources ("California Register").

- The results of this evaluation were recorded on a Department of Parks and Recreation ("DPR") form, provided in Attachment C.

PREVIOUS EVALUATIONS

Roosevelt High was found ineligible for the listing in the National Register and California Register (6Z) as part of a "Phase 1 Preliminary Historic Resources Survey" sponsored by the Getty Grant Program in 2002. However, the survey was undertaken from the public right-of-way and the evaluation did not consider improvements located within the campus. Because of the survey methodology, the Classroom and Auditorium Building 1 constructed in 1922 situated in the middle of campus was not evaluated, therefore, PCR has undertaken this Preliminary HRE analysis to evaluate all improvements over forty-five years of age on the Roosevelt High campus.

HISTORIC OVERVIEW AND CONSTRUCTION HISTORY

Although Roosevelt High did not enter operation until 1923, it appears that plans for the school existed as early as October 1921. At that time the plan was for the school to be comprised of one main

[2] Sapphos Environmental, Inc., *Los Angeles Unified School District: Historic Context Statement, 1870 to 1969* (March 2014).

building, fronting Fickett Street, with two detached secondary buildings located behind the primary structure.[3] Construction of Theodore Roosevelt High School began in June of 1922. The original school was designed by architects Hunt and Burns and built by the K.R. Bradley Construction Company. The estimated cost of the new school building, located at Fourth and Fickett Street, was $420,000.[4] The school was built at a time when Los Angeles was attempting to cope with an over-crowding crisis within the city's public school system. By the end of 1922, over six million dollars was slated to be spent on the construction of new schools to provide relief from the crowded conditions.[5] By 1924 planning was underway to expand the number of buildings on the Roosevelt High campus. The two buildings noted in the 1921 plan simply as "new buildings" became shops and the cafeteria. Three new additions were also planned for 1925. A gymnasium was to be added to the northeast of the main building at the corner of Fickett Street and Fourth Street, with two tennis courts filling the space between. A garage would be added east of the shops and a classroom addition attached to the southwest end of the main building. Several residences within the block also appear to have been repurposed as class rooms by the mid-1920s.[6] Historical site plans, photographs and elevations of the Roosevelt High are provided in Attachment A.

It appears likely that the proposed garage was never built, as by January of 1925 it is no longer included in the plans for the school site. Rather, the plans from early 1925 show the addition of a playground and athletic field southeast of the tennis courts. From the available plans, it appears that the creation of the athletic field required the destruction of the residences and other buildings previously located at the corner of Mott Street and Fourth Street. By 1925, the address of the school had changed to 450 South Fickett Street.[7] By April of 1926 the expansion of the school required the demolition or relocation of all remaining residential structures on the property. By this time a second shop building was extant just southeast of the first shop, and the garage, which was ultimately placed south of the cafeteria, was slated for demolition to be replaced by a new building. A domestic science building, outdoor fireplace, and new tennis courts fronted Mott Street on the southern end of the property.[8]

In its early years, Roosevelt High incorporated studies in the practical application of skills related to construction and industry. This emphasis on building technologies was direct correlated to booming development in the Los Angeles area and the subsequent increase in demand for workers skilled in

3 8829.00.000 Map of Roosevelt High School Site Los Angeles Board of Education October 1921, K.Y. Morin, LAUSD Drawing Archive – Vault, Historic Plans.

4 "Roosevelt Contract Awarded," *Los Angeles Times*, June 20, 1922, II1.

5 "New Schools Being Planned," *Los Angeles Times*, December 4, 1922, II1.

6 8829.00.002 Plot Plan Roosevelt High School, J.F. Nelson Surveyor, August 1924, LAUSD Drawing Archive – Vault, Historic Plans.

7 8829.00.003 Grading – Retaining Walls Curbing and Tennis Courts, Roosevelt High School, January 12, 1925, LAUSD Drawing Archive – Vault, Historic Plans.

8 8829.00.004 Improvements to Grounds Roosevelt High School, April 20, 1926, revised June 2, 1926, LAUSD Drawing Archive – Vault, Historic Plans.

construction methods such as brick masons and cement workers.[9] The construction of Roosevelt High and its expanded curriculum were consistent with patterns seen throughout the school district in the 1920s. Extremely rapid growth of the City of Los Angeles during the 1920s quickly led to overcrowded schools and also fed the construction boom. The 1920s were also a period when traditional school curriculum centered on uniformity gave way to more flexible options, with a greater emphasis on individual pupil's needs and abilities. This was the decade in which the trade school opened in Los Angeles, and the vocational training programs at Roosevelt were a predecessor to schools that were devoted entirely to learning a trade.[10]

Roosevelt High, like many pre-1933 Los Angeles school buildings, was also directly affected by the 1933 Long Beach earthquake. Some reforms related to earthquake-ready buildings had already taken place in the late 1920s, but Roosevelt High predates these changes. Following the earthquake, many architectural features such as chimneys and parapets were removed from school buildings, and many surviving schools, including Roosevelt High, were ultimately remodeled and retrofitted to better standup against any future major quakes.[11] In 1936, the architecture firm of Hibbard, Gerity & Kerton was hired to reconstruct and strengthen the main original Roosevelt High building (built 1922). The biography of the architecture firm is provided on the DPR Form in Attachment C. Many of the changes that occurred to the building at this time were structural, but a number of alterations also occurred to the various elevations of the main building, altering its stylistic features and creating a much more modern and streamlined look for the building.[12] Below, the front and rear elevations of the main building can be seen as they appeared in the 1920s. The gabled parapets and third-floor were removed, creating a flat roofline and eliminating the danger that any above-roof protrusions could topple over. The diaper-pattern brick frieze with its cast stone band border that ran under the roofline of the main building was also removed or covered with stucco. It appears that the arches to the right of the main entry were also filled in during this time.[13] These alterations dramatically altered the aesthetics of the main building, transforming it into an aesthetically modern structure, stripped of its exterior decorative program. This change was consistent with the prevailing aesthetic sensibilities of the 1930s and also conformed to new regulations regarding the decorative program of buildings in locations where earthquakes could quickly turn exterior sculptural elements into lethal projectiles.

Following the rehabilitation and renovation of the main building in 1936, a new classroom building (Building 7) was added at the corner of Mott and Lanfranco Streets. This three story building was designed by architect Sumner Spaulding and matches the simplicity and clean lines of the new exterior of

9 "School to Teach Work in Cement," *Los Angeles Times*, February 3, 1924, B14.

10 Sapphos Environmental, Inc., *Los Angeles Unified School District: Historic Context Statement, 1870 to 1969* (March 2014): 43-47.

11 Ibid., 62-63.

12 8829.10.000, LAUSD Drawing Archive – Vault, Historic Plans.

13 8829.10.000 Strengthening & Modernization of Auditorium/Classroom Building (1922 Portion), LAUSD Drawing Archive – Vault, Historic Plans.

the main buildings, with virtually no exterior decoration.[14] Two years later, the west entrance was altered with the replacement of the existing doors, sidelights, frames, and trim.[15] In 1949, fire ravaged part of the main building, requiring repairs to the north wind and central portion of the main building.[16] In 1950, the two existing shop buildings and the tennis courts along Mott Street were demolished to construct a new industrial arts building designed by Sumner Spaulding and John Rex.[17]

Between 1964 and 1969, the school expanded to the west to incorporate an entire city block into the school site, as a result the main building constructed in 1922 no longer served as the face of the school and a new Contemporary style administration building (Building 5) was constructed in front of the main building in 1969. Also during the 1960s, a number of new buildings went up on the larger campus. These included new physical education (Building 19), industrial arts (Building 6), and utility buildings in 1966, followed by a new administration and classroom building (Building 5) and a new garage in 1969.[18] The architects of these buildings are unknown.

In 1970, Roosevelt High was thrice the target of terrorist acts perpetrated by the Chicano Liberation Front. The group committed arson on the campus twice and also detonated two bombs, though no one was injured in these incidents; however, the fire damage inflicted to Building 1 had to be repaired,[19] and bomb damages had to be repaired in the main building.[20] The Chicano group also targeted a number of other institutions in East Los Angles and the greater Los Angeles area during the same period, including Los Angeles City Hall, Bank of America branches, Safeway grocery store, Chevron Chemical, Shopping Bag Market, Atlantic Savings and Loan, United California Bank branch, Belvedere Junior high school, Pan American Bank branch, and Hazard Park Armory Reserve.[21]

There were other buildings constructed during the 1970s. A childhood education aide building was constructed in 1972.[22] In 1975 a number of changes were made, with the construction of a second

[14] 8829.09.000 1936 – New Classroom bldg, LAUSD Drawing Archive – Vault, Historic Plans.

[15] 8829.02.005 1938 – Alteration of west entrance, LAUSD Drawing Archive – Vault, Historic Plans.

[16] 8829.11.000 1949 – Fire Damage, LAUSD Drawing Archive – Vault, Historic Plans.

[17] 8829.12.000 1950 - Industrial Arts Bldg, LAUSD Drawing Archive – Vault, Historic Plans.

[18] 8829.22.000 1966 – New Phys Ed, Industrial Arts, and Utility Bldgs, LAUSD Drawing Archive – Vault, Historic Plans.

8829.23.000 1969 – New Admin/classroom and garage bldgs., LAUSD Drawing Archive – Vault, Historic Plans.

[19] 8829.24.000 1970 – Fire damage repair, LAUSD Drawing Archive – Vault, Historic Plans.

[20] 8829.24.000 1970 – Fire damage repair, LAUSD Drawing Archive – Vault, Historic Plans.

[21] "Boyle Heights Bank Set Afire; Damage Estimated at $30,000," *Los Angeles Times* (April 22, 1970): A1.

"The Chicano Liberation Front (1971)," Notes from Aztlan: Desde el Barrio," http://www.notesfromaztlan.com/2014/04/16/the-chicano-liberation-front-1971/ (April 16, 2014), accessed May 27, 2015.

[22] 8829.25.000 1972 – Childhood Ed Bldg, LAUSD Drawing Archive – Vault, Historic Plans.

classroom building, a new cafeteria, a music building, and a gazebo.[23] That same year the site of the old gymnasium became an outdoor swimming pool, and the old cafeteria, domestic science building and agriculture building were demolished.[24] Five years later the lunch shelter and arcades were also dismantled.[25]

Architectural Description

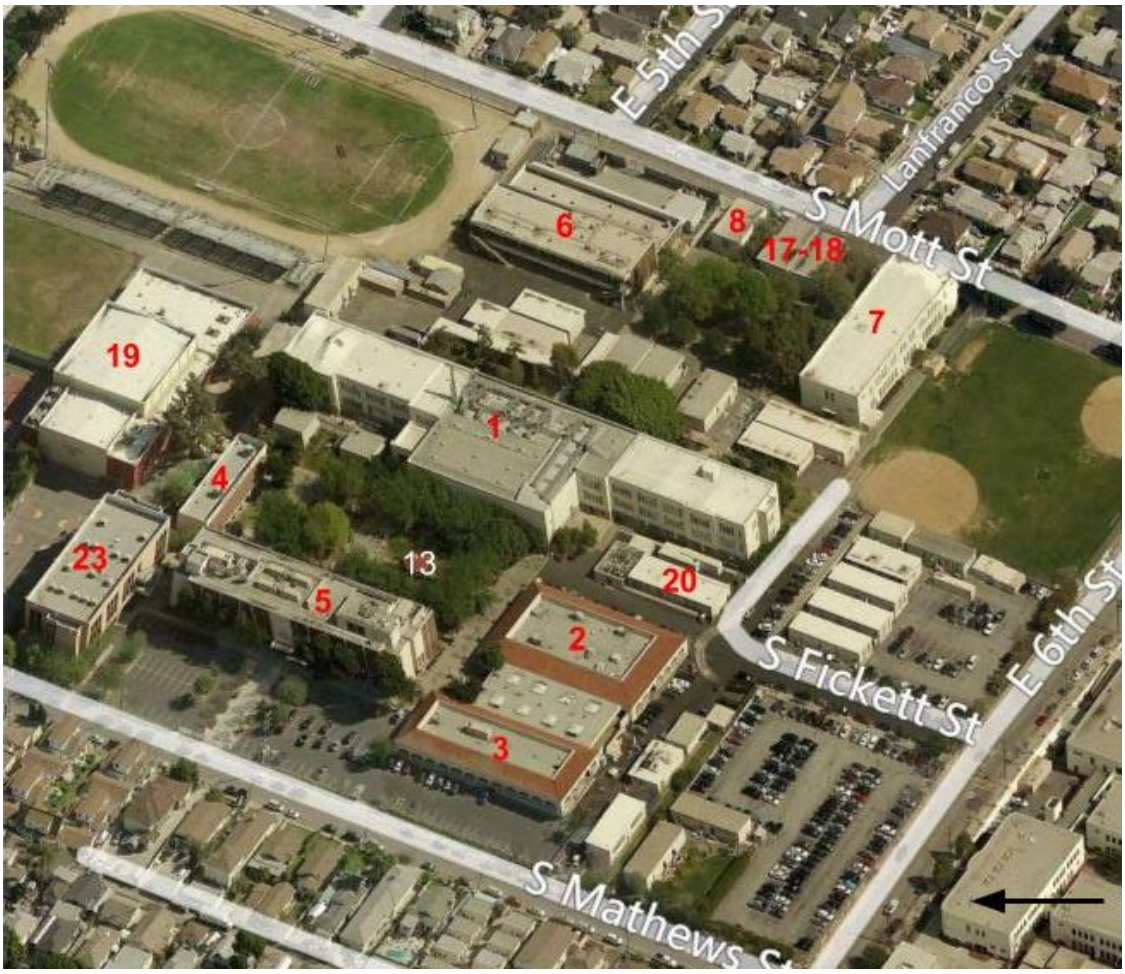
There are approximately twenty-nine permanent school buildings constructed between 1922 and 1990 on the Roosevelt High campus. The central anchor of the campus is the Classroom and Auditorium Building 1 constructed in 1922, which originally faced west towards Fickett Street, and is the only extant improvement from the original campus. As the neighborhood population continued to grow over the course of the mid-twentieth century, the District expanded the campus one city block west and constructed buildings to accommodate the increasing student population. Because of the gradual campus improvements, the campus has school buildings representative of a variety of architectural styles including PWA Moderne, Modern, Neo-Mediterranean, and Contemporary, and the school does not have structured site plan. Located on rectangular lot, Roosevelt High has a central quad surrounded by Buildings 1, 2, 3, 4, 5, 19, 20, and 23. The rear of the campus is improved with another grouping of buildings that include Buildings 6, 4, 8, 17 and 18. The primary building facing Mathews Street is the Contemporary style Administration and Classroom Building 5 Street, which was constructed following the campus expansion in 1969. To the north of the Administration and Classroom Building 5 is the Contemporary style Library and Classroom Building 23 constructed in 1990, and to the east are the Neo-Mediterranean style Classroom Building 3 and Cafeteria Building 2 both constructed in 1977. The remainder of the campus is improved with surface parking areas and recreational fields. Located in the northeast corner of the campus is the track and field, playing field, hard courts, and physical education building, while in the opposite southeast corner is the baseball field. The eight permanent buildings over forty-five years in age (Buildings 1, 5, 6, 7, 8, 17, 18, and 19) are described in greater below. Current photographs of the Roosevelt High campus are provided in Attachment B.

[23] 8829.30.000 1975 – Demo Cafeteria/Dom. Sci. and Ag. Buildings, LAUSD Drawing Archive – Vault, Historic Plans.

[24] 8829.27.000 1975 – Classroom bldg. #2, cafeteria bldg., music building and gazebo, LAUSD Drawing Archive – Vault, Historic Plans.

8829.28.000 1975 – Community Swimming Pool, LAUSD Drawing Archive – Vault, Historic Plans.

[25] 8829.02.047 1980 – Demo lunch shelter service bldg. and arcades, LAUSD Drawing Archive – Vault, Historic Plans.



Current Aerial of Roosevelt High with Building Numbers (Bing Maps)

The anchor of Roosevelt High campus is the Classroom and Auditorium Building 1 constructed in the Italian Renaissance Revival style in 1922 with a south wing addition in 1924, however, following the Long Beach earthquake Building 1 was structurally stabilized and rehabilitated into the PWA Moderne style in 1936. All of the Italian Renaissance Revival style ornamentation and decorative brickwork was stripped; however, there is some extant detailing remaining in the lobby and auditorium interiors, as described below. The two-story with basement Classroom and Auditorium Building 1 has a T-shape plan, a flat-roof, and a smooth stucco finish. The building has little decorative ornamentation, except for a thin, molding extending around the building at the roofline and above and below the second-story windows.

The primary entrance Classroom and Auditorium Building 1 is located on the west elevation and consists of four sets of single-pane Kalamein double doors (alteration, metal security screens) and steel multi-pane fixed transom windows divided by a fluted column that once had decorative cast stone capital (alteration). Concrete stairs with two landings lead up to the entrance. The name of the school "Theodore Roosevelt High School" is posted in a PWA Moderne font above the entrance. Fenestration generally consists of three-over-three windows with transom windows that have been painted over or replaced with outtake vents (alteration). There are a number of secondary entrances on the rear (east) and side (north) elevations. On the side (north) elevation there are two secondary entrances, the first floor has a three-way concrete stairway leading to two pairs of Kalamein doors with transom windows and the second-story has a metal stair leading to a pair of Kalamein doors with transoms. On the rear (east) elevation there are four rear entrances, two consist of pairs of flat panel double doors (alteration, replacements) covered by awnings and the other two are single flat-panel doors (alteration, replacements). The historical setting of the buildings has been altered as it no longer faces outward to Mathews Street or the neighborhood and buildings have been constructed within the north and south courtyards in front of the primary elevation that was historically landscaped lawns.

The interior of the Classroom and Auditorium Building 1 exhibits pre-earthquake spaces and features, unlike the exterior. The lobby has an original concrete floor marked off in squares and a coffered wood ceiling, however, the ticket booth on the south wall was reconstructed and the trophy case on the north wall was added in 1936. The auditorium has an original coffered wood ceiling, wood paneling, concrete and wood floors, seating, and lighting fixtures dating from 1922. Throughout the years Building 1 has been extensively remodeled in the interior due to fires and the conversion of the building into a classroom building, as the library and administrative uses were moved into other buildings constructed for these purposes. While the remainder of the building has the original configuration of the single central corridor flanked by classrooms, all of the finishes, doors, and transoms have been replaced.

In 1969, the new Administration and Classroom Building 5 was constructed in front of Classroom and Auditorium Building 1 after the campus expansion. The Administration and Classroom Building 5 is the face of the campus and is sited parallel with Mathews Street behind an asphalt parking lot. The Contemporary style two-story building has a rectangular plan and massing and a flat roof. The building is sheathed with panels of brick veneer separated by columns of windows. Located at the center of the primary façade is the main entrance is set within a stucco panel and covered by an awning. There is a large courtyard to the rear of the building where Buildings 1, 2, and 4 are grouped around.

The second oldest building, the PWA Moderne style Classroom Building 7, was constructed in 1937 in the southeast portion of the campus and shares many of the minimalist features of Building 1. The two-story Classroom Building 7 has a rectangular plan and massing, flat roof, and painted board form

concrete construction (alteration, in some areas stucco has been applied over the board form concrete). Fenestration consists of six-over-six windows with three-light transoms (alteration, infilled windows) and four-light hopper windows. Simple molding encircles the building at the roofline and above and under the second story windows. Entrances are located on the north, west and east elevations. The entrances at the east and west elevations are pairs of metal security doors covered by streamline awnings, while the entrance on the north elevation is a single-metal security door (alteration, the transom window above has been removed and infilled).

Located to the north of Classroom Building 7 is Industrial Art Building 6 constructed in 1966. The one-and-two story Industrial Art Building 6 has a rectangular plan and massing, flat-roof, brick and stucco sheathing, and flat-panel doors. The building's primary decorative feature is the second-story concrete balcony shielded by a wide overhang on the west elevation where access to the classrooms is provided by two concrete stairways. A wide awning runs along the rear one-story elevation to provide shelter for the automotive classes.

Sited between Buildings 6 and 7, are three classrooms buildings (Buildings 8, 17, and 18) arranged in a row constructed in 1959 and 1964. Two-story buildings 17 and 18 share identical designs and have rectangular plans, flat roofs, concrete construction, and second story metal balconies covered by wide overhangs onto which the classroom open. Garage Building 8 is a simple, concrete rectangular box with openings covered by a wide awning on the south elevation.

The Physical Education Building 19, built in 1966, is located in the northern area of the campus adjacent to the tennis courts and football field. The simple, one-story Building 19 has a rectangular plan and massing, flat roof, and painted brick and stucco veneer. The focal point of Building 19 is the central entrance containing two pairs of double doors inset within a mosaic wall and covered by a rectangular awning.

SIGNIFICANCE EVALUATION

Roosevelt High is an extensively altered example of an Italian Renaissance Revival and PWA Moderne style school. Originally Roosevelt High was an Italian Renaissance Revival style school designed by Hunt & Burns between 1921 and 1923. Only one building remains extant from the initial construction period, Building 1, constructed in 1922; however, Building 1 was reconstructed following the earthquake by Hibbard, Gerity & Kerton in 1936 and no long retains integrity as a result of extensive alterations. Also during this period Building 7, designed by Sumner Spaulding, was constructed in 1936. Buildings 1 and Building 7 do not appear to be exceptional, distinctive, or outstanding examples of the PWA Moderne style, rather they are simplified typical and altered examples of the style. The period of significance for

Roosevelt High is 1922 to 1936, from the initial construction of the school in 1922 through the end of the earthquake reconstruction for this PWA Moderne school in 1936. The campus was expanded one city block to the west between 1964 and 1969, effectively modifying the site plan of the original 1920s campus and altering the spatial relationships of Building 1 with the neighborhood, other campus buildings, and landscape. In the Postwar period there were also many additions to the campus, including Building 8 (1959), Buildings 17 and 18 (1964), Building 6 (1966), and Building 5 (1969). Earthquake reconstruction, extensive rehabilitation, the campus expansion, and numerous later additions to the campus detract significantly from its integrity as a potential historical resource.

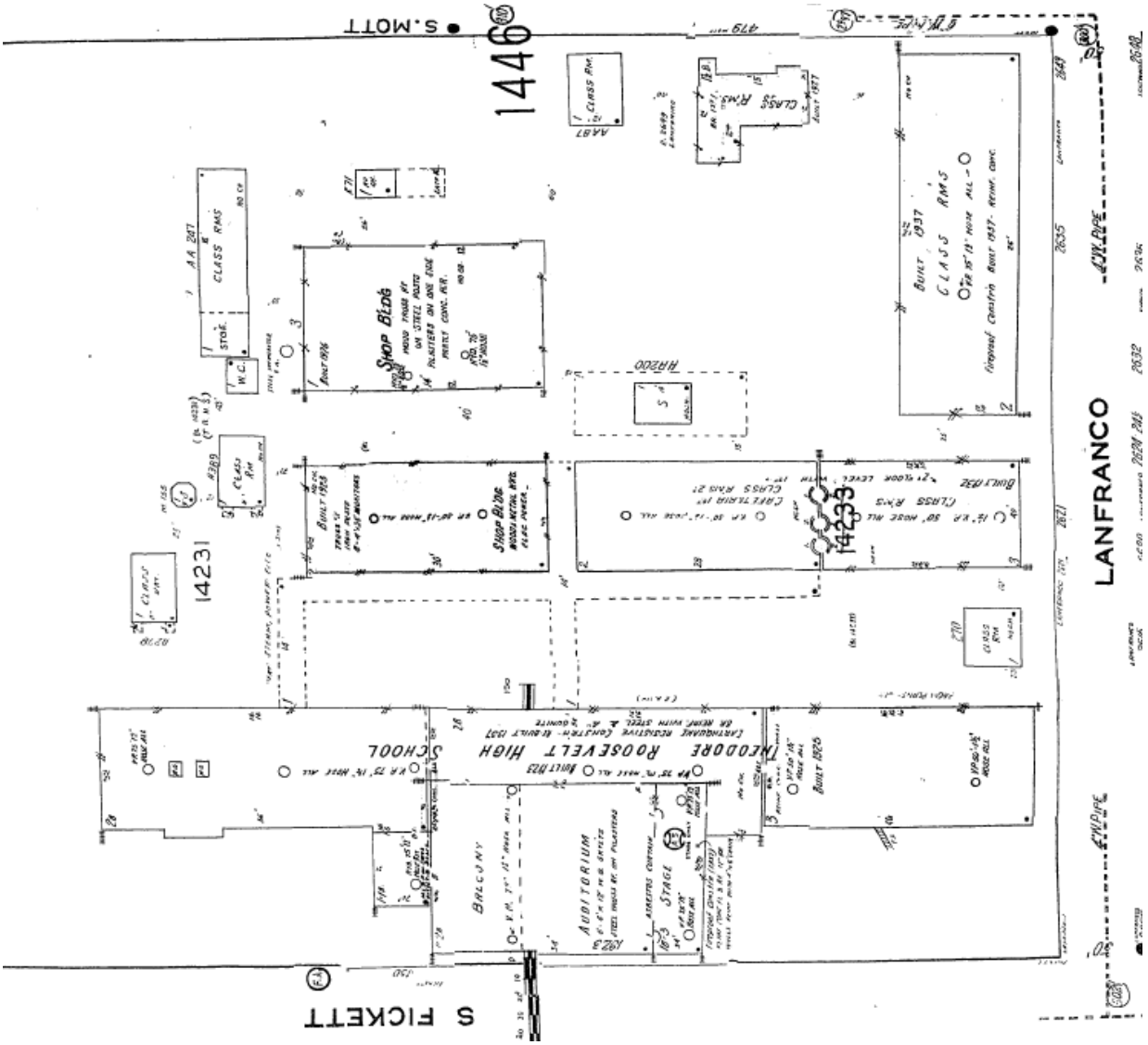
Roosevelt High is associated with several themes including Progressive Education Movement: Pre-1933 Long Beach Earthquake Plants (1910-1933), Mediterranean Revival and Spanish Colonial Revival, Post 1933 Long Beach Earthquake Schools (1933-1945), and the Educating the Baby Boom- Postwar Modern Functionalist Schools (1945-1969). However, due to the extensive losses and alterations that obscure remaining original building fabric, the school does not appear eligible for the National Register (Criterion C) or California Register (Criterion 3) based upon its architectural merit. Similarly, the extensive changes to the campus by additions and alterations detract significantly from its eligibility as campus representative of the Italian Renaissance and/or PWA Moderne style. Only two identifiable buildings from the period of significance remain, Building 1 and Building 7. These remaining, altered buildings do not appear to be the best architectural works of Hibbard, Gerity & Kerton or Sumner Spaulding, as their architectural partnership was short lived and individually they designed more prominent works. Thus, Roosevelt High lacks sufficient integrity to meet the threshold of eligibility under any of the applicable criteria. Furthermore, Roosevelt High is not identified with the productive life of any individual District teachers, principals, administrators, students, or any other persons important in our past; therefore, the school is not eligible under National Register Criterion B or California Register Criterion 2. The arson and bombings on the campus lead by the Chicano Liberation front was one of many terrorist attacks the group enacted in Los Angeles and does not appear to have been a significant event that shaped the history of the campus or the pursuits of the terrorist group; therefore, the school is not eligible under National Register Criterion A or California Register Criterion 1. Pursuant to CEQA, Roosevelt High appears ineligible for listing as an historical resource at either the federal, state or local levels and is therefore assigned a status code of 6Z. A DPR form for the subject school is provided in Attachment C.

Attachments

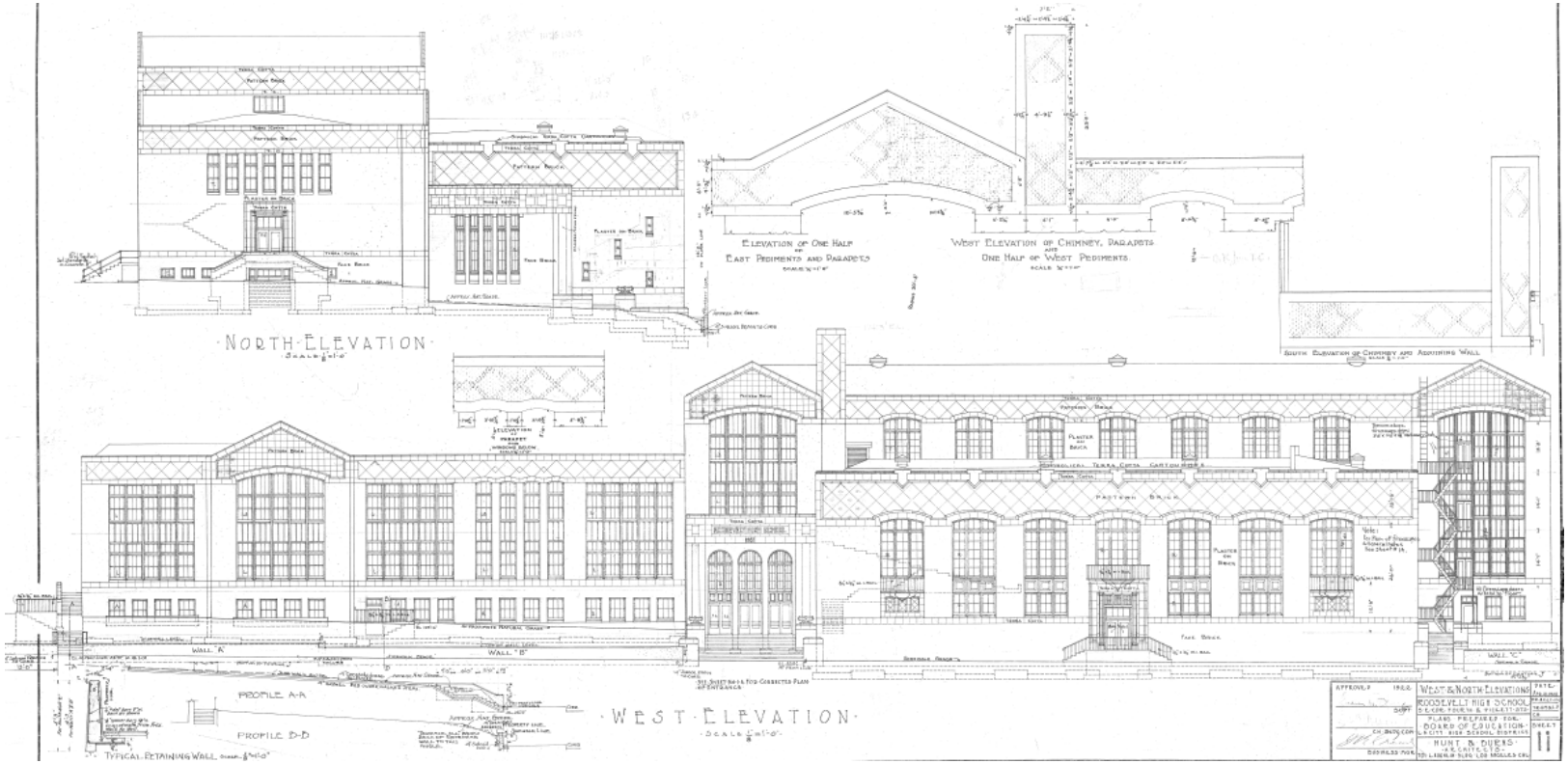
Attachment A - Historical Site Plan, Photographs and Elevations
Attachment B – Current Photographs
Attachment C – DPR Form
Attachment D – Professional Qualifications

ATTACHMENT A - HISTORICAL SITE PLAN, PHOTOGRAPHS AND ELEVATIONS

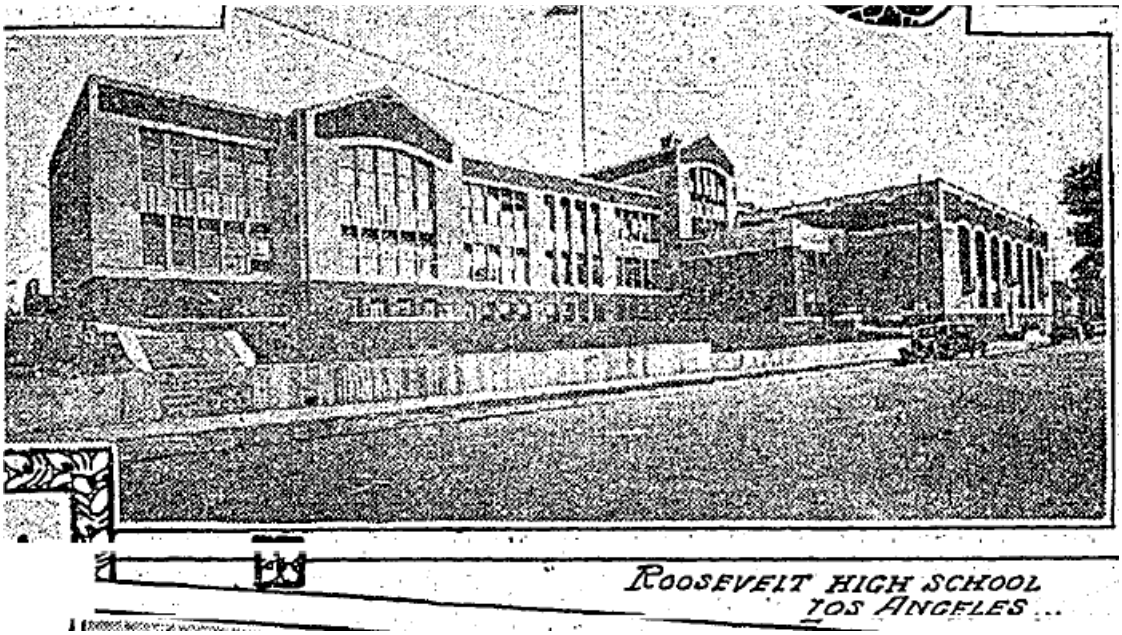
Historical Site Plan, Photographs and Elevations



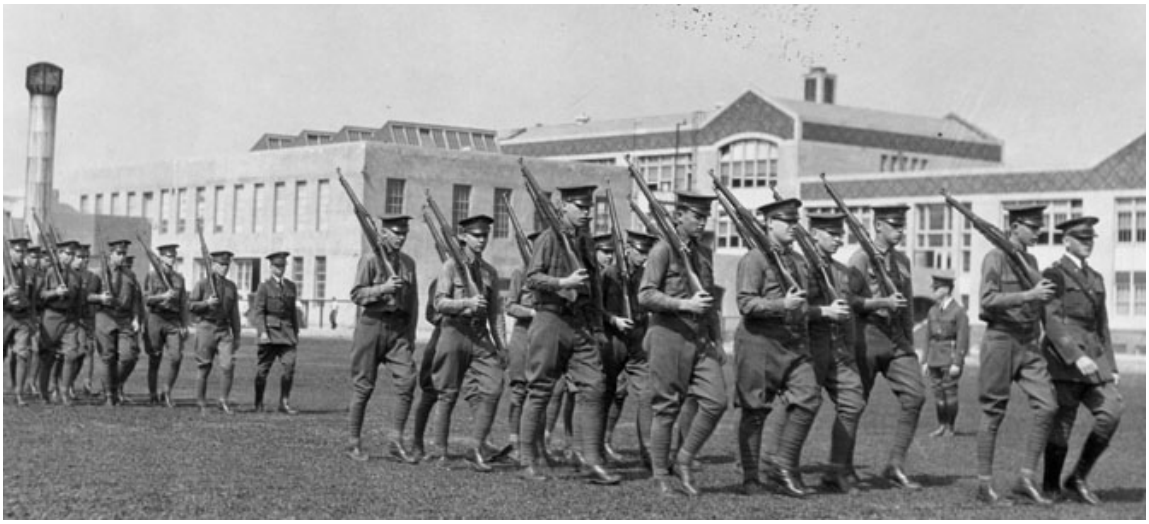
Detail of 1949 Sanborn Map Showing Site Plan of Roosevelt High School (LAPL)

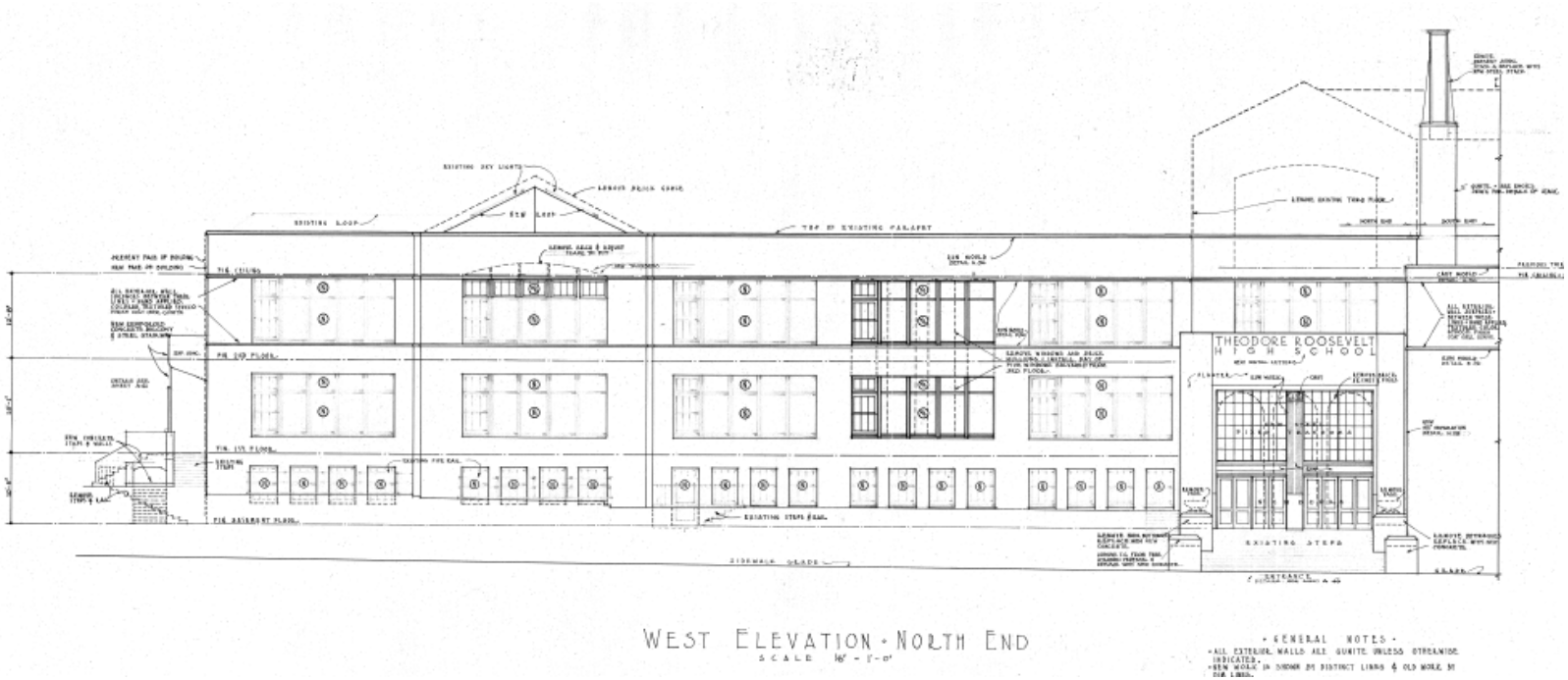


North and West Elevations of the Main Building, 1922 (LAUSD Drawing Archive)



Front elevation of Theodore Roosevelt High School in 1924, view towards the south (Los Angeles Times, 1924)


At right in background, rear elevation of Theodore Roosevelt High School, with shop building (demolished) at left, in 1927 (Los Angeles Public Library)



West Elevation Following Strengthening and Reconstruction, 1936 (LAUSD Drawing Archive)

ATTACHMENT B – CURRENT PHOTOGRAPHS

Current Photographs



Classroom and Auditorium Building 1, Primary Elevation, View East (PCR 2015)



Classroom and Auditorium Building 1, Primary Entrance, View East (PCR 2015)



Classroom and Auditorium Building 1, Rear Elevation, View Southeast (PCR 2015)



Classroom and Auditorium Building 1, Rear Elevation, View East (PCR 2015)



Classroom and Auditorium Building 1, Primary (West) and South Elevations, View Northeast (PCR 2015)



Classroom and Auditorium Building , Side (North) Elevation, View South (PCR 2015)



Classroom and Auditorium Building 1, Lobby, View West (PCR 2015)



Classroom and Auditorium Building 1, Auditorium, View Southwest (PCR 2015)



Classroom and Auditorium Building 1, Auditorium, View Northwest (PCR 2015)


Classroom and Auditorium Building 1, Corridor (PCR 2015)



Classroom and Auditorium Building 1, Interior Stair (PCR 2015)


Classroom Building (Building 7), View Northwest (PCR 2015)



Buildings 17 and 18, View East (PCR 2015)



Industrial Art Building 6, Constructed in 1966



Central Courtyard in-front of Building 1 with Gazebo constructed 1975, View Southwest (PCR 2015)



Central Courtyard, View West (PCR 2015)



Physical Education Building 19, View North (PCR 2015)



Physical Education Building 19, View North (PCR 2015)


)
Music Building 4, View Northeast (PCR 2015)



Cafeteria Building 2, View South (PCR 2015)



Administrative/Classroom Building 5, View Southeast (PCR 2015)



Classroom Building 3, View South (PCR 2015)



Library and Classroom Building 23, View North (PCR 2015)

ATTACHMENT C – DPR FORM

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

PRIMARY RECORD

Primary #
HRI #
Trinomial
NRHP Status Code 6Z

Other Listings
Review Code | Reviewer | Date

Page 1 **of** 7 ***Resource Name or #:** Theodore Roosevelt High School

P1. Other Identifier:

***P2. Location:** ☐ **Not for Publication** ☐ **Unrestricted** ***a. County:**

and (P2b and P2c or P2d. Attach a Location Map as necessary.)

***b. USGS 7.5' Quad:** **Date:** **T** ; **R** ; **¼ of** **¼ of Sec** **;** M.D. **B.M.**

c. Address: 456 South Mathews Street City: Los Angeles Zip: 90033

d. UTM: Zone: 10 ; mE/ mN (G.P.S.)

e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate) Elevation:

APN: 5185-004-929

***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

There are approximately twenty-nine permanent school buildings constructed between 1922 and 1990 on the Roosevelt High campus. The central anchor of the campus is the Classroom and Auditorium Building 1 constructed in 1922, which originally faced west towards Fickett Street, and is the only extant improvement from the original campus. As the neighborhood population continued to grow over the course of the mid-twentieth century, the District expanded the campus one city block west and constructed buildings to accommodate the increasing student population. Because of the gradual campus improvements, the campus has school buildings representative of a variety of architectural styles including PWA Moderne, Modern, Neo-Mediterranean, and Contemporary, and the school does not have structured site plan. Located on rectangular lot, Roosevelt High has a central quad surrounded by Buildings 1, 2, 3, 4, 5, 19, 20, and 23. The rear of the campus is improved with another grouping of buildings that include Buildings 6, 4, 8, 17 and 18. The primary building facing Mathews Street is the Contemporary style Administration and Classroom Building 5 Street, which was constructed following the campus expansion in 1969. To the north of the Administration and Classroom Building 5 is the Contemporary style Library and Classroom Building 23 constructed in 1990, and to the east are the Neo-Mediterranean style Classroom Building 3 and Cafeteria Building 2 both constructed in 1977. The remainder of the campus is improved with surface parking areas and recreational fields. Located in the northeast corner of the campus is the track and field, playing field, hard courts, and physical education building, while in the opposite southeast corner is the baseball field. The eight permanent buildings over forty-five years in age (Buildings 1, 5, 6, 7, 8, 17, 18, and 19) are described on the continuation sheets.

***P3b. Resource Attributes:** HP15. Education Facility

***P4. Resources Present:** ☒Building ☐Structure ☐Object ☐Site ☒District ☐Element of District ☐Other (Isolates, etc.)

P5a. Photo or Drawing



P5b. Description of Photo: Classroom and Auditorium Building 1, Primary Elevation, View East (PCR 2015)

***P6. Date Constructed/Age and Sources:** ☒Historic ☐Prehistoric ☐Both
Approx 1922-1990

***P7. Owner and Address:**
LAUSD

***P8. Recorded by:**
PCR Services
201 Santa Monica Blvd, Ste 500
Santa Monica, CA 90401

***P9. Date Recorded:** 6/19/2015

***P10. Survey Type:**
Intensive

*P11. Report Citation: PCR Services, Preliminary Historic Resource Evaluation Report (HRE) for Theodore Roosevelt Senior High School, 456 South Mathews Street, Los Angeles, California, 90033. Prepared for LAUSD (June 19, 2015).

***Attachments:** ☐NONE ☐Location Map ☐Sketch Map ☒Continuation Sheet ☒Building, Structure, and Object Record ☐Archaeological Record ☐District Record ☐Linear Feature Record ☐Milling Station Record ☐Rock Art Record ☐Artifact Record ☐Photograph Record ☐ Other (List):

BUILDING, STRUCTURE, AND OBJECT RECORD

***NRHP Status Code** 6Z

***Resource Name or #** Theodore Roosevelt High School

B1. Historic Name: Theodore Roosevelt High School
B2. Common Name: Theodore Roosevelt High School
B3. Original Use: High School B4. Present Use: High School
***B5. Architectural Style:** Reinaissance Revival, PWA Moderne, Mid-Century Modern, and Contemporary
***B6. Construction History:**
See continuation sheets

***B7. Moved?** ☒No ☐Yes ☐Unknown **Date:** **Original Location:** Los Angeles
***B8. Related Features:**

B9a. Architect: See continuation sheets b. Builder: See continuation sheets
***B10. Significance: Theme:** Progressive Education Movement: Pre-1933 Long Beach Earthquake Plants (1910-1933), Mediterranean Revival and Spanish Colonial Revival, Post 1933 Long Beach Earthquake Schools (1933-1945), and the Educating the Baby Boom- Postwar Modern Functionalist Schools (1945-1969) **Area:**
Period of Significance: 1922-1936 **Property Type:** **Applicable Criteria:** None

Roosevelt High is an extensively altered example of an Italian Renaissance Revival and PWA Moderne style school. Originally Roosevelt High was an Italian Renaissance Revival style school designed by Hunt & Burns between 1921 and 1923. Only one building remains extant from the initial construction period, Building 1, constructed in 1922; however, Building 1 was reconstructed following the earthquake by Hibbard, Gerity & Kerton in 1936 and no long retains integrity as a result of extensive alterations. Also during this period Building 7, designed by Sumner Spaulding, was constructed in 1936. Buildings 1 and Building 7 do not appear to be exceptional, distinctive, or outstanding examples of the PWA Moderne style, rather they are simplified typical and altered examples of the style. The period of significance for Roosevelt High is 1922 to 1936, from the initial construction of the school in 1922 through the end of the earthquake reconstruction for this PWA Moderne school in 1936. The campus was expanded one city block to the west between 1964 and 1969, effectively modifying the site plan of the original 1920s campus and altering the spatial relationships of Building 1 with the neighborhood, other campus buildings, and landscape. In the Postwar period there were also many additions to the campus, including Building 8 (1959), Buildings 17 and 18 (1964), Building 6 (1966), and Building 5 (1969). Earthquake reconstruction, extensive rehabilitation, the campus expansion, and numerous later additions to the campus detract significantly from its integrity as a potential historical resource.
(See continuation sheets for remaining significance discussion)

B11. Additional Resource Attributes: (List attributes and codes)

***B12. References:** Los Angeles Times, LAUSD Archives and Historical Plans, Sanborn Maps

B13. Remarks:

***B14. Evaluator:** PCR Services

***Date of Evaluation:** 6/19/2015

(This space reserved for official comments.)



B6. Construction History

Although Roosevelt High did not enter operation until 1923, it appears that plans for the school existed as early as October 1921. At that time the plan was for the school to be comprised of one main building, fronting Fickett Street, with two detached secondary buildings located behind the primary structure.[i] Construction of Theodore Roosevelt High School began in June of 1922. The original school was designed by architects Hunt and Burns and built by the K.R. Bradley Construction Company. The estimated cost of the new school building, located at Fourth and Fickett Street, was $420,000.[ii] The school was built at a time when Los Angeles was attempting to cope with an over-crowding crisis within the city's public school system. By the end of 1922, over six million dollars was slated to be spent on the construction of new schools to provide relief from the crowded conditions.[iii] By 1924 planning was underway to expand the number of buildings on the Roosevelt High campus. The two buildings noted in the 1921 plan simply as "new buildings" became shops and the cafeteria. Three new additions were also planned for 1925. A gymnasium was to be added to the northeast of the main building at the corner of Fickett Street and Fourth Street, with two tennis courts filling the space between. A garage would be added east of the shops and a classroom addition attached to the southwest end of the main building. Several residences within the block also appear to have been repurposed as class rooms by the mid-1920s.[iv]

It appears likely that the proposed garage was never built, as by January of 1925 it is no longer included in the plans for the school site. Rather, the plans from early 1925 show the addition of a playground and athletic field southeast of the tennis courts. From the available plans, it appears that the creation of the athletic field required the destruction of the residences and other buildings previously located at the corner of Mott Street and Fourth Street. By 1925, the address of the school had changed to 450 South Fickett Street.[v] By April of 1926 the expansion of the school required the demolition or relocation of all remaining residential structures on the property. By this time a second shop building was extant just southeast of the first shop, and the garage, which was ultimately placed south of the cafeteria, was slated for demolition to be replaced by a new building. A domestic science building, outdoor fireplace, and new tennis courts fronted Mott Street on the southern end of the property.[vi]

In its early years, Roosevelt High incorporated studies in the practical application of skills related to construction and industry. This emphasis on building technologies was direct correlated to booming development in the Los Angeles area and the subsequent increase in demand for workers skilled in construction methods such as brick masons and cement workers.[vii] The construction of Roosevelt High and its expanded curriculum were consistent with patterns seen throughout the school district in the 1920s. Extremely rapid growth of the City of Los Angeles during the 1920s quickly led to overcrowded schools and also fed the construction boom. The 1920s were also a period when traditional school curriculum centered on uniformity gave way to more flexible options, with a greater emphasis on individual pupil's needs and abilities. This was the decade in which the trade school opened in Los Angeles, and the vocational training programs at Roosevelt were a predecessor to schools that were devoted entirely to learning a trade.[viii]

Roosevelt High, like many pre-1933 Los Angeles school buildings, was also directly affected by the 1933 Long Beach earthquake. Some reforms related to earthquake-ready buildings had already taken place in the late 1920s, but Roosevelt High predates these changes. Following the earthquake, many architectural features such as chimneys and parapets were removed from school buildings, and many surviving schools, including Roosevelt High, were ultimately remodeled and retrofitted to better standup against any future major quakes.[ix] In 1936, the architecture firm of Hibbard, Gerity & Kerton was hired to reconstruct and strengthen the main original Roosevelt High building (built 1922). Many of the changes that occurred to the building at this time were structural, but a number of alterations also occurred to the various elevations of the main building, altering its stylistic features and creating a much more modern and streamlined look for the building.[x] Below, the front and rear elevations of the main building can be seen as they appeared in the 1920s. The gabled parapets and third-floor were removed, creating a flat roofline and eliminating the danger that any above-roof protrusions could topple over. The diaper-pattern brick frieze with its cast stone band border that ran under the roofline of the main building was also removed or covered with stucco. It appears that the arches to the right of the main entry were also filled in during this time.[xi] These alterations dramatically altered the aesthetics of the main building, transforming it into an aesthetically modern structure, stripped of its exterior decorative program. This change was consistent with the prevailing aesthetic sensibilities of the 1930s and also conformed to new regulations regarding the decorative program of buildings in locations where earthquakes could quickly turn exterior sculptural elements into lethal projectiles.

B6. Construction History (continued)

Following the rehabilitation and renovation of the main building in 1936, a new classroom building (Building 7) was added at the corner of Mott and Lanfranco Streets. This three story building was designed by architect Sumner Spaulding and matches the simplicity and clean lines of the new exterior of the main buildings, with virtually no exterior decoration.[xii] Two years later, the west entrance was altered with the replacement of the existing doors, sidelights, frames, and trim.[xiii] In 1949, fire ravaged part of the main building, requiring repairs to the north wind and central portion of the main building.[xiv] In 1950, the two existing shop buildings and the tennis courts along Mott Street were demolished to construct a new industrial arts building designed by Sumner Spaulding and John Rex.[xv]

Between 1964 and 1969, the school expanded to the west to incorporate an entire city block into the school site, as a result the main building constructed in 1922 no longer served as the face of the school and a new Contemporary style administration building (Building 5) was constructed in front of the main building in 1969. Also during the 1960s, a number of new buildings went up on the larger campus. These included new physical education (Building 19), industrial arts (Building 6), and utility buildings in 1966, followed by a new administration and classroom building (Building 5) and a new garage in 1969.[xvi] The architects of these buildings are unknown.

In 1970, Roosevelt High was thrice the target of terrorist acts perpetrated by the Chicano Liberation Front. The group committed arson on the campus twice and also detonated two bombs, though no one was injured in these incidents; however, the fire damage inflicted to Building 1 had to be repaired,[xvii] and bomb damages had to be repaired in the main building.[xviii] The Chicano group also targeted a number of other institutions in East Los Angles and the greater Los Angeles area during the same period, including Los Angeles City Hall, Bank of America branches, Safeway grocery store, Chevron Chemical, Shopping Bag Market, Atlantic Savings and Loan, United California Bank branch, Belvedere Junior high school, Pan American Bank branch, and Hazard Park Armory Reserve.[xix]

There were other buildings constructed during the 1970s. A childhood education aide building was constructed in 1972.[xx] In 1975 a number of changes were made, with the construction of a second classroom building, a new cafeteria, a music building, and a gazebo.[xxi] That same year the site of the old gymnasium became an outdoor swimming pool, and the old cafeteria, domestic science building and agriculture building were demolished.[xxii] Five years later the lunch shelter and arcades were also dismantled.[xxiii]

Architecture Firm of Sumner P. Hunt & Silas R. Burns

Hunt & Burns were the original architects of Theodore Roosevelt High School campus during the 1920s. The contract was awarded to the architecture firm of Hunt & Burns June of 1922.[xxiv] The biographies of the firm and partners are described in the following paragraphs.

Sumner P. Hunt (1865-1938), a well-known civic leader as well as a successful architect for fifty years, was born in Brooklyn, New York. Like many early architects, he did not receive academic training but learned to design by taking on low-level drafting jobs in prominent architectural offices, starting as a teenager in 1879 working for the architectural firm of Clarence B. Cutler in Troy, New York. After relocating to Los Angeles in 1889, he worked for the firm of Caulkin & Haas, before establishing his own office in 1895. One of his most important jobs there was the development of working details and the supervision of construction of the old Los Angeles City Hall. He never worked alone but had a series of partners, including Silas R. Burns (1855-1940) with whom he began an association in 1908. Over the years, his other partners were Theodore Eisen and A. Wesley Eager. However, Burns stayed the longest–continuing in the firm until Hunt's retirement in 1930. During the early period, Hunt's firm was responsible for the design of many fine residences in Southern California and "his early influence was largely responsible in directing local domestic architecture from the prevailing milwork type to one of simpler lines."[xxv] Mr. Hunt was also involved in the planning and design of many schools including a new building for Virgil Avenue Junior High; Louis Pastor Junior High; reconstruction of David Starr Junior High School; and Academic Hall, Scripps College.[xxvi]

Hunt was a member of the Allied Architects Association and also served as an original member of the Los Angeles City Planning Commission and on the Municipal Art Commission. One of his most valuable contributions was the support of seismic standards to resist earthquake damage and was on a number of committees, such as the American Institute Committee on Earthquake Hazards. A Fellow of the American Institute of Architects (AIA), he was a strong proponent of the restoration of California missions and was one of the founders of the California Landmarks Club. In fact, his residential work often reflected the monumentality and historicity of old pioneer buildings he had seen around Southern California.[xxvii]

Silas Reese Burns (1885-1940) was a native of Morgantown, West Virginia. After graduation from the Massachusetts Institute of Technology, in 1881 Burns established an architectural firm with Luther Peters in Dayton, Ohio–a partnership that was to last twenty-six years. Burns' first trip to Los Angeles in 1887 was to serve as supervisor of construction of the National Soldiers' Home in Sawtelle. He moved permanently to Southern California in 1907 and soon after received his certificate from the State Board of Architecture. In 1907 he entered into a partnership with Mr. Hunt and A. Wesley Eager which became Hunt & Burns after Mr. Eager withdrew in 1910. The firm of Hunt & Burns maintained one of the leading architectural offices in Los Angeles until 1930 when Mr. Burns retired. Like Hunt, Burns was a Fellow of the AIA and was a member of the Engineers and Architects Association of Southern California.[xxviii] His obituary published in the *Los Angeles Times* on August 11, 1940 noted "he was known throughout the country as a designer and builder of military homes, having planned and constructed those of Marion, Indiana; Dayton, Ohio; and West Los Angeles."[xxix]

The Biographical Dictionary of American Architects (Deceased) lists the most prominent projects of Hunt and Burns in Southern California: The Children's Hospital (1910); Southwest Museum (1914); Los Angeles Country Club (1923); Automobile Club of Southern California (1923); Ebell Club (1927); and Balch Hall at Scripps College, Claremont.[xxx]

Architecture Firm of Hibbard, Gerity, and Kerton

The firm of Hibbard, Gerity, and Kerton were responsible for the structural retrofit of the Classroom and Auditoirum Building 1. The biographies of the partners are described in the following paragraphs.

Lester Hudson Hibbard (1886-1972) was born in St. Louis, Missouri in 1886. He received both his B.S. and M.S. in Architecture from the University of California, Berkeley. Following school, he traveled in Europe between 1912 and 1913. He initially worked as a draftsman, first for Myron & Elmer Grey and later for Myron Hunt, also serving as a structural engineer at the latter's firm. His first firm was Hibbard and Cody, which he formed with H. Bryant Cody. Around 1920, he established the firm of Hibbard, Gerity & Kerton, which ultimately became Hibbard & Gerity. Hibbard's partnership with Gerity dissolved after Gerity's retirement in 1953, but Hibbard continued to work. By 1956 he had formed a new form of H.C. Chambers and Lester Hibbard. His major works in Los Angeles include the Lincoln Heights Branch Library (1917), the Beaux Arts Building (1926), the Canoga Park High School auditorium (1939), and the Quincy Cass Residence (1940). Hibbard received the Honor Award from the Southern California Chapter of the AIA in 1921 for his design of the Lincoln Heights Branch Library. He also served as chairman of the Building Code Commission in the late 1940s.[xxxi]

Heath Scott Gerity (1885-1956) was born in Elmira, New York in 1885. He studied architecture at the University of Colorado, the Massachusetts Institute of Technology, and the Atelier Duchene-Racoura in Paris. After school, he was a draftsman at the firm of Fisher and Fisher in Denver, Colorado from 1910 to 1911. In 1913, Hibbard relocated to Los Angeles, where he worked for Robert Farquahar and Carlton M. Winslow Sr. Around 1920 he formed his partnership with Lester Hudson Hibbard, which continued until Gerity retired in 1953.[xxxii]

No further information was available on Kerton, the third partner in the firm. It appears that the firm of Hibbard, Gerity, and Kerton was likely a short-lived partnership, and that the firm was quickly reduced to only Hibbard and Gerity.

P3a. Description (continued)

The anchor of Roosevelt High campus is the Classroom and Auditorium Building 1 constructed in the Italian Renaissance Revival style in 1922 with a south wing addition in 1924, however, following the Long Beach earthquake Building 1 was structurally stabilized and rehabilitated into the PWA Moderne style in 1936. All of the Italian Renaissance Revival style ornamentation and decorative brickwork was stripped; however, there is some extant detailing remaining in the lobby and auditorium interiors, as described below. The two-story with basement Classroom and Auditorium Building 1 has a T-shape plan, a flat-roof, and a smooth stucco finish. The building has little decorative ornamentation, except for a thin, molding extending around the building at the roofline and above and below the second-story windows.

The primary entrance Classroom and Auditorium Building 1 is located on the west elevation and consists of four sets of single-pane Kalamein double doors (alteration, metal security screens) and steel multi-pane fixed transom windows divided by a fluted column that once had decorative cast stone capital (alteration). Concrete stairs with two landings lead up to the entrance. The name of the school "Theodore Roosevelt High School" is posted in a PWA Moderne font above the entrance. Fenestration generally consists of three-over-three windows with transom windows that have been painted over or replaced with outtake vents (alteration). There are a number of secondary entrances on the rear (east) and side (north) elevations. On the side (north) elevation there are two secondary entrances, the first floor has a three-way concrete stairway leading to two pairs of Kalamein doors with transom windows and the second-story has a metal stair leading to a pair of Kalamein doors with transoms. On the rear (east) elevation there are four rear entrances, two consist of pairs of flat panel double doors (alteration, replacements) covered by awnings and the other two are single flat-panel doors (alteration, replacements). The historical setting of the buildings has been altered as it no longer faces outward to Mathews Street or the neighborhood and buildings have been constructed within the north and south courtyards in front of the primary elevation that was historically landscaped lawns.

The interior of the Classroom and Auditorium Building 1 exhibits pre-earthquake spaces and features, unlike the exterior. The lobby has an original concrete floor marked off in squares and a coffered wood ceiling, however, the ticket booth on the south wall was reconstructed and the trophy case on the north wall was added in 1936. The auditorium has an original coffered wood ceiling, wood paneling, concrete and wood floors, seating, and lighting fixtures dating from 1922. Throughout the years Building 1 has been extensively remodeled in the interior due to fires and the conversion of the building into a classroom building, as the library and administrative uses were moved into other buildings constructed for these purposes. While the remainder of the building has the original configuration of the single central corridor flanked by classrooms, all of the finishes, doors, and transoms have been replaced.

In 1969, the new Administration and Classroom Building 5 was constructed in front of Classroom and Auditorium Building 1 after the campus expansion. The Administration and Classroom Building 5 is the face of the campus and is sited parallel with Mathews Street behind an asphalt parking lot. The Contemporary style two-story building has a rectangular plan and massing and a flat roof. The building is sheathed with panels of brick veneer separated by columns of windows. Located at the center of the primary façade is the main entrance is set within a stucco panel and covered by an awning. There is a large courtyard to the rear of the building where Buildings 1, 2, and 4 are grouped around.

The second oldest building, the PWA Moderne style Classroom Building 7, was constructed in 1937 in the southeast portion of the campus and shares many of the minimalist features of Building 1. The two-story Classroom Building 7 has a rectangular plan and massing, flat roof, and painted board form concrete construction (alteration, in some areas stucco has been applied over the board form concrete). Fenestration consists of six-over-six windows with three-light transoms (alteration, infilled windows) and four-light hopper windows. Simple molding encircles the building at the roofline and above and under the second story windows. Entrances are located on the north, west and east elevations. The entrances at the east and west elevations are pairs of metal security doors covered by streamline awnings, while the entrance on the north elevation is a single-metal security door (alteration, the transom window above has been removed and infilled).

P3a. Description (continued)

Located to the north of Classroom Building 7 is Industrial Art Building 6 constructed in 1966. The one-and-two story Industrial Art Building 6 has a rectangular plan and massing, flat-roof, brick and stucco sheathing, and flat-panel doors. The building's primary decorative feature is the second-story concrete balcony shielded by a wide overhang on the west elevation where access to the classrooms is provided by two concrete stairways. A wide awning runs along the rear one-story elevation to provide shelter for the automotive classes.

Sited between Buildings 6 and 7, are three classrooms buildings (Buildings 8, 17, and 18) arranged in a row constructed in 1959 and 1964. Two-story buildings 17 and 18 share identical designs and have rectangular plans, flat roofs, concrete construction, and second story metal balconies covered by wide overhangs onto which the classroom open. Garage Building 8 is a simple, concrete rectangular box with openings covered by a wide awning on the south elevation.

The Physical Education Building 19, built in 1966, is located in the northern area of the campus adjacent to the tennis courts and football field. The simple, one-story Building 19 has a rectangular plan and massing, flat roof, and painted brick and stucco veneer. The focal point of Building 19 is the central entrance containing two pairs of double doors inset within a mosaic wall and covered by a rectangular awning.

B10. Significance (continued)

Roosevelt High is associated with several themes including Progressive Education Movement: Pre-1933 Long Beach Earthquake Plants (1910-1933), Mediterranean Revival and Spanish Colonial Revival, Post 1933 Long Beach Earthquake Schools (1933-1945), and the Educating the Baby Boom- Postwar Modern Functionalist Schools (1945-1969). However, due to the extensive losses and alterations that obscure remaining original building fabric, the school does not appear eligible for the National Register (Criterion C) or California Register (Criterion 3) based upon its architectural merit. Similarly, the extensive changes to the campus by additions and alterations detract significantly from its eligibility as campus representative of the Italian Renaissance and/or PWA Moderne style. Only two identifiable buildings from the period of significance remain, Building 1 and Building 7. These remaining, altered buildings do not appear to be the best architectural works of Hibbard, Gerity & Kerton or Sumner Spaulding, as their architectural partnership was short lived and individually they designed more prominent works. Thus, Roosevelt High lacks sufficient integrity to meet the threshold of eligibility under any of the applicable criteria. Furthermore, Roosevelt High is not identified with the productive life of any individual District teachers, principals, administrators, students, or any other persons important in our past; therefore, the school is not eligible under National Register Criterion B or California Register Criterion 2. The arson and bombings on the campus lead by the Chicano Liberation front was one of many terrorist attacks the group enacted in Los Angeles and does not appear to have been a significant event that shaped the history of the campus or the pursuits of the terrorist group; therefore, the school is not eligible under National Register Criterion A or California Register Criterion 1. Pursuant to CEQA, Roosevelt High appears ineligible for listing as an historical resource at either the federal, state or local levels and is therefore assigned a status code of 6Z.

[i] 8829.00.000 Map of Roosevelt High School Site Los Angeles Board of Education October 1921, K.Y. Morin, LAUSD Drawing Archive – Vault, Historic Plans.

[ii] "Roosevelt Contract Awarded," *Los Angeles Times*, June 20, 1922, II1.

[iii] "New Schools Being Planned," *Los Angeles Times*, December 4, 1922, II1.

[iv] 8829.00.002 Plot Plan Roosevelt High School, J.F. Nelson Surveyor, August 1924, LAUSD Drawing Archive – Vault, Historic Plans.

[v] 8829.00.003 Grading – Retaining Walls Curbing and Tennis Courts, Roosevelt High School, January 12, 1925, LAUSD Drawing Archive – Vault, Historic Plans.

[vi] 8829.00.004 Improvements to Grounds Roosevelt High School, April 20, 1926, revised June 2, 1926, LAUSD Drawing Archive – Vault, Historic Plans.

[vii] "School to Teach Work in Cement," *Los Angeles Times*, February 3, 1924, B14.

[viii] Sapphos Environmental, Inc., *Los Angeles Unified School District: Historic Context Statement, 1870 to 1969* (March 2014): 43-47.

[ix] Ibid., 62-63.

[x] 8829.10.000, LAUSD Drawing Archive – Vault, Historic Plans.

[xi] 8829.10.000 Strengthening & Modernization of Auditorium/Classroom Building (1922 Portion), LAUSD Drawing Archive – Vault, Historic Plans.

[xii] 8829.09.000 1936 – New Classroom bldg, LAUSD Drawing Archive – Vault, Historic Plans.

[xiii] 8829.02.005 1938 – Alteration of west entrance, LAUSD Drawing Archive – Vault, Historic Plans.

[xiv] 8829.11.000 1949 – Fire Damage, LAUSD Drawing Archive – Vault, Historic Plans.

[xv] 8829.12.000 1950 - Industrial Arts Bldg, LAUSD Drawing Archive – Vault, Historic Plans.

[xvi] 8829.22.000 1966 – New Phys Ed, Industrial Arts, and Utility Bldgs, LAUSD Drawing Archive – Vault, Historic Plans.

8829.23.000 1969 – New Admin/classroom and garage bldgs., LAUSD Drawing Archive – Vault, Historic Plans.

[xvii] 8829.24.000 1970 – Fire damage repair, LAUSD Drawing Archive – Vault, Historic Plans.

[xviii] 8829.24.000 1970 – Fire damage repair, LAUSD Drawing Archive – Vault, Historic Plans.

[xix] "Boyle Heights Bank Set Afire; Damage Estimated at $30,000," *Los Angeles Times* (April 22, 1970): A1.

"The Chicano Liberation Front (1971)," Notes from Aztlan: Desde el Barrio," http://www.notesfromaztlan.com/2014/04/16/the-chicano-liberation-front-1971/ (April 16, 2014), accessed May 27, 2015.

[xx] 8829.25.000 1972 – Childhood Ed Bldg, LAUSD Drawing Archive – Vault, Historic Plans.

[xxi] 8829.30.000 1975 – Demo Cafeteria/Dom. Sci. and Ag. Buildings, LAUSD Drawing Archive – Vault, Historic Plans.

[xxii] 8829.27.000 1975 – Classroom bldg. #2, cafeteria bldg., music building and gazebo, LAUSD Drawing Archive – Vault, Historic Plans.

8829.28.000 1975 – Community Swimming Pool, LAUSD Drawing Archive – Vault, Historic Plans.

[xxiii] 8829.02.047 1980 – Demo lunch shelter service bldg. and arcades, LAUSD Drawing Archive – Vault, Historic Plans.

[xxiv] "Roosevelt Contract Awarded," *Los Angeles Times*, June 20, 1922, II1.

[xxv] "Obituary: Sumner P. Hunt," *The Bulletin: The Southern California Institute of Architects* 3.12 (December 1938:) 2.

[xxvi] Henry F. Withey, A.I.A. and Elsie Rathburn Withey, *Biographical Dictionary of American Architects (Deceased)* (Los Angeles: New Age Publishing Company, 1956): 312.

[xxvii] "Obituary: Sumner P. Hunt," *The Bulletin: The Southern California Institute of Architects* 3.12 (December 1938:) 2.
Henry F. Withey, A.I.A. and Elsie Rathburn Withey, *Biographical Dictionary of American Architects (Deceased)* (Los Angeles: New Age Publishing Company, 1956): 311-312.
"Sumner P. Hunt, Celebrated Architect, Taken by Death," *Los Angeles Times* (November 20, 1938): 10.

[xxviii] Henry F. Withey, A.I.A. and Elsie Rathburn Withey, *Biographical Dictionary of American Architects (Deceased)* (Los Angeles: New Age Publishing Company, 1956): 100-101.

[xxix] "Noted Architect Taken by Death," *Los Angeles Times* (August 11, 1940): 6.

[xxx] Henry F. Withey, A.I.A. and Elsie Rathburn Withey, *Biographical Dictionary of American Architects (Deceased)* (Los Angeles: New Age Publishing Company, 1956): 101, 312.

[xxxi] Hibbard, Lester (Hudson), *The AIA Historical Directory of American Architects*, American Architects Directory, First Edition, 1956 (New York: R. R. Bowkey Company, 1955): 246.

[xxxii] Gerity, H(eath) Scott, *The AIA Historical Directory of American Architects*, American Architects Directory, First Edition, 1956 (New York: R. R. Bowkey Company, 1955): 194.

ATTACHMENT D – PROFESSIONAL QUALIFICATIONS

Margarita Jerabek, Ph.D., DIRECTOR OF HISTORIC RESOURCES

Education

- Ph.D., Art History, University of California, Los Angeles, 2005
- M.A., Architectural History, School of Architecture, University of Virginia, Charlottesville, 1991
- Certificate of Historic Preservation, School of Architecture, University of Virginia, Charlottesville, 1991
- B.A., Art History, Oberlin College, Oberlin, Ohio, 1983

Professional Affiliations

- Santa Monica Conservancy
- Los Angeles Conservancy
- California Preservation Foundation
- Society of Architectural Historians
- National Trust for Historic Preservation Leadership Forum
- American Institute of Architects (AIA), National Allied Member
- American Architectural Foundation
- Association for Preservation Technology

Summary

Dr. Jerabek has an extensive background in historic preservation, architectural history, art history and decorative arts, and historical archaeology. Her qualifications and experience meet and exceed the Secretary of the Interior's Professional Qualification Standards in History, Archaeology, and Architectural History. She has 25 years in professional practice in the United States and 15 years of academic experience in American, European and Latin American architecture. She has managed and conducted a wide range of technical studies in support of environmental compliance projects, developed preservation and conservation plans, and implemented preservation treatment projects for public agencies and private clients in California and throughout the United States. Prior to coming to PCR, she was Senior Architectural Historian in EDAW's Los Angeles office (2004-2006); Senior Architectural Historian, Parsons Engineering Science (1995-2004); Architectural Historian, John Milner Associates, Inc., (1991-1995); and Architectural Historian, Land and Community Associates, Charlottesville, Virginia, (1988-1991).

Dr. Jerabek is a specialist in Visual Art and Culture, 19th-20th Century American Architecture, Modern and Contemporary Architecture, Architectural Theory and Criticism, Urbanism and Cultural Landscape. Her academic work has been recognized and supported by numerous scholarships and fellowships including the Samuel H. Kress Foundation Fellowship in Art History; American Council of Learned Societies Fellowship in East European Studies; Edward A. Dickson Graduate Fellowship in Art History, UCLA; and the Thomas Jefferson, Dupont and Governor's State Graduate Fellowships in Architectural History, School of Architecture, University of Virginia. Her accomplishment in historic preservation has been recognized by a 2012 Preservation Design Award from the California Preservation Foundation under the category of Cultural Resources Studies and Reports for the RMS *Queen Mary Conservation Management Plan, Long Beach, California*.

Experience

Rehabilitation/adaptive-reuse, planning and redevelopment projects are of particular interest to Dr. Jerabek. She provides expert assistance to public agencies and private clients in environmental review, from due diligence through planning/design review and permitting; and when necessary, she implements mitigation and preservation treatment measures on behalf of her clients. She is a highly experienced manager with broad national experience throughout the United States in California, Washington, D.C., Virginia, Maryland, Pennsylvania, West Virginia, New York, South Carolina, Georgia, Florida, Texas, Michigan, Ohio, Iowa, Utah, Washington, and Canada. As primary investigator and author of hundreds of technical reports, plan review documents, preservation and conservation plans, HABS/HAER/HALS reports, construction monitoring reports, salvage reports and relocation plans, she is a highly experienced practitioner and expert in addressing historical resources issues while supporting and balancing project goals.

She specializes in the evaluation, management and treatment of historic properties for compliance with Sections 106 and 110 of the National Historic Preservation Act (NHPA), the National Environmental Protection Act (NEPA), Section 4(f) of the Department of Transportation Act, the California Environmental Quality Act (CEQA), and local ordinances and planning requirements. She is highly experienced in the assessment of projects for conformance with the Secretary of the Interior's Standards for the Treatment of Historic Properties, and assists clients with adaptive reuse/rehabilitation projects by providing preservation design and treatment consultation, agency coordination, legally defensible documentation, construction monitoring and conservation treatment.

Dr. Jerabek has over 17 years of project experience in historical resources management and preservation in California and is a regional expert on Southern California architecture. She has prepared a broad range of environmental documentation and conducted preservation projects throughout the Los Angeles metropolitan area as well as in Ventura, Orange, Riverside, San Bernardino and San Diego counties. She currently manages PCR's on-call preservation services contracts with the City of Santa Monica (2002-present), County of San Bernardino Department of Public Works, City of Hermosa Beach, Los Angeles Unified School District and Long Beach Unified School District; and previously managed PCR's preservation consulting services under master agreements with the Los Angeles Redevelopment Agency, City of Long Beach, City of Anaheim, and private developers.

Amanda Y. Kainer, M.S., SENIOR ARCHITECTURAL HISTORIAN

Education

- M.S., Historic Preservation (Emphasis: Conservation Science), Columbia University, New York, New York, 2008
- B.S., Design, (Emphasis: Interior Architecture), University of California, Davis, 2002
- B.A., Art History, University of California, Davis, 2002

Professional Experience

- Intern, Historic Resources Group, Los Angeles California, Summer 2007

Awards

- Joel Polsky Academic Achievement Award, American Society of Interior Designers, 2008

Professional Affiliations

- California Preservation Foundation
- Los Angeles Conservancy
- Santa Monica Conservancy
- Association of Preservation Technology Western Chapter

Training

- CEQA and Historic Resources: Thresholds, Mitigation & Case Studies, California Preservation Foundation Workshop, March 2011

Summary

Ms. Kainer has over eight years of professional and academic experience in the practice of historic preservation and architectural history in New York and California. Her undergraduate work in Art History and Interior Architecture at UC Davis led to a master's degree in Historic Preservation (emphasis Conservation Science) from Columbia University. At Columbia, Ms. Kainer studied under esteemed conservation science professors Dr. George Wheeler, Norman Weiss, and Dr. Theodore Prudon (thesis advisor). During graduate school, she interned at the Historic Resources Group under Peyton Hall, managing principal, working on character-defining features tables for All Saints Church and Polytechnic Elementary School. She has training and substantial experience in the evaluation and conservation of art and architecture and passion for interior design.

Experience

Ms. Kainer has conducted extensive archival research, field observation, recordation, and prepared survey documentation for numerous PCR historic resources projects. She has served as project architectural historian and conducted survey work, provided archival, historical, architectural and property research, and assisted in database management. She completed and co-authored a wide range of architectural investigations such as historic resources assessment and impacts analysis reports for compliance with CEQA, character-defining features reports, plan reviews, investment tax credit applications, Section 106 significance evaluations, and HABS documentations for PCR projects in the Los Angeles metropolitan area. She has also conducted extensive research and survey work and prepared numerous landmark and preliminary assessment reports for the City of Santa Monica. Recent projects included California Register nomination for the UCLA Faculty Center, historic resources assessments for eleven single-family residential properties in Beverly Hills, a historic resources assessment for late nineteenth century ranch associated with California's early mining history, a Section 106 report for the Santa Monica Pier, and a CEQA Impacts Analysis and Evaluation Report for a pipeline in Escondido.

Survey Experience: She was a contributing author for three major Community Redevelopment Agency of the City of Los Angeles (CRA/LA) – Adelante Eastside, Wilshire Center/Koreatown, and Normandie 5 Redevelopment Areas. Ms. Kainer also served as PCR Survey Team Leader and co-author for the comprehensive survey of over 4,000 objects of fine and decorative arts aboard the RMS Queen Mary in Long Beach. Additionally, Ms. Kainer helped complete the district-wide survey and evaluation of the Long Beach Unified School District and a windshield survey of Hermosa Beach for the Historic Resources Chapter of the Hermosa Beach General Plan Update.

Historic Resources Assessments: Ms. Kainer has contributed to the research, site inspections, and report preparation of a number of historic resources assessments in the Los Angeles metropolitan area for compliance with CEQA. Ms. Kainer has evaluated a number of different types of potential historical resources, including single-family and multi-family residences, banks, commercial buildings, schools, hotels, and cultural landscapes.

Virginia E. Harness, M.A., HISTORIC RESOURCES INTERN

Education

- M.A., Architectural History (Major: American Architecture) University of Virginia, Charlottesville, 2014
- Certificate in Historic Preservation, University of Virginia, Charlottesville, 2014
- B.A., St. John's College, Annapolis, Maryland, 2011

Awards

- The Peter R. Kutscha Endowed Memorial Scholarship in Historic Preservation, University of Virginia, 2013
- Architectural History Faculty Book Award, University of Virginia, 2014

Professional Affiliations

- Thomas Jefferson Society of Architectural Historians

Summary

Virginia Harness has two years of academic experience in the practice of historic preservation and architectural history in Virginia. Additionally, her professional background includes a year of professional experience in archival work and a summer of training in archaeology. She has also worked in the field of public history, conducting oral history interviews and creating a museum exhibit.

She earned her M.A. in Architectural History and Certificate in Historic Preservation from the University of Virginia (UVA) where she studied under architectural historian Dr. Richard Guy Wilson (thesis advisor) and preservationist Dr. Daniel Bluestone. Her wide range of work across preservation and history fields brings a depth of experience to her current work in historic resources.

Experience

Ms. Harness has extensive experience in archival research, first as an archivist with the Brethren Historical Library and Archives and during her time as a student at UVA. While at UVA she worked on the Historic American Building Survey (HABS) recordation of Little Mountain Farm in Albemarle County and was a contributing author of the National Register Nomination for a corridor in Dillwyn, Virginia to assess its eligibility for listing as a historic district on the National Register of Historic Places.

As a public history intern with Historic Vienna, Inc. in northern Virginia she designed and created a small scale museum exhibit which included traditional board mounted displays and a touch-screen interface.

Since commencing work at PCR she has worked on historic resources assessment and impacts analysis reports, character-defining features reports, plan reviews, and HABS documentation for projects in the greater Los Angeles metropolitan area. Recent projects include HABS documentation for a late 19th century residence in Laguna Beach, a historic resource assessment and impacts analysis report for a new construction project in the Old Pasadena historic district, and research for an impact report for a pipeline in San Diego County.

ESA

233 Wilshire Boulevard
Suite 150
Santa Monica, CA 90401
310.451.4488 phone
310.451.5279 fax

www.esassoc.com

memorandum

date October 26, 2016

to Edward S. Paek, AICP, CEQA Project Manager, Contract Professional, LAUSD

from Margarita Jerabek, Margaret Roderick and Amanda Kainer, ESA

subject Landscape and Cultural Analysis for Theodore Roosevelt Senior High School, 456 South Mathews Street, Los Angeles, California

ESA was commissioned to complete a Cultural Analysis Memorandum for the Los Angeles Unified School District (LAUSD) regarding Theodore Roosevelt Senior High School (Roosevelt HS or Campus or school) located at 456 S. Matthews Street (Assessor Parcel Number 5185-004-929) in the Los Angeles neighborhood of Boyle Heights, east of Downtown Los Angeles. The memorandum intends to provide descriptions, assessments, and recommendations on cultural features of the landscape and architecture that account for the school's cultural identity and sense of place.

All work has been performed by qualified ESA historic practice group personnel who meet and exceed the Secretary of the Interior's Professional Qualifications Standards in history, architectural history, and historic architecture, and have the necessary knowledge and experience in the evaluation of educational architecture, eligibility determinations, character-defining features analysis, schematic plan review, and Secretary of the Interior's Standards (SOI Standards) conformance, and application of the State Historic Building Code to conduct these investigations.

PCR Services Corporation (now known as ESA) completed a Historic Resource Evaluation (HRE) Report in 2015 regarding Roosevelt HS that included a site visit, historical research, and evaluation of the Campus against National Register of Historic Places (National Register) and California Register of Historical Resources (California Register) criteria. The HRE found that Roosevelt HS's campus and its buildings are too altered from its period of significance (1922-1936) to retain enough integrity to be considered for local, state, or national designation although it is associated with several themes including: Progressive Educational Movement, Pre-1933 Long Beach Earthquake Plants (1910-1933), Mediterranean Revival and Spanish Colonial Revival, post 1933 Long Beach Earthquake Schools (1933-1945), and the Educating the Baby Boom: Postwar Modern Functionalist School (1945-1969). The Auditorium and Classroom Building and another classroom building date to the period of significance, but most buildings date to the 1960s. In addition, the Campus has been significantly altered and expanded since 1936 and fails to express the original plan or design. As such, Roosevelt HS was recommended ineligible for listing as an historical resource at either the federal or state or local levels and assigned a California Historical Resource status code of 6Z.

Since its construction in 1922 Roosevelt HS has impacted the lives of its students, providing them with academic and practical learning experiences. In the 1920s students physically shaped the campus by laying down cobblestone walkways at the direction of a professor for the beautification of the landscape.[1] Again, in the 1930s students of the Japanese Club implemented a Japanese Garden plan in order to promote friendship with all students at Roosevelt HS and to show their devotion to the school and community.[2] Through the school's history, yearbooks indicate that students gathered at key spaces on campus such as the school's original entrance steps located on the west (primary) elevation of the Auditorium and Classroom Building, in the small rear (east) quad that contains a vibrant fountain, in the Japanese Garden, and in other outdoor spaces. Not only do these spaces represent an image of the school but contain meaning as cultural features for students past, present, and future.

This memorandum summarizes the site inspection, identifies the potential cultural features and discusses their material value, aesthetic value, and cultural value, and recommends measures for conservation and/or integration into future plans for Roosevelt HS.

ESA's Architectural Historians conducted an initial site visit with the project team on June 2, 2016 to document the landscape and features associated with the school's historic and cultural significance. The site visit included intensive-level survey of the Campus and the immediate surrounding vicinity with the project team including digital photography and visual inspection. All survey work was consistent with procedures previously established by local, state, and federal guidelines for conducting historic preservation work. The site inspection yielded the identification of landscape and cultural resources on the Roosevelt HS campus. Features, no matter how small, were considered. Identified features include the following: entrance steps to the Auditorium and Classroom Building, the Lindberg Fountain located in the small quad, the Japanese Garden, central quad, murals, class tiles, and benches.

A follow-up visit by ESA Architectural Historian was conducted on September 19, 2016 to complete onsite research at the school's library and complete a secondary site inspection, including digital photography and visual inspection, of Roosevelt HS to document the landscape features associated with the school's historic and cultural significance.

The secondary site inspection yielded results concurrent with the first site inspection. In addition, on site library research was highly advantageous in completing this review memorandum. Yearbooks from 1928, 12933-36, 1942, 1950, and 1997 were studies in order to understand key moments in the history of the school's landscape and potential historic resources. Given that Japanese students were removed from Roosevelt HS during World War II, the 1942 and 1950 yearbooks were considered in order to understand how WWII affected the demographics of the campus and campus culture. Commemorative plaques and murals were also reviewed on the secondary site visit in order to see how the landscape and cultural features have changed over the course of the school's history from its construction in 1922 to its current status and condition today.

Site visit and inspection, along with archival research was not enough to fully obtain a perspective of the school's landscape and cultural resources. As such, three interviews were conducted to gain insight from those affiliated with the school and its landscape and cultural resources. ESA staff interviewed Bruce Kaji, Buddie Weber, and Carlos Callejo all of whom are alum from Roosevelt HS and have participated in the either the Japanese Garden rebuilding and related activities, or mural painting. A list of questions asked during the interviews is included, along with response summaries, in Appendix B.

[1] "Mr. Keinholtz's class laying a walk," (1928 Roosevelt HS Yearbook,126)

[2] Yearbooks from 1934, 1936, and 1942 indicate that the objective the Japanese club was to promote friendship and service the school. In addition, outreach activities such as sharing native dress and customs with others appears to have been an aspect of the club as evidenced from photographs in the yearbooks.

This memorandum will examine the landscape and cultural resources in the following manner: First, each resource will be introduced with a brief history and its material, aesthetic, and cultural value and second, ESA will provide recommendations on how best to preserve and integrate the landscape features, cultural resources, and sense of place of Roosevelt HS as redevelopment occurs. Materials contribute to the culture and identity of a place and its community. In reviewing the landscape and cultural features of Roosevelt HS, the materials appear to be less valuable than the aesthetic value, which in turn appears to be less valuable than the cultural value. Each feature, however, has its own significance within the landscape and culture of Roosevelt HS. Meanwhile, aesthetics play a valuable role in the beautification and enjoyment of the Campus while the cultural value provides history and context for students, staff, and passers-by past, present, and future.

The Entrance Steps

Roosevelt HS opened to students in 1923 with one main building—the Auditorium and Classroom Building—fronting Fickett Street.[3] This building, designed by Hunt and Burns, was damaged in the 1933 Long Beach earthquake and subsequently retrofitted for safety.[4] In 1936, the architectural firm of Hibbard, Gerity, and Kerton was hired to reconstruct and strengthen the original 1923 building.[5] The remodel lacked its original decorative but obtained a distinctly modern, 1930s look. Currently this building no longer retains integrity as a result of extensive alterations. However, the front entrance steps do not appear to have been altered (Figure 1-2). The entrance steps are made of concrete, which have since been painted in the school colors (Figure 3). Thus, the material value of the 1923 steps has been altered but the original materials are still extant. As the original entrance to Roosevelt HS, their visual qualities were once very important. Now, however, they are not the face of the school but the addition of paint does provide new aesthetic and cultural consideration. Clearly, Roosevelt HS has sought to maintain the entrance steps as school landscape and culture has changed by paintings them, a measure to revitalize the site. In the face of redevelopment, ESA recommends that the steps themselves do not need to be retained, but that the idea of them should.

The entrance steps appear to have been a formal presentation of the school to students, staff, and the community and it is this formal, constructed identity that should be retained over the object itself. School class photographs and club photographs were formally taken on the steps, especially in early yearbooks (Figure 4). In addition, images of this site appear in the yearbook as front and back matter throughout the history of the school. Here, students are absent from the images and the focus is clearly on the identity of Roosevelt HS and that the entrance symbolizes and embodies that identity.

In 1923 when the school opened, the entrance steps to the Auditorium and Classroom Building lead from Fickett Street to the school. Since that time, however, the school has expanded and Fickett Street along Roosevelt HS closed and its land incorporated into the school's campus. Now, direct access to the auditorium has been compromised and the steps are only seen by those on campus rather than passers-by and, as such, are and can no longer be the image and identity of the school.

Therefore, when the Roosevelt HS campus is developed, it is suggested that consideration be given to how the new construction will become the physical identity of the school. Questions to consider are as follows:

- How will the new construction serve as the new face of the school?
- In what ways can the school, including students and staff, use the new buildings as backdrops for activities both academic and social?

[3] PCR Services Corporation, "Preliminary Historic Resource Evaluation Report (HRE) for Theodore Roosevelt Senior High School, 456 South Matthews Street, Los Angeles, California, 90033," (June 19, 2015): 2-3.
[4] Ibid., 3.
[5] Ibid., 4.

- What will be the key visual references for students, staff, and passers-by?
- Will alum and community stakeholders still feel a connection to the campus?

These four questions listed above are just a few examples of the types of considerations that should go into the redevelopment process. Points to remember in considering and reviewing answers include the idea of constructed identity, representation of cultural and/or historic interest, and a focus should be given to points of entrance and exit.

Lindberg Fountain

The fountain in the small quad to the rear (east) of the Auditorium and Classroom Building was dedicated in 1928 by the Artifex Club to commemorate Charles Lindberg's inaugural first non-stop transatlantic flight, which occurred on May 20, 1927 when he departed from Roosevelt Field in New York and arrived at Le Bourget Field, France, on May 21, 1927. The fountain underwent a restoration project in 2005 (Figure 5). A commemorative plaque erected in 2005 suggests that the reference to Lindberg's first non-stop transatlantic flight corresponds to the diversity of Roosevelt HS's demographics. Indeed, the terminology states the fountain also commemorated "Roosevelt High School Students Who Hail From All Over The Globe."[6]

The fountain appears to have been constructed in concrete and possibly stuccoed, but work in 2005 tiled the fountain. Today the water feature no longer contains water, a likely measure due to severe drought and/or maintenance issues. The 1928 fountain also contained lily pads and a thriving ecosystem. Likewise, the small quad surrounding the fountain contains a geometrically curated space defined by pathways and flora such as grass and trees.

The aesthetic qualities include the symmetrical but complex shape, the formal, curated setting, and now, the colorful, decorative tiles that adorn the fountain. These are brightly colored, Spanish style tiles also accompanied by several tiles depicting the school mascot, the Rough Rider. It should be noted, too, the original aesthetic qualities also corresponded to water and lily pads. Additionally, there is an auditory element as water once circulated. The circulating water and lily pad-ecosystem once contrasted against the formal, symmetrical setting creating beautiful and enjoyable setting.

The cultural value of the fountain is first related to its history, which was presented above. The cultural value, however, is also signified though its endurance as a site of interest for generations of students. Like, the entrance steps mentioned above, photographs in yearbooks since 1928 include images of fountain (Figure 6-9). Occasionally, the fountain is shown by itself but more often, students surround it either on its edge or on the nearby grass. In short, the fountain and its quad setting appear to be an integral part of the landscape and cultural resources at Roosevelt HS as a beautiful and relaxing site of social activity.

ESA recommends that the fountain be retained and used as a fountain. Although severe drought and/or maintenance issues may play a role in the discontinuance of the fountain's eater feature, ESA recommends that the fountain function as intended and circulate water. Moreover, it should retain an ecosystem akin to its original as well. The fountain has many layers of value including its historic 1928 intent and character, which continue to play a vital role in its function today as a site for students' enjoyment. The fountain appears to be a vital aspect of student life on campus. Dating back to its construction in 1928, students have gathered near and around the fountain in their free time for both academic and social activities. Early yearbooks include many photographs of the site both with and without students. Also, more current yearbooks also include some photographs of the fountain with it without students. As such, the fountain has been and continued to be a significant cultural marker on the Roosevelt HS campus.

[6] Lindberg Fountain Plaque, Roosevelt HS, 2005.

Due to the historic character and its value based on material, aesthetic, and cultural value the fountain should, ideally, be restored back to its original 1928 design. Thus, tiles should be removed and as discussed above, the water feature be enacted as well.

In the event that redevelopment requires use of the fountain space, then the fountain could be relocated to a new space on campus. However, in considering this option, the new space around the fountain should conform to its original setting as well because the geometric and formal, yet intimate space factors into how the fountain is experienced. If this option is not feasible then the new project could consider creating a new fountain. As such, the fountain should be sited with its length along a northwest-southeast line and surrounded by a curved pathway as it currently is. Its setting should include grass with trees and should still be contained within an intimate space rather than a large, open landscape. This option is not ideal but would be recommended over a no-fountain option. In this event consideration should be given to creating a functional area where students (and others) can enjoy a sense of place. Complete documentation of the current fountain should take place in any situation where it is not retained in-situ including drawings, photographs, and other documentation for archival records and/or a display within a campus building.

Japanese Garden

In 1932-33 the Japanese Club at Roosevelt HS created a Japanese Garden (or Garden) on campus through an association with alumni members of the club (Figure 10).[7] It was located where the auto shop building now stands, which is to the east of its current location.[8] Unfortunately, the Japanese Garden was removed during World War II but was reincorporated back into the landscape and cultural features of Roosevelt HS in the 1990s, with a dedication ceremony in 1997.[9] More work was completed in the garden again in 2005.

The Japanese Garden has most of the features that the original 1934 garden featured (Figure 11-12). It has an ecosystem consisting of a variety of plants, pathways, a bridge above a small pond, and a sculptural representation of a pagoda. Materials include plants, concrete, wood, and rocks. The aesthetic value of the Japanese garden is considerable. It is scenic though it's asymmetrical design and offers organic views through the unpredictable growth of its plantings. Given the history of Japanese and the Japanese Garden at Roosevelt HS, the cultural value is immense. Indeed, the Japanese Garden may be the most culturally relevant landscape feature at Roosevelt HS due to its history as a symbol of friendship and community.

The pre-war Japanese Garden appears to have been an important aspect of the Roosevelt HS campus for students. A full page is dedicated to the Japanese Club in the 1933 yearbook and expressly mentions the role the club played in building a Japanese Garden on campus.[10] In addition, the full page spread notes that the club first started in 1928 and was involved in the school and local community. Also, the new garden is photographed for the front and back matter of the 1933 yearbook in conjunction with its opening that same year (Figure 10). In reviewing yearbooks since the Japanese Garden's construction during the 1933-34 school year, the Garden appears regularly in photographs. In the 1935 yearbook, for example, non-Japanese students are photographed sitting on the Garden's bridge at least four times (Figure 13-14).[11] Japanese cultural activities appear to have been a common occurrence at Roosevelt HS and include "Japanese Belles", a picture of Japanese girls in traditional attire (Figure 15).[12] In the 1990s a project was introduced to reinstate the Japanese Garden. Thus, although the Garden had been removed approximately fifty (50) years prior, the memory and cultural value of the Garden persisted and was acknowledged.

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[7] 1933 Roosevelt HS Yearbook, 86.
[8] 1997 Roosevelt HS Yearbook, 14-15.
[9] Ibid. Also, ESA, *Interview with Bruce Kaji*, October 10, 2016. Kaji indicated that he lived across the street from the Japanese Garden at 470 S. Mott Street. Historic Areal from 1948 supports the location.
[10] 1933 Roosevelt HS Yearbook, 86.
[11] 1935 Roosevelt HS Yearbook, 125-126.
[12] 1935 Roosevelt HS Yearbook, 124.

Bruce Kaji and Bud Weber were interviewed regarding their time as students at Roosevelt HS and their affiliations with the Japanese Garden. Bruce Kaji, a Japanese-American student at Roosevelt, would have graduated in 1944 had him and his family not been moved to Manzinar in 1943.[13] Kaji remembers the pre-war Japanese Garden best as a nearby neighbor rather than as a student. Kaji recounted stories from his high school years in at Roosevelt HS and in the local community fondly, often repeating that he was friends with students of all ethnicities and that, while he was not a member of the Japanese Club, he did participate in music and sports. Regarding the rebuilding project, he got involved through his affiliation with the Japanese-American Museum in Los Angeles and would like to see the Japanese Garden preserved in its current state. Bud Weber attended Roosevelt HS at the same time as Kaji and also recounts storied fondly, reinforcing the idea that the students got along easily with each other and service and/or participation in school activities and a commitment to the community were aspects of Roosevelt HS in the 1940s. [14] Likewise, Weber volunteered at the Japanese-American Museum and initially got involved in Roosevelt HS in an effort to provide both World War II veterans and Japanese students with high school diplomas for which the war interrupted.

The Japanese Garden is tightly associated with the history of Roosevelt HS through its students and alum. Moreover, it has endured a difficult past through the dedication of alum as well as teachers and contemporary students. Not only is the Garden a valuable asset to the landscape of the Campus but also to Roosevelt HS's culture. It tells a story of triumph and dedication, of service and community, in the face of any difficulties presented. This history and culture appear to be key aspects of Roosevelt HS and reiterated in many landscape and cultural features discussed in this memorandum such as commemorative plaques on the Lindberg Fountain or benches and the murals.

Therefore, ESA recommends that the Japanese Garden be retained in any redevelopment plan. Due to its destruction during World War II and its more recent rebuilding, it is recommended that the Garden remain in its current location with its current design. Although this is not the original, historic Japanese Garden and is now placed in a new location, the history of its removal and rebirth should be memorialized. Not only is the Garden important but so are the people involved for the story of the Japanese Garden at Roosevelt HS is not only of its 1933 appearance but also of its WWII destruction and its later remembrance and rebuilding. For this same reason, the Garden should henceforth have permanent place. Two plaques contained in the Garden tell of its history and rebuilding. Thus, the first Garden and its history are commemorated through additional means that educate visitors.

In the event that a redevelopment project requires the land that the current Japanese Garden is located on, then ESA recommends that a Japanese Garden is placed on the Garden's original site, which was at the eastern boundary of Roosevelt HS and just west of the intersection between S. Mott Street and Lanfranco Street.[15] In this case, the current Garden design may be retained as a marker of the Garden's history or a new design following from the original could be implemented. The current design follows from careful planning. Research was conducted by Roosevelt HS students, after which these students and several teachers coordinated with alum to rebuild the Garden. Here, Roosevelt HS hired Japanese landscape architects to design a new, appropriate garden based on research and after discussions, a design emerged.[16]

In reviewing pre-war yearbooks a clear plan of the 1933 Garden can be recreated (Appendix D). The original Garden was much larger than the current plan and appears to have also included a gazebo feature, an element which was not included in the new plan. Additionally, the bridge in the original Garden had a low rail, which students enjoyed sitting on as evidenced through yearbook photographs. More research can also be conducted

[13] ESA, *Interview with Bruce Kaji*, October 10, 2016
[14] ESA, *Interview with Bud Weber*, October 8, 2016
[15] ESA, *Interview with Bruce Kaji*, October 10, 2016. Kaji indicated that he lived across the street from the Japanese Garden at 470 S. Mott Street. Historic Areal from 1948 supports the location.
[16] ESA, *Interview with Bruce Kaji*, October 10, 2016.

through additional interviews and documents. Moreover, it would be vital to include the community and students in this effort since these cultural associations have been a current in the Japanese Garden in both of its constructions to date (1930s and 1990s).

In the event that the Japanese Garden is not retained in its current form or location than complete documentation must occur before removal or relocation. This documentation should include sketches, descriptions, photographs, and interviews and these materials should be kept as archival material on site. Furthermore, a new interpretive plaque should be included along with the old in order to present the full history of the Japanese Garden at Roosevelt and its cultural relevance today.

Central Quad

The central quad is located in front (west) of the Auditorium and Classroom Building and is a later addition to the Roosevelt HS Campus (in the 1960s or after).[17] It is a large formally designed space with clearly designated pathways and grassy areas. It also has stucco arches surrounding it and a centrally located gazebo. The central quad is not historic but does facilitate outdoor space for students. Indeed, this space is likely used by students when not in class as an accessible social area where students can easily see and be seen. As such, it is a practical space for students but also does convey interactions as cultural signifiers.

ESA recommends that a new redevelopment plan include space akin to the central quad that includes plantings for enjoyment and shade such that students can retain a large, open space for social interactions. It should be noted that as a non-historic element the central quad was not the focus of this assessment and the gazebo may or may not need to be included into a new plan. Questions to consider in regards to retaining the gazebo or for incorporating a gazebo into the new plan includes the following:

- What is this history of the gazebo in the central quad?
- Does the gazebo currently serve any particular function for formal activities?
- How is the gazebo used as an informal space by students?

Essentially, it would be worthwhile to consider the use of current gazebo before determining how the new quad is designed. Moreover, it is peculiar in that the original Japanese Garden featured a gazebo element and further research may determine a connection between the old one and the new one, if not directly through its physical properties then indirectly through cultural conventions of and at Roosevelt HS.

Murals

There are numerous murals located on campus near to the entrance to the Auditorium and Classroom Building. The murals are as follows: Harvey Milk Day Service mural located just inside the Building, Avenue of the Athletes by Carlos Callejo and others, located just north of the entrance steps to the Auditorium and Classroom Building, and three recent agricultural murals located just north of the entrance steps to the Auditorium and Classroom Building.

The murals are painted on wall surfaces and by their very nature, are aesthetic. They convey meaning through visual means as works of art. In addition, they also act as instructors by presenting a message. Although aesthetics are a vital elements of the murals and how they function, the cultural impact is also vital because of the ways in which they present ideas, history, and the school's standing in the community.

[17] The Administration building to the west of the Central Quad dates to the 1960s when the school was expanded.

ESA interviewed Carlos Callejo regarding his participation in creating the Avenue of the Athletes mural (Figure 16).[18] Callejo attended Roosevelt HS (graduating class 1969) and participated in the Chicano Liberation Movement, including a 1968 walk-out at the school. Callejo, now a renowned muralist, was recently asked to create a mural on Roosevelt HS athletes, which portrays students from the school that went on to become professional athletes. Callejo explains that the project was a pleasure to work on and he expressed that he still feels a connection to Roosevelt HS and the Boyle Heights community. By its very subject matter the Avenue of the Athletes mural expresses the school's culture and value to its community. Moreover, incorporating alum into projects is also representative of the school's culture and value to its community, as evidenced through various projects past and present that have taken place on Campus such as the Japanese Garden, both the 1933 and 1997 versions. In terms of the future of Roosevelt HS, Callejo would like to see more arts incorporate where students and alum can leave their mark that expresses their time on Campus; new generations have new experiences that create a vibrant education.

ESA recommends that murals need not be retained but, as aesthetic and cultural aspects of the campus and student life, should be documented through photographs, drawings, and descriptions before removal. The information should be kept on site as archival information or displayed in a classroom building. Additionally, ESA recommends an interpretive exhibit or display on the five (5) murals in support of the school's history and culture. In the place of these murals, however, it is also recommended that in the future students and alum are given the opportunity to participate in creating new murals that speak to the history and culture of the school, much like the current murals do today.

Class tiles

Small class tiles are located on the rear (east) elevation of the Auditorium and Classroom Building and date from 1956 to 1969. Each tile presents the letter "R" and a date but each tile is different. They appear to be ceramic with either glaze or paint to emphasize the content. Since each tile is distinct they do contain aesthetic value. However, their real value is cultural, especially for alum; Graduating classes expect to be commemorated through these plaques. It is likely, however, that current students do not feel a connection to the plaques generally, but will upon graduating when one is erected for their senior class thus creating a tangible recognition of their connection and experiences at Roosevelt HS.

ESA recommends that the class tiles be relocated but remain on campus. These are small objects as opposed to the Lindberg Fountain, for example, and could easily be relocated from their current location to any location in the redevelopment project, if not a similar one. Thus, they could be adhered to an exterior façade but they could also be relocated to an interior space. In the event they are brought in to an interior space, they can be curated as a display, complete with an interpretive exhibit. This option would allow alum to be commemorated while also educating students, staff, and visitors on Roosevelt HS history and traditions. Here, Roosevelt HS could easily facilitate the continuance of its identity and connect with alum.

Benches

A series of benches can be found throughout the Roosevelt HS campus. The benches are generic and appear to be made of concrete. Three elements, however, provide decoration: two tiles that match the tiles on the Lindberg Fountain are on either side of the bench, a Rough Rider relief is centrally located along the back rest portion of the bench, and a commemorative plague surrounds the relief. An artist named Locarois signed the Rough Rider reliefs. Plaques such as "donated by the Enriquez Family, 1962, 64, 66, 67" or "Ellis Paint Company, RSHBeautification.com" suggest community involvement through outreach and alum. These elements provide aesthetic qualities to an otherwise generic bench. The benches also facilitate aesthetics through allowing user to

[18] ESA, *Interview with Carlos Callejo,* October 7, 2016.

sit, rest, and enjoy views of the campus. Cultural value of the benches appears to be more valuable for commemoration than the benches' material or aesthetic qualities.

Community outreach and strong relationships appear to be a vital aspect of a student's experience at Roosevelt HS as evidenced through clubs and service programs. For example, this is apparent when viewing old yearbooks regarding clubs and the building/rebuilding of the Japanese garden discussed above. Captions about clubs—Japanese or otherwise—indicate participation in the community and outreach or service such as sharing cultural traditions and dedication to the school. In addition, decades later in 1996 students learned about the Japanese history at Roosevelt HS and worked with previous Alum, teachers, and community members to revitalize the vision of the garden an acknowledge that places such as the garden signify sense of place for different stakeholders in different, yet important ways. Furthermore, it is apparent that the various donors and contributors, whether community members, local businesses, or alum, noted in the plaques on these benches believe that an investment in Roosevelt HS is an important measure or action for the current and future student body.

ESA recommends that Roosevelt HS enact measures to conserve not the benches themselves but rather their content. Primarily, ESA recommends that commemoration of the donors and contributors continue to exist on Campus as the complete removal of the benches and the plaques is a delicate issue if donors and contributors expect to be commemorated for their service or donation though the benches and their plaques. The benches do not necessarily need to be retained in their given locations, if at all. If the benches are removed than a new form of displaying commemoration should be enacted on campus. Like the class tiles, this can be done in a number of ways. The benches themselves can be relocated on campus as part of the redevelopment plan. Or, in the event of the benches' removal, the plaques can be relocated either to a new outdoor setting or, as suggested for class tiles, relocated to an interior setting, complete with an interpretive display. This option would allow donors to be commemorated while also educating students, staff, and visitors on Roosevelt HS history and community relationships. In the event of relocation the donors and contributors should be contacted such that community relationships are maintained.

Conclusion

In conclusion, Roosevelt HS has many landscape and cultural elements that supplement ones experience on campus and create a sense of place. Through the landscape and cultural features discussed in this letter, each has material, aesthetic, and cultural value for students, staff, and the community. Indeed, the interaction between school and community has been particularly strong throughout Roosevelt's history since its opening in 1923. Students such as Buddie Weber, Bruce Kaji, and Carlos Callejo speak of their time at the school as memorable occasions and reinforce the connection between school or student and community or Alum. Objects such as the Japanese Garden, murals, and benches all reinforce the value and integration of good, strong relationships formed at Roosevelt HS and with the community. Other aspects of the landscape and cultural analysis such as the entrance steps to the Auditorium and Classroom Building or class tiles to the rear of that same building support the identity of the school and its students.

ESA recommends that all of the landscape and cultural features identified in this analysis memorandum be retained or reinterpreted in some way as redevelopment occurs on the Campus. The most important features should be first and foremost retained such as the Japanese Garden or Lindberg Fountain. Other features can be creatively retained such as class tiles or commemorative plaques on the benches in the event that redevelopment calls for complete transformation of the campus. Meanwhile, some aspects of the landscape of the campus can be redeveloped but the cultural significance should be retained such as the Central Quad. Here, the Central Quad conveys culture through social interactions and functions as a gathering space and it is this idea, rather than form, that should be incorporated into a new plan for Roosevelt HS.

APPENDICES

Appendix A – Professional Qualifications
Appendix B- Interview Content
Appendix C- Photographs
Appendix D- Sketch Map of Japanese Garden

Appendix A – Professional Qualifications



Margarita Jerabek, PhD

Historic Resources Director

EDUCATION

Ph.D., Art History, University of California, Los Angeles

M.A., Architectural History, School of Architecture, University of Virginia

Certificate of Historic Preservation, School of Architecture, University of Virginia

B.A., Art History, Oberlin College

30 YEARS EXPERIENCE

AWARDS

2014 Preservation Award, The Dunbar Hotel, L.A. Conservancy

2014 Westside Prize, The Dunbar Hotel, Westside Urban Forum

2014Design Award: Tongva Park & Ken Genser Square, Westside Urban Forum

2012 California Preservation Foundation Award, RMS Queen Mary Conservation Management Plan, California Preservation Foundation

PROFESSIONAL AFFILIATIONS

California Preservation Foundation

Santa Monica Conservancy

Los Angeles Conservancy

Society of Architectural Historians

National Trust for Historic Preservation Leadership Forum

American Institute of Architects (AIA), National Allied Member

Margarita Jerabek has 30 years of professional practice in the United States with an extensive background in historic preservation, architectural history, art history and decorative arts, and historical archaeology. She specializes in Visual Art and Culture, 19th-20th Century American Architecture, Modern and Contemporary Architecture, Architectural Theory and Criticism, Urbanism, and Cultural Landscape, and is a regional expert on Southern California architecture. Her qualifications and experience meet and exceed the Secretary of the Interior's Professional Qualification Standards in History, Archaeology, and Architectural History. Margarita has managed and conducted a wide range of technical studies in support of environmental compliance projects, developed preservation and conservation plans, and implemented preservation treatment projects for public and private clients in California and throughout the United States.

Relevant Experience

Margarita has prepared a broad range of environmental documentation and conducted preservation projects throughout the Los Angeles metropolitan area and Southern California. She provides expert assistance to public agencies and private clients in environmental review, from due diligence through planning/design review and permitting and when necessary, implements mitigation and preservation treatment measures on behalf of her clients. As primary investigator and author of hundreds of technical reports, plan review documents, preservation and conservation plans, HABS/HAER/HALS reports, construction monitoring reports, salvage reports and relocation plans, she is a highly experienced practitioner and expert in addressing historical resources issues while supporting and balancing project goals.

She is an expert in the evaluation, management and treatment of historic properties for compliance with Sections 106 and 110 of the NHPA, NEPA, Section 4(f) of the Department of Transportation Act, CEQA, and local ordinances and planning requirements. Margarita regularly performs assessments to ensure conformance with the Secretary of the Interior's Standards for the Treatment of Historic Properties, and assists clients with adaptive reuse/rehabilitation projects by providing preservation design and treatment consultation, agency coordination, legally defensible documentation, construction monitoring and conservation treatment.

Margarita is a regional expert on Southern California architecture. She has prepared a broad range of environmental documentation and conducted preservation projects throughout the Los Angeles metropolitan area as well as in Ventura, Orange, Riverside, San Bernardino and San Diego counties. Beyond her technical skill, she is a highly experienced project manager with broad national experience throughout the United States. She currently manages PCR's on-call preservation services with the City of Santa Monica, County of San Bernardino Department of Public Works, City of Hermosa Beach, Los Angeles Unified School District, and Long Beach Unified School District.



Amanda Kainer

Senior Architectural Historian

EDUCATION

M.S., Historic Preservation (Emphasis: Conservation Science), Columbia University

B.S., Design (Emphasis: Interior Architecture), University of California, Davis

B.A., Art History, University of California, Davis

9 YEARS EXPERIENCE

AWARDS

Joel Polsky Academic Achievement Award, American Society of Interior Designers, 2008

PROFESSIONAL AFFILIATIONS

California Preservation Foundation

Los Angeles Conservancy

Santa Monica Conservancy (Volunteer Docent for the Shotgun House)

Docomomo SoCal

Association of Preservation Technology Western Chapter

Amanda Kainer has nine years of professional and academic experience in the practice of historic preservation and architectural history. She has conducted extensive archival research, field observation, recordation, and prepared survey documentation and assisted in database management for numerous PCR historic resources projects. She has training and substantial experience in the evaluation and conservation of art and architecture and passion for interior design.

Relevant Experience

Amanda has completed and co-authored a wide range of architectural investigations including historic resources assessment and impacts analysis reports for compliance with CEQA, character-defining features reports, plan reviews, investment tax credit applications, Section 106 significance evaluations, and HABS documentations. She has also performed extensive research, survey work, and prepared numerous landmark and preliminary assessment reports as a part of PCR's On-Call Historic Preservation Contract with the City of Santa Monica.

She is involved a diverse set of projects and analyses. These include anything from a California Register nomination for the UCLA Faculty Center to a paint analysis for a Churrigueresque style 1920s commercial building in Santa Monica. Amanda has co-authored Section 106 reports for the residential development in Thousand Oaks, Santa Monica Pier, Avalon Fuel Dock on Catalina Island, and a Mid-Century roadside motel in Bakersfield. For LAUSD, she authored a character-defining features analysis for seven historic schools, provided historic analysis for an MND, and preliminary resource evaluations and plan reviews for various historic schools.

Historic Resources Assessments. Amanda has contributed to the research, site inspections, and report preparation of a number of historic resources assessments in the Los Angeles metropolitan area for compliance with CEQA. She has evaluated a number of different types of potential historical resources, including single-family and multi-family residences, banks, commercial buildings, schools, hotels, and cultural landscapes in Beverly Hills, Venice, Los Angeles, and Santa Monica.

Large Scale Survey Experience. She was a contributing author for three major Community Redevelopment Agency of the City of Los Angeles– Adelante Eastside, Wilshire Center/Koreatown, and Normandie 5 Redevelopment Areas. Amanda also served as ESA PCR Survey Team Leader and co-author for the comprehensive survey of over 4,000 objects of fine and decorative arts aboard the RMS Queen Mary in Long Beach. Additionally, she helped complete the district-wide survey and evaluation of the Long Beach Unified School District and a windshield survey of Hermosa Beach for the Historic Resources Chapter of the Hermosa Beach General Plan Update.



Margaret Roderick

Architectural Historian Intern

EDUCATION

Master of Heritage Conservation, University of Southern California School of Architecture, (Candidate)

Master of Arts, Art History, Florida State University

Bachelor of Arts, Art History and Criticism, University of California, San Diego

1 YEARS EXPERIENCE

PROFESSIONAL AFFILIATIONS

Los Angeles Conservancy

AWARDS

Tau Sigma Delta Honors, The University of California, School of Architecture, 2016

Margaret Roderick is an experienced researcher with expertise in Art History, Architecture, and Heritage Conservation and is writing her Master of Heritage Conservation thesis on modern San Diego architect Russell Forester. During her internship she will apply her analytical skills towards support for the Historic Resources Division.

Margaret provides research and writing support regarding permit and assessor information, construction and owner/tenant chronologies, architectural descriptions, and historic context. Margaret has detailed architect and artist biographies for properties such as I. Magnin Wilshire. Since then she has evaluated properties in Los Angeles and Santa Monica according to national, state, and local registers through the use of Department of Parks and Recreation forms (DPR) and Historic Resource Assessment reports. In addition, she has completed several successful PowerPoint presentations on historic properties that have been presented to the Los Angeles Heritage Commission and the State Office of Historic Preservation.

Relevant Experience

Pellissier Square Garage, Los Angeles, CA. *Architectural Historian Intern. .* Margaret provided support on the Historic Resources Assessment. In particular, she completed research and write-ups for Commercial Development and the Automobile (1910-1980): Parking Structures, Art Deco: Commercial (1926-1939), architects Morgan, Walls, and Clements, architectural description and Character Defining Features table, and significance evaluation.

Plan Review (Letter), South Pasadena, CA. *Architectural Historian Intern.* The project included the review an architectural plan for a rear two-story addition to a Dutch Colonial/Craftsman residence in a district that was identified in 2009 city-wide survey. Margaret completed the letter review, which included photographing and visual inspecting the site, research on construction history, review of South Pasadena ordinance and surveys, and review of the architect's plans.

Single-Story Mid-Century Modern Court yard Apartment, Santa Monica, CA. *Architectural Historian Intern.* The project required the evaluation of the property for the City of Santa Monica through a Historic Resource Assessment. Margaret completed research and write-ups on Residential Development of Santa Monica: Pico Neighborhood, The Courtyard Apartment (1910-1980), Mid-Century Modern Architecture (1945-1970, architectural description, and other property research including occupancy and permits.

I.Magnin Wilshire, Los Angeles, CA. *Architectural Historian Intern.* Margaret provided support on the Historic Resources Assessment. In particular, she completed research and write-ups for I.Magnin & Company Department Stores, Prewar Modernism in Los Angeles (1919-1945), architects Hunt & Chambers (1920-1947), and various artists including Timothy Pflueger and muralists.

Publications and Presentations

"Kenneth J. Conant," Mapping Gothic France, Florida State University, Late Medieval, Fall 2010, http://www.mappinggothicfrance.com/person/454

"Caen, Église de la Trinité (Abbaye aux Dames)," Mapping Gothic France, Florida State University, Late Medieval, Fall 2010, http://www.mappinggothicfrance.com/building/1098

Appendix B- Interview Content

Interviewees

1. Bruce Kaji
2. Bud Weber
3. Carlos Callejo, muralist for Avenue of the athletes

Questions

1. What is your relationship to Roosevelt HS?
2. In your option, what are the school's most memorable spaces? Or what do you remember best about your time at RHS?
3. Did you spend a lot of time in the garden or X?/Where did you spend your free time?
4. What features of the garden or X do you think are the most important and why?
    a. Material?
    b. Aesthetic?
    c. Cultural?
5. What does the garden or X mean to you?
    a. And what do you think it meant to other students at the time? How about now?
6. Tell me about your role in designing/creating/reconstructing the garden or X. Aka…how did you get involved and what was your role?
    a. What was the experience like?
    b. What issues or conflicts presented and how were they resolved? Any opposition?
7. Have you been involved in the school in other ways…how so?
8. What do you hope for the future of the garden or x?

Response Summaries

Bruce Kaji (Interviewed 10/10/2016)

Kaji, Roosevelt HS Class of 1944, lived at 470 S. Mott Street which was just across from the Japanese Garden. He was familiar with the garden more so from this rather than spending time there as a student. Kaji played sports and was involved in music while attending Roosevelt HS. He was not a member of the Japanese Club but participated in various school activities.

Kaji explained that he was friends with many students of various ethnic backgrounds and his being Japanese-American was not an issue among the student body. Along with this he discussed the neighborhood as having a high Jewish population. Also discussed the Boyle Heights community and what it was like growing up there in the 1930s-1940s. He also said he had a good experience at Roosevelt HS.

Family removed from Boyle Heights to Manzinar

Later in life he got involved in the Japanese American Museum in Downtown Los Angeles and also got involved in the post-WWII Japanese Garden project at Roosevelt HS. Memory of the garden and its function were and are important. Kaji mentioned that they hired Japanese gardeners to design the garden. After several discussions they decided on the garden plan that was implemented.

He would like to see the Japanese Garden preserved in the future because it has a long history.

Bud Weber (Interviewed 10/8/2016)

Weber, class of 1944, was involved in many activities in the community and at Roosevelt HS including Student Body President and sports such as football, tennis, and gymnastics. He also worked at a nearby playground as an assistant playground director. Like Kaji, he recalls his time at Roosevelt HS fondly.

Weber was drafted into WWII.

Weber became a volunteer at the Japanese-American Museum and worked with a principal of Roosevelt to ensure that all students affected by WWII who were unable to obtain their High School Diploma (Japanese and those drafted) in the 1940s received it later in life through various ceremonies.

Weber did not seem to remember much about the Japanese Garden but did mention that his time at Roosevelt HS was the best in his mind. He feels that the school has changed quite a bit and would like to see it returned to its former glory.

Carlos Callejo (Interviewed 10/7/2016)

Callejo, class of 1969, also recalls his time at Roosevelt HS fondly. He discussed how it was an exciting time to be a student at Roosevelt HS in Boyle Heights in the late 1960s and that his experiences there have a very important role in the development of his character. He participated in the 1968 Walk-Out where Chicano students protested against their poor education, ect. He mentioned that he hung out in the lunch area.

There is a group of alum from 1968-1972 that have strong connections with one another and, while he hadn't participated in other school-related activities since graduation, he did/does keep in contact with this group. Since graduation he has become a well-known muralist. He returned to Los Angeles about seven (7) years ago and was asked to participate in the athletic mural. He indicated the subject matter was given to him but it was up to him to work out the mural visually. There was a small budget so he had to research and paint at the same time, rather than research and plan, then paint. Despite this, he said it was a pleasure to work on the project.

He said he would like to see more public art at Roosevelt HS in the future and that new generations should be able to impart their experiences, too. He also indicated that he appreciated the older architecture of the school and that the sensitivity to architecture is an aspect of mural painting such that the muralist must consider the building as not a blank canvas.

Appendix C- Photographs



Figure 1. "They Will Not be the Same Again," pre-1933 Long Beach Earthquake and subsequent changes, view east (1936 Roosevelt HS Yearbook, 133)

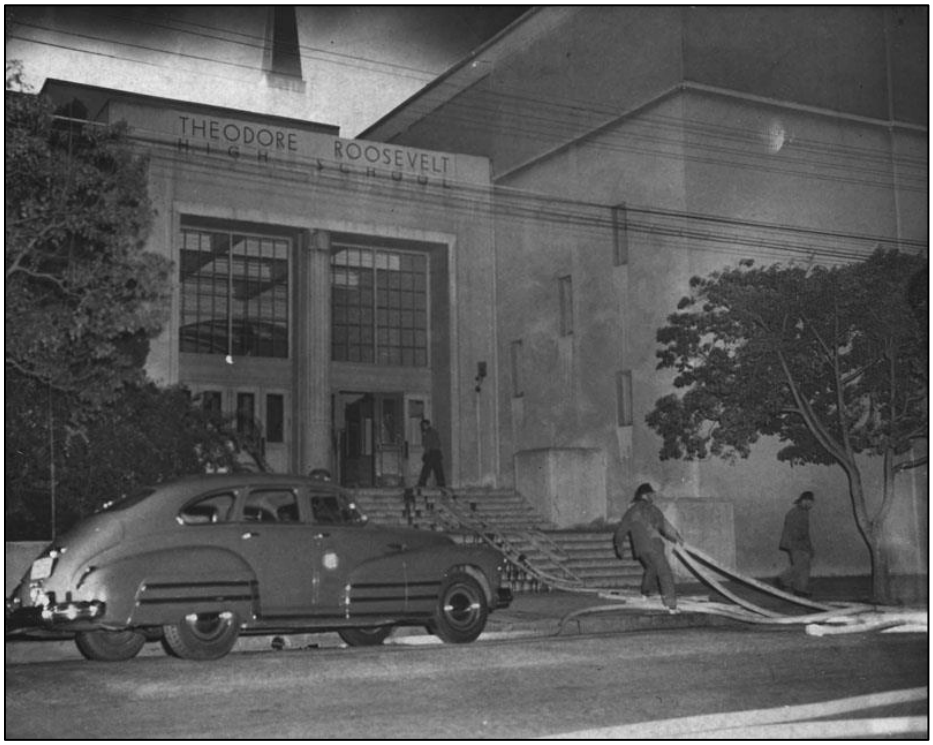


Figure 2. Firemen at Roosevelt HS, 1949 (USC Archives)



Figure 3. Entrance Steps to Auditorium and Classroom Building, view east (ESA 2016)



Figure 4: Class Photographs, Entrance Steps to the Auditorium and Classroom Building (1935 Roosevelt HS Yearbook, 45)



Figure 5. Lindberg Fountain, view east (ESA 2016)



Figure 6. "Gaze Upon These Scenes for the Last Time," Lindberg Fountain (1936 Roosevelt HS Yearbook, 132)



Figure 7. "Day Dreaming," Lindberg Fountain (1936 Roosevelt HS Yearbook, 137)

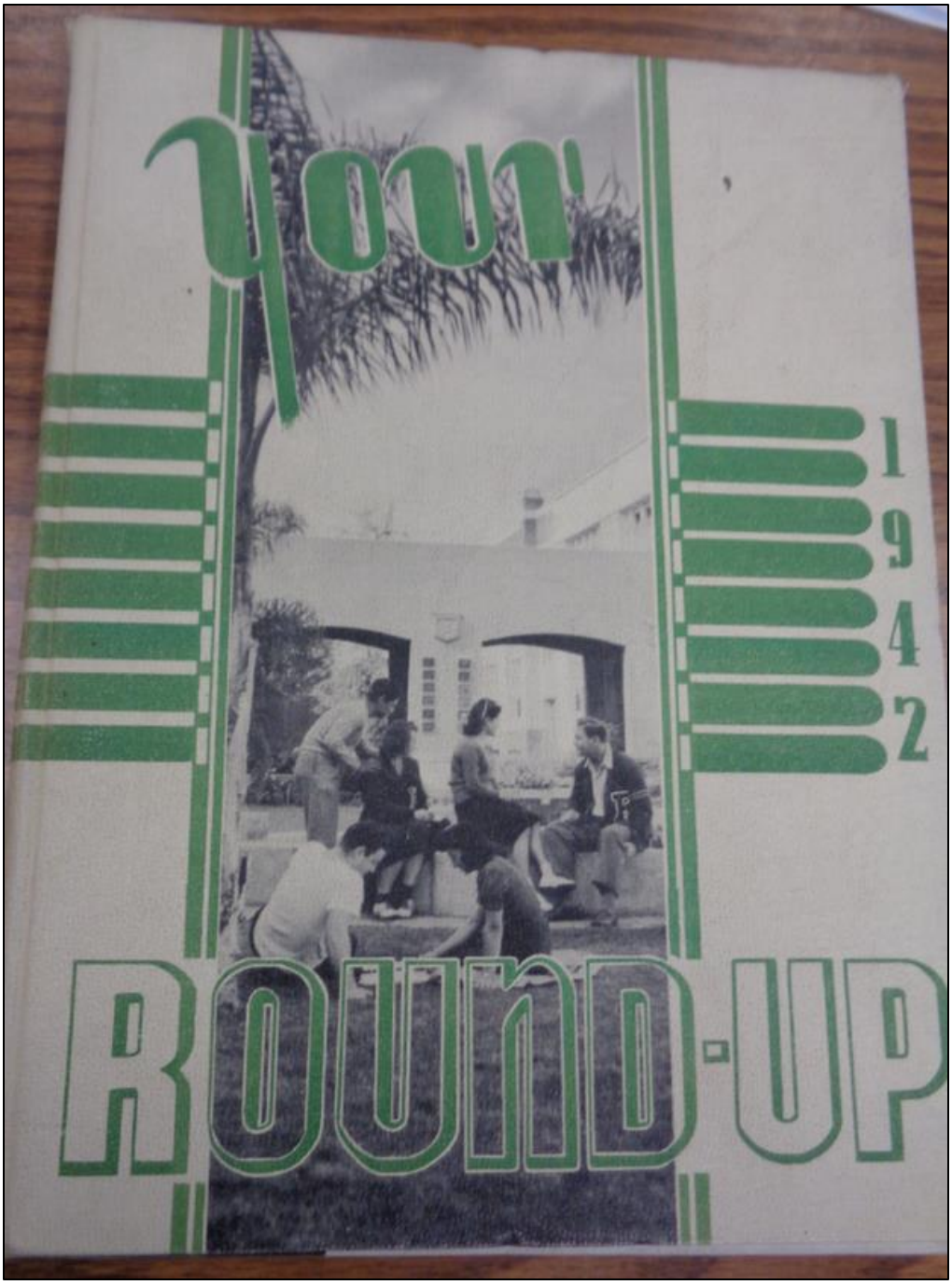


Figure 8. Lindberg Fountain on the Roosevelt HS Yearbook cover, 1942



Figure 9. "Clerks and Secretaries," Lindberg Fountain (1942 Roosevelt HS Yearbook)



Figure 10. Front matter (1934 Roosevelt HS Yearbook)



Figure 11. Japanese Garden, view northwest (ESA 2016)

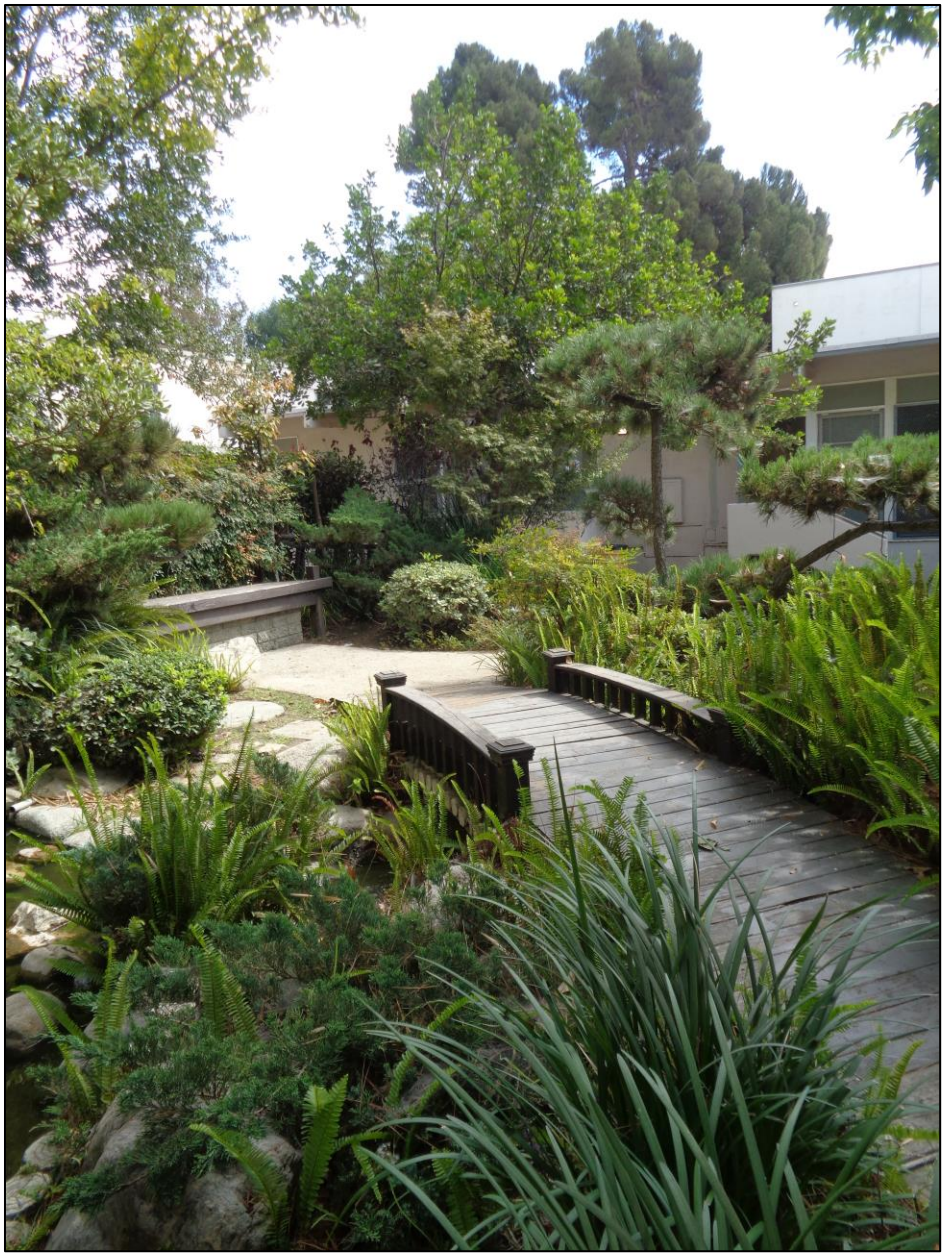


Figure 12. Japanese Garden, view northwest (ESA 2016)



Figure 13. "A Quiet Spot in the Japanese Garden," Japanese Garden (1935 Roosevelt HS Yearbook, 126)



Figure 14. "Bridge of Sighs," Japanese Garden (1935 Roosevelt HS Yearbook, 125)



Figure 15. "Japanese Bells" (1935 Roosevelt HS Yearbook, 124)

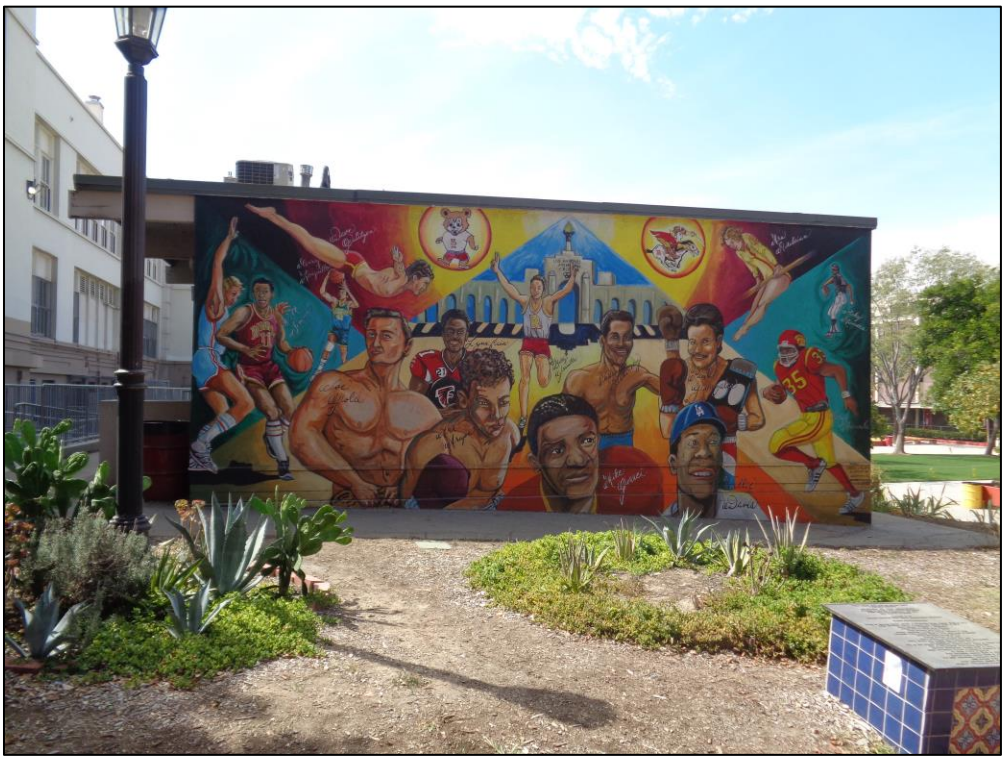
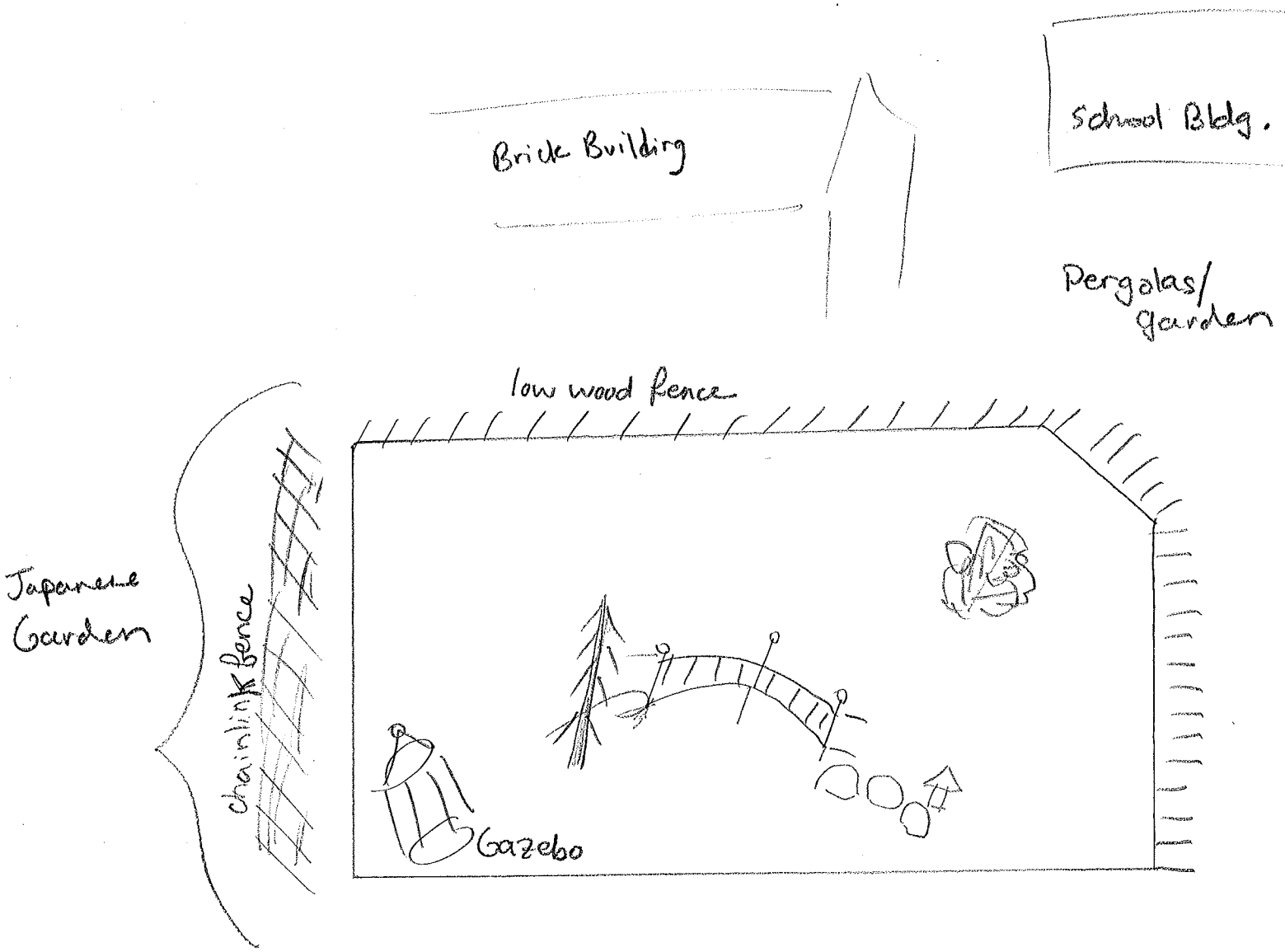


Figure 16. Avenue of the Athletes (mural), Carlos Callejo, view south (ESA 2016)

Appendix D- Sketch Map of Japanese Garden


Brick Building
School Bldg.
Pergolas/
Garden
low wood fence
Japanese
Garden
chainlink fence
Gazebo

ESA

233 Wilshire Boulevard
Suite 150
Santa Monica, CA 90401
310.451.4488 phone
310.451.5279 fax

www.esassoc.com

memorandum

date February 13, 2017

to Edward S. Paek, AICP, LAUSD

cc

from Margarita Jerabek, Director of Historic Resources, and Amanda Kainer, Senior Architectural Historian, ESA

subject Theodore Roosevelt Senior High School Cultural Analysis

Introduction

ESA was commissioned to complete a Cultural Analysis Memorandum (Memorandum) for the Los Angeles Unified School District ("LAUSD" or "District") regarding Theodore Roosevelt Senior High School ("RHS" or "school" or "campus") located at 456 S. Mathews Street in the Los Angeles neighborhood of Boyle Heights, east of Downtown Los Angeles. Constructed in phases, RHS was initially constructed in 1922, later retrofit following the Long Beach earthquake, and improved with Contemporary buildings up to 1990. ESA was asked to prepare an analysis of potential cultural features of the landscape and buildings that give the campus a sense of place and are considered an important part of the school's cultural identity. This Memorandum provides a historic background, physical description, and recommendations for cultural features and spaces identified on the campus.

Methodology

This Memorandum was prepared by ESA's Historic Resources Division personnel Margarita Jerabek, Ph.D., Director of Historic Resources, and Amanda Y. Kainer, M.S., Senior Architectural Historian, who meet and exceed the Secretary of the Interior's Professional Qualification Standards in history and architectural history.[1] Research support was provided by Margaret Roderick, M.H.P. candidate, ESA Intern. The following tasks were performed by ESA for the study:

- ESA staff conducted a pedestrian survey on June 2, 2016 and September 19, 2016 to document and photograph the landscape and features associated with the school's historic and cultural significance. ESA's survey methodology was consistent with the State Office of Historic Preservation (OHP) guidelines.

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1 *The Professional Qualification Standards are requirements used by the National Park Service and have been published in the Code of Federal Regulations ("CFR"), 36 CFR Part 61.*

- ESA staff conducted site-specific research on the campus, including a review of Sanborn Fire Insurance Maps (Sanborn Maps), historical aerials and architectural plans, California Index, Avery Index, Online Archive of California, USC Digital Collections, historical Los Angeles Times, American Institute of Architects (AIA) historical directory, SurveyLA, and other published sources. Additional archival research was conducted at the campus, which included a review of yearbooks from 1928, 1933-36, 1942, 1950, and 1997 held in the library, and an examination of display cases in the Administration and Classroom Building 5 hallway which presented archival information of campus history grouped by decade.

- ESA staff conducted oral interviews of RHS alumni who were associated with the Japanese Garden or mural painting. ESA interviewed the following three individuals over the phone: Bruce Kaji, Buddie Weber, and Carlos Callejo. A list of interview questions and responses is included in Attachment A.

Character-Defining Cultural Features and Spaces of Roosevelt High School

As a result of the survey, research and oral interviews, seven features on campus were analyzed further and include: Classroom and Auditorium Building 1 Entrance Steps, Lindberg Memorial Fountain and Courtyard, Class Tiles, Japanese Garden, Central Quad and Gazebo, Benches, and Murals.

Classroom and Auditorium Building 1 Entrance Steps

Historic Background

RHS opened to students in 1923 with one main building—the Auditorium and Classroom Building—fronting Fickett Street (Figure 1).[2] This building, designed by Hunt and Burns, was damaged in the 1933 Long Beach earthquake and subsequently retrofitted for safety.[3] In 1936, the architectural firm of Hibbard, Gerity, and Kerton was hired to reconstruct and strengthen the original 1923 building (Figure 2).[4] The remodel lacked its original decorative brickwork and ornamentation but obtained a distinctly Art Deco/Streamline Moderne, 1930s look. Traditionally, formal school class and club photographs were taken on the front steps, especially for early yearbooks (Figure 3). In addition, images of the front entrance and steps appear in yearbooks as front and back matter throughout the history of the school. Often in these yearbook cover photographs students are absent from the images thereby showing this entrance symbolized the identity of the RHS. In 1923 when the school opened, the primary elevation of the Classroom and Auditorium Building 1 fronted Fickett Street. Since that time, however, the school expanded between 1964 and 1969 with new construction blocking views of the original front and therefore the Classroom and Auditorium Building 1 was no longer the face of the school.

[2] PCR Services Corporation, "Preliminary Historic Resource Evaluation Report (HRE) for Theodore Roosevelt Senior High School, 456 South Mathews Street, Los Angeles, California, 90033," (June 19, 2015): 2-3.

[3] Ibid., 3.

[4] Ibid., 4.



Figure 1. Classroom and Auditorium Building 1 Pre-1933 Long Beach Earthquake, View East (1936 RHS Yearbook, 133)



Figure 2. Fire in Classroom and Auditorium Building 1, 1949 (USC Archives)



Figure 3. Class Photographs, Entrance Steps to the Classroom and Auditorium Building 1 (1935 RHS Yearbook, p 45)

Current Physical Description

The primary entrance of Classroom and Auditorium Building 1 (Figure 4) is located on the west elevation and consists of four sets of single-pane Kalamein double doors (alteration, metal security screens) and steel multi-pane fixed transom windows divided by a fluted column (alteration, once had decorative cast stone capital). Concrete stairs with two landings lead to the primary entrance. Currently this building no longer retains integrity

as a result of extensive alterations; however, the front entrance steps do not appear to have been altered except for new paint colors. The primary elevation of Classroom and Auditorium 1 building has lost its original relationship to Fickett Street and now the elevation fronts a landscaped quad area with gazebo (described in this Memorandum in one of the sections following).



Figure 4. Entrance Steps to Classroom and Auditorium Building 1, view east (ESA 2016)

Recommendations

The entrance steps provide students and alumni members with a sense of place and connection to the original campus where many school photographs were taken. ESA recommends that the District consider the incorporation of the entrance steps as part of any future redevelopment plan, if feasible. Or if modifications are proposed, ESA recommends that the District consider the historical features of the steps, including the wide entrance, shallow concrete stairs, two deep landings, and pedestals in a new building.

Lindberg Memorial Fountain and Courtyard

Historic Background

Located in the courtyard to the rear of the Auditorium and Classroom Building 1, the Lindbergh Memorial Fountain was dedicated on January 28, 1930 to commemorate the accomplishments of Charles Lindberg (Figure 5). An account of the dedication ceremony was published in the *Los Angeles Times* and described the fountain as follows:

> *The fountain is of colored cement and was designed and built by the class in manual training under the supervision of Thomas Fellows, instructor. It forms a modernistic ellipse in the center of the patio, the*

> *modeled likeness of a winged Lindbergh rearing up from the waters of the pool. Two years were required in completing it.*[5]

Based upon historical yearbook photographs and the *Los Angeles Times* article, the Lindbergh Memorial Fountain appears to have been constructed of integrally colored concrete, flanked by urns on pedestals, and surrounded by a concrete pathway centered in a landscaped rectangular quad. The original fountain contained water and lily pads. Along the rear elevation of the Class and Auditorium Building 1 was an arcade where class year concrete medallions and a wall fountain were attached. The arcade encircled the rectangular quad. At an unknown date the central decorative water bubbler was replaced with a collection of stacked rocks.

The Lindbergh Memorial Fountain and courtyard functioned as the primary gathering area on campus from its completion up to the 1960s expansion. Yearbooks photographs (Figures 6 to 13) indicate this area was as a popular spot for photographs and social meetings.

It appears that the Lindbergh Memorial Fountain had fallen into disrepair by the early 1990s and a fundraising campaign was initiated in 1995 for its restoration.[6] In 2005, the Lindbergh Memorial Fountain was restored.[7] A commemorative plaque installed adjacent to the fountain as part of the restoration effort describes a similarity between Lindberg's first non-stop transatlantic flight and the diversity of RHS's demographics, and states "Roosevelt High School Students Who Hail From All Over The Globe."[8] The restoration adhered colorful enamel tiles to the concrete water fountain, installed a new central water feature, and paved the concrete walkway with square Spanish tiles while preserving a small section of original concrete with writing (Figure 15).

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5 "Lindbergh Fount Dedicated: Pupils Render Tribute to Ride of Skies." *Los Angeles Times* (January 29, 1930).
6 "All-Star Basketball to Benefit Roosevelt." *Los Angeles Times* (May 14, 1995).
7 Lindberg Fountain Plaque, Roosevelt HS, 2005.
8 Ibid.

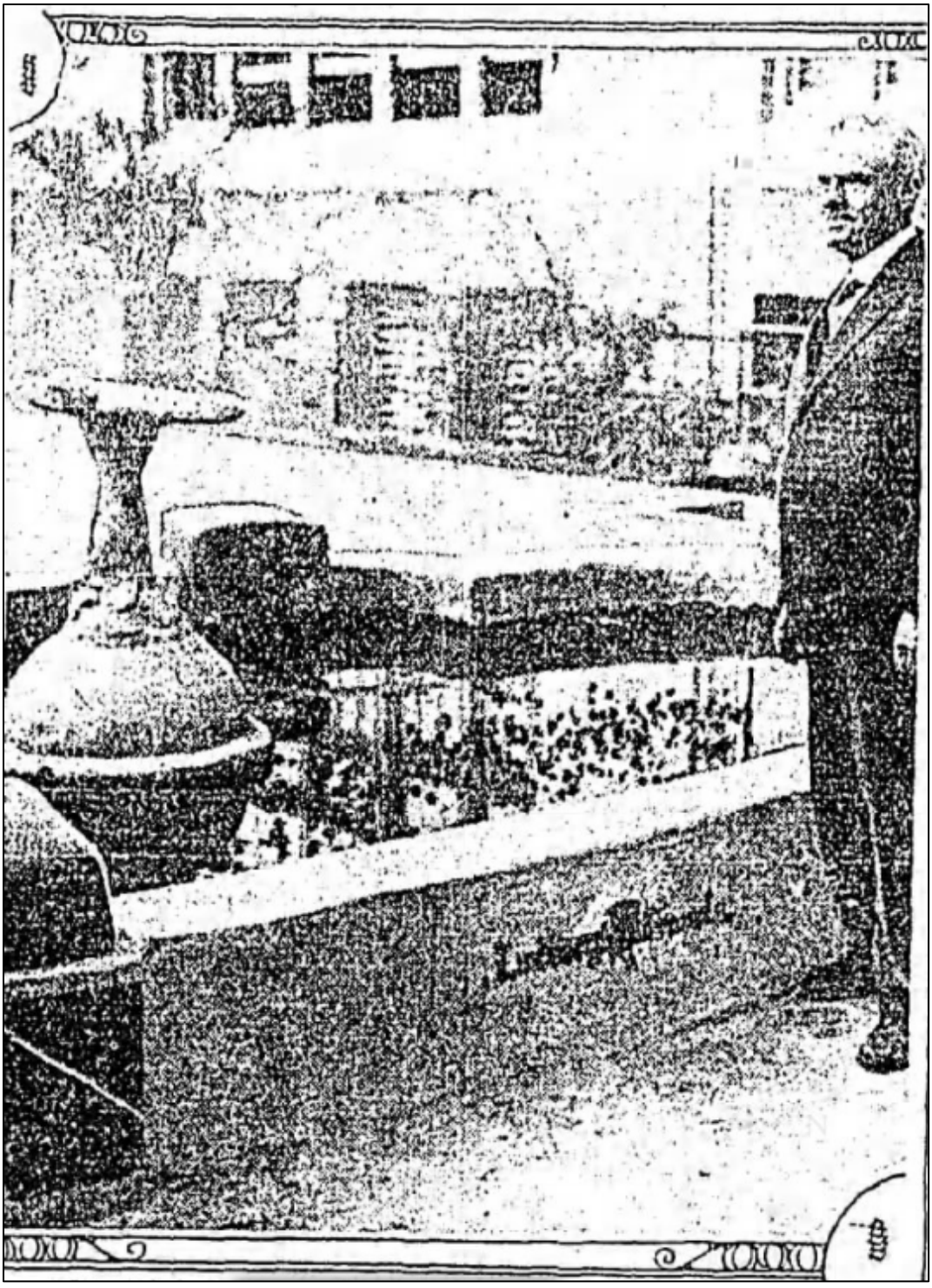


Figure 5. "Lindbergh Fountain Dedicated: Pupils Render Tribute to Ride of Skies." (*Los Angeles Times*. January 29, 1930)

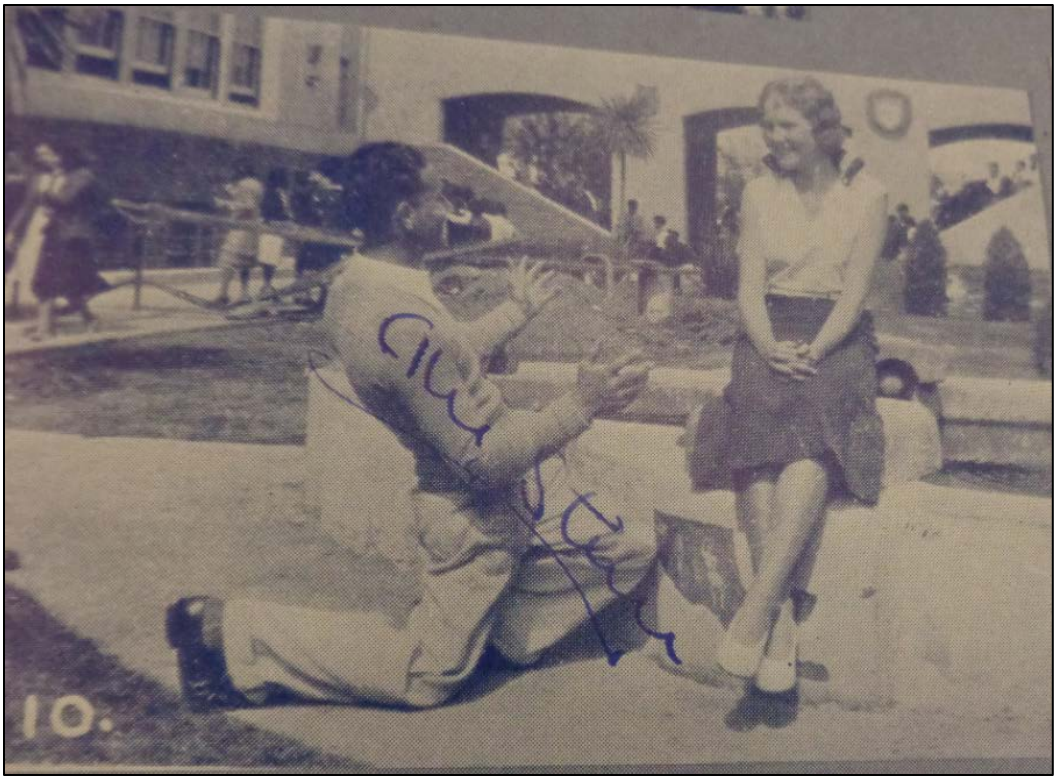


Figure 6. Students in front of the Lindberg Memorial Fountain (1932 RHS Yearbook)

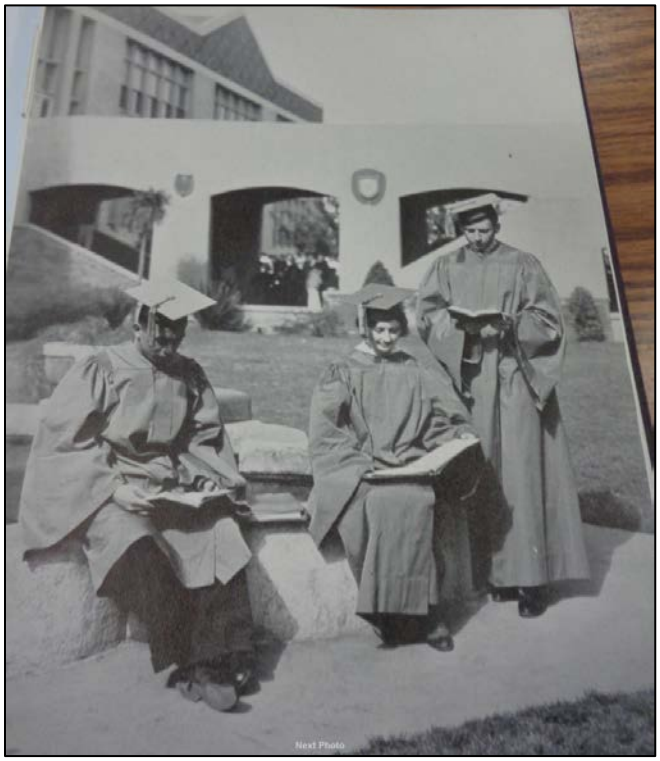


Figure 7. Graduates in front of the Lindberg Memorial Fountain (1933 RHS Yearbook 1933)



Figure 8. Figure Lindberg Memorial Fountain (1935 RHS Yearbook)



Figure 9. Lindberg Memorial Fountain (1936 RHS Yearbook, p. 132)



Figure 10. "Day Dreaming" (1936 RHS Yearbook, p. 137)

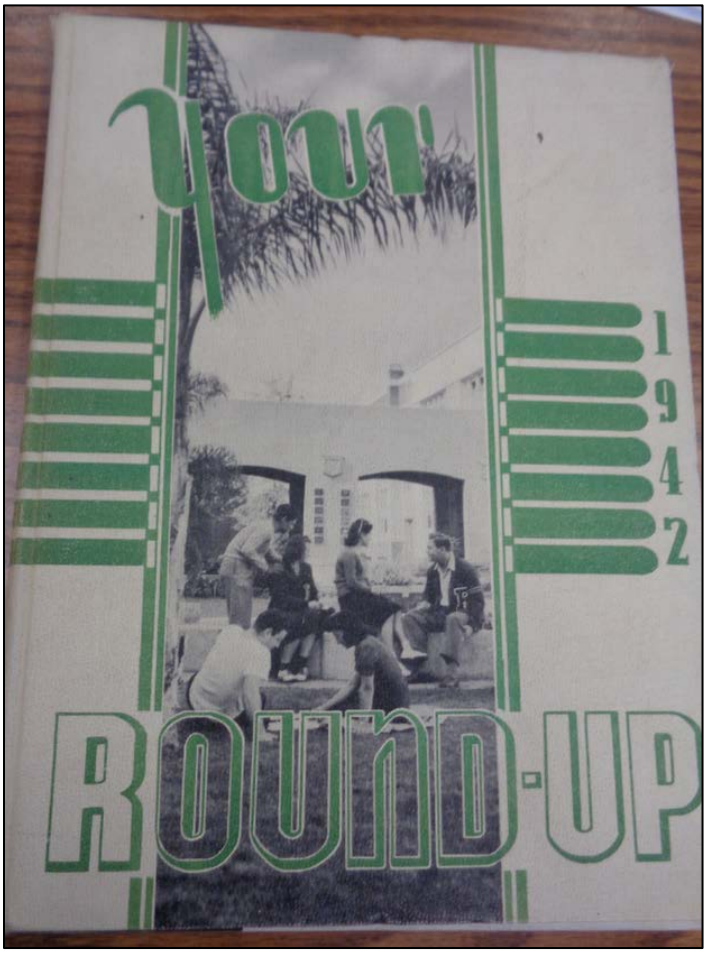


Figure 11. Lindberg Memorial Fountain on the 1942 RHS Yearbook Cover



Figure 12. Clerks and Secretaries Around the Lindberg Memorial Fountain (1942 RHS Yearbook)

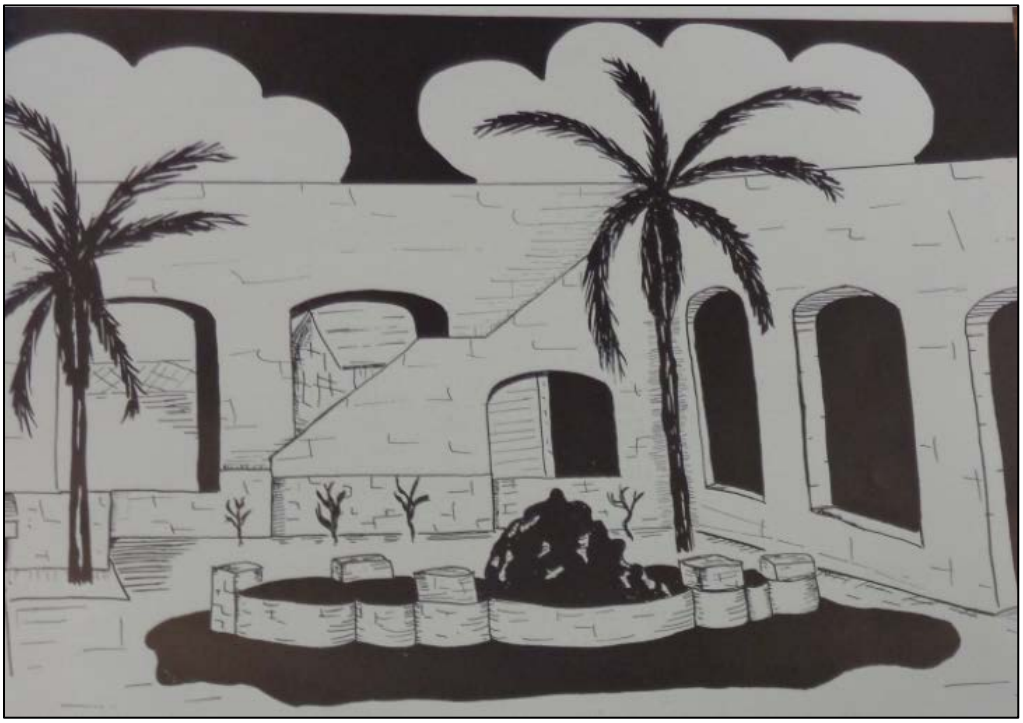


Figure 13. Drawing of the Lindberg Memorial Fountain (1950 RHS Yearbook)

Current Physical Description

Located near the northern end of the rear elevation of Classroom and Auditorium Building 1, the Lindbergh Memorial Fountain occupies the center of a rectangular quad enclosed by a covered walkway (Figures 14 to 17). The fountain has an elliptical shape and is covered by colorful enamel tiles (alteration). At the center of the fountain is a modern tiered concrete water fountain (alteration); however it does not currently contain any water. Surrounding the fountain is an original walkway connecting the west and east portions of the campus that has been covered with Spanish red tiles (alteration). The remainder of the quad is planted with grass and four original palm trees shade the east side of the fountain. Red benches are arranged in pairs along the perimeter of the courtyard.



Figure 14. Lindbergh Memorial Fountain, View Southwest (ESA 2016)



Figure 15. Lindbergh Memorial Fountain, Detail of Original Concrete with Inscription (ESA 2016)



Figure 16. Lindbergh Memorial Fountain, View Southwest (ESA 2016)



Figure 17. Lindbergh Memorial Fountain, View Northeast (ESA 2016)

Recommendations

ESA recommends that the District consider retention of the Lindbergh Memorial Fountain as part of any future redevelopment project. Despite the alterations made to the fountain during the 2005 restoration, the fountain retains integrity of design, association, feeling, location, and setting. The fountain remains centered within a grass quad and has some original landscape features. The fountain is a gathering and meeting place on campus, along with the Japanese Garden and front steps of the Classroom and Auditorium Building 1, and is featured within numerous yearbooks. Due to the warm California climate, the fountain was, and remains today, a gathering place for students. ESA also recommends that the District consider restoring the fountain to its historic appearance based on historical photographs. Although severe drought and/or maintenance issues may play a role in the discontinuance of the fountain's water feature, ESA recommends that the fountain function as intended and circulate water, if feasible. If retention and restoration are not feasible, then ESA recommends that the District consider creating a new fountain incorporating qualities of the original setting, to produce an intimate space from the geometric and formal configuration. Complete documentation of the current fountain should take place in any situation where it is not retained in-situ including drawings, photographs, and other documentation for archival records and/or a display within a school building.

Class Tiles

Historic Background and Current Physical Description

Little historical background information is available on the class tiles. A grouping of small class tiles (Figures 18 and 20) above a circular medallion is located on the rear (east) elevation of the Classroom and Auditorium Building 1 that commemorate the graduating classes of 1956 to 1969. Each tile presents the letter "R" and a date

of the class graduation. The concrete medallion appears to have the date of 1930 incorporated within the design. The tiles appear to be ceramic and are either glazed or painted to emphasize the content. Historically the class tiles were located on the arcade (now removed) that once encircled the Lindbergh Memorial Fountain and courtyard (Figure 19) and were relocated to their present location at an unknown date. It appears that some of the class tiles are missing.



Figure 18. Class Tiles on Rear Elevation of Classroom and Auditorium Building 1, View Northwest (ESA 2016)



Figure 19. Class Tiles on the Arcade Encircling the Lindbergh Memorial Fountain and Courtyard (1942 RHS Yearbook)

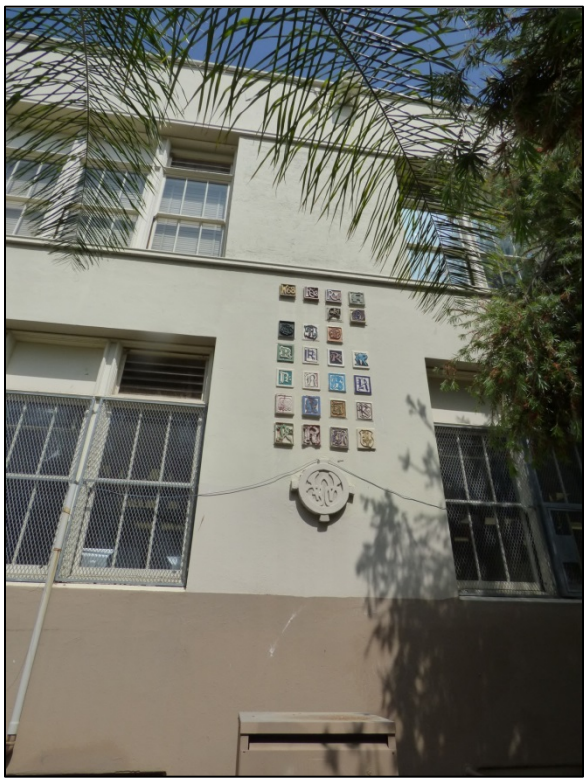


Figure 20. Class Tiles on Rear Elevation of Classroom and Auditorium Building 1, View Northwest (ESA 2016)

Recommendations

ESA recommends that the District consider keeping the tiles associated with the Lindbergh Memorial Fountain as part of any future redevelopment project, if feasible. If the fountain were to be relocated to another area of the Campus, then it is also recommended the tiles be relocated to a wall adjacent to the fountain. However, if not feasible, the class tiles could be relocated to another exterior wall or an interior space or stored in a safe location. In the event they are brought into an interior space, they could be curated as a display, complete with an interpretive exhibit. This option would allow alumni to be commemorated while also educating students, staff, and visitors on RHS history and traditions. Here, RHS could easily facilitate the continuance of its identity and connect with alumni.

Japanese Garden

Historic Background

In 1931, the RHS Japanese Club students, led by Shigeo Takayama president, created a 200 square foot Japanese garden at the northern side of the Edith Roosevelt House, a structure that once housed RHS social activities for the entire school (Figure 21).[9] A formal dedication ceremony, announced in the *Los Angeles Times*, was held on December 11, 1931. Prominent members of the Japanese community joined teachers and students:

[9] 1933 Roosevelt HS Yearbook, 86.

> *The Program included addresses by T. Satow, Japanese Consul K. Shimano, principal of the First Japanese-American Teacher's Institute, and Prof. Ken Nakazaws, University of Southern California, and musical numbers and dances by Miss Clara Suski, accompanied by Miss Mary Shibato, Tatsuko Nakajuma by Miss Tsuyako Mayeda, Miss Ruth Watanabe, and Miss Grace Sumida. Among the guests were Eizo Masuyama, representing the alumni of the Japanese Chamber of Commerce, Roy Yamadera, president of the Japanese Club of Roosevelt High School, Mrs. Elysabeth Louise Clark of the Board of Education, G. Millage Montgomery, principal of Roosevelt High School, and Mrs. C. H. Richmond, philanthropist.* [10]

Based on yearbook photographs from 1932 to 1936, the focal point of the garden appears to have been a wooden bridge arching over the pond known as the "Bridge of Sighs" – several students posed for pictures standing on this bridge (Figures 22 to 24). A concrete lantern placed on a large rock near the bridge symbolically provided light to the garden. The garden also included rocks, trees, shrubs, and a wood pavilion, and was enclosed by a fence that separated the space from the rest of the campus.



Figure 21. Approximate Location of Japanese Garden (see red circle) (RHS Yearbook, 1933)

[10] "Fete Marks High School Garden Gift: Students of Japanese Club Present Plot with Formal Ceremonies," *Los Angeles Times* (December 12, 1931).

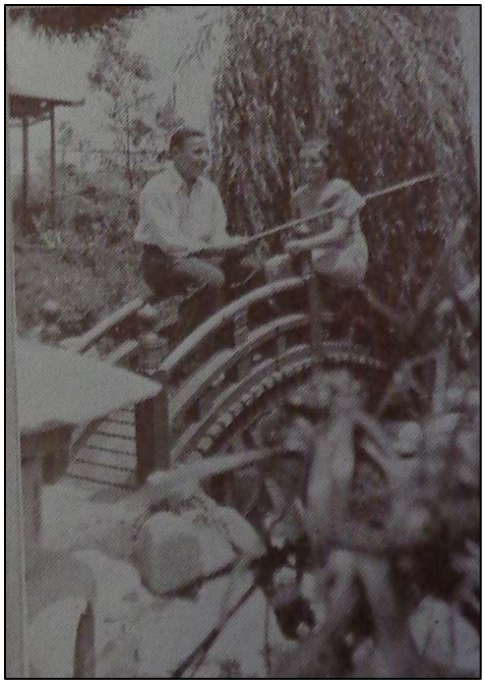


Figure 22. RHS Yearbook 1934



Figure 23. "A Quiet Spot in the Japanese Garden" Japanese Garden (1935 RHS Yearbook, p. 126)



Figure 24. "Bridge of Sighs," Japanese Garden (1935 RHS Yearbook, p. 125)

The Japanese garden appears to have been an important aspect of the RHS campus for students. A full page is dedicated to the Japanese Club in the 1933 yearbook and expressly mentions the role the club played in building a Japanese garden on campus.[11] In addition, the full-page spread notes that the club first started in 1928 and was involved in the school and local community. In reviewing RHS yearbooks since the garden's construction, the garden was an important backdrop that appears regularly in photographs. In the 1935 yearbook, for example, non-Japanese students are photographed sitting on the garden's bridge at least three times (see Figures 22 to 24).[12] Japanese cultural activities were important to RHS's student life and include "Japanese Belles", a picture of Japanese girls in traditional attire (Figures 25 and 25).[13]

[11] 1933 Roosevelt HS Yearbook, 86.
[12] 1935 Roosevelt HS Yearbook, 125-126.
[13] 1935 Roosevelt HS Yearbook, 124.



Figure 25. The Japanese Girls Standing in the Japanese Garden (1936 RHS Yearbook, p. 76)



Figure 26. "Japanese Belles" Standing in-front of the Edith Roosevelt House (1935 RHS Yearbook, p. 124)

Due to the political climate of World War II, the original garden was destroyed shortly after the bombing of Pearl Harbor (December 7, 1941) and Japanese American RHS students along with their families were sent to Japanese internment camps. The 1942 RHS yearbook does not include photographs of students in the garden. Instead, students and faculty were photographed around the Lindbergh Memorial Fountain.

The garden would later be reconstructed in 1996 by RHS students who learned about the history of the former garden while studying constitutional rights and the Japanese language.[14] Interested in bringing back the school's cultural history and making peace with past injustices, the students teamed with faculty and alumni, including Bruce Kaji, Jun Yamamoto and Bud Weber, to re-create the garden in front of the southern end of the Classroom and Auditorium Building 1's rear elevation.[15] Yosh Kuromiya volunteered to design the garden and contractor

[14] Bill Boyarsky, "A Tribute to Another Era – and to 'the Real L.A," *Los Angeles Times* June 26, 1996.
[15] RHS Yearbook (1997): 14-15.

Ko Endo supervised the work.[16] Upon completion of the garden, the school held a rededication ceremony (Figure 25) to celebrate the new garden, similar in some ways to a tree planting ceremony held (Figure 24) at the original garden in 1937. Photographs of the re-created garden show the garden as very simple with a handrail-less arched bridge over a dry creek bed (Figures 28 to 30).

ESA staff interviewed Bruce Kaji and Bud Weber regarding their educational experience at RHS and their memories of the garden. Bruce Kaji, a Japanese-American student, would have graduated in 1944 if he and his family were not interned at Manzanar in 1943.[17] Mr. Kaji remembered the original garden fondly, reminiscing that he was friends with students of all ethnicities and that while he was not a member of the Japanese Club, he did participate in music and sports. Regarding the recreation of the garden in 1996, he became involved through his affiliation with the Japanese American National Museum in Los Angeles. Bud Weber attended RHS at the same time as Mr. Kaji and also recounts his experiences fondly; reinforcing the idea that students got along easily with each other and service and/or participation in school activities and a commitment to the community were aspects of RHS in the early 1940s. [18]

In 2005 the garden was once again revitalized with a pond, arched bridge, and plantings. Through the generous donations of Shigeo Takayama, a former student, landscape contractor Haruo Yamashiro was hired to enhance the Garden.[19] At this time the garden was renamed the 'Garden of Peace.'



Figure 27. Planting Ceremony at the Original Japanese Garden, 1937 (*Images of America: Los Angeles's Boyle Heights*, p. 116)

[16] Boyarsky, Bill. "A Tribute to Another Era – and to 'the Real L.A." *Los Angeles Times*. June 26, 1996.
[17] ESA, *Interview with Bruce Kaji*, October 10, 2016
[18] ESA, *Interview with Bud Weber*, October 8, 2016
[19] Bronze Plaque in Garden.



Figure 28. Rededication Ceremony of the Japanese Garden in 1996, Pictured from Left to Right are Alumni Colonel M. Bud Weber and Bruce Kaji, Principal Henry Ronquillo, and Rev. Alfred Tsuyuki of Konko Church of Los Angeles
(*Images of America: Los Angeles's Boyle Heights*, p. 116)



Figure 29. Re-created Japanese Garden, Circa 1997 (1997 RHS Yearbook)



Figure 30. Re-created Japanese Garden, 1996
(Bill Boyarsky, "Honoring Another People in Another Era," *Los Angeles Times*, June 26, 1996.)

Current Physical Description

The present Japanese garden (Figures 31 to 36) is inspired by the original RHS garden, as well as traditional Japanese garden design. The focal point of the tiered garden is a 'natural' shaped koi pond with rock waterfall and arched wood bridge. The waterfall creates a pleasant background sound to the tranquil garden to appeal to all senses. Other features scattered within the garden include meandering concrete pathways, concrete lanterns, variety of rocks, paver stones, a concrete water basin, a vertical standing stone, and concrete bamboo-style edging. There are two monuments, a bronze plaque mounted on a rock (Figure 36) and the 'Garden of Peace' marble monument (Figure 31), located at entrances to the garden explaining the history and meaning of the garden. The garden's asymmetrical design offers organic views through the unpredictable growth of its plantings. There are many different types of plants include ferns, shrubbery, bamboo, and trees. A pine tree has been trained to arch over the pond.



Figure 31. Eastern Entrance to Japanese Garden, View North (ESA 2016)



Figure 32. Japanese Garden, View Northeast of the Bridge and Contemplation Area (ESA 2016)

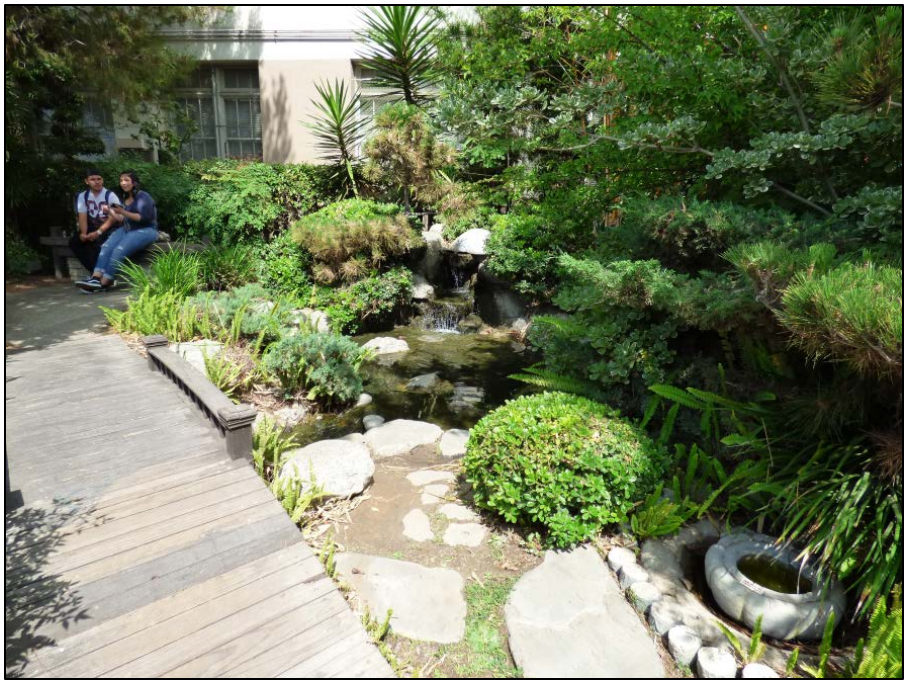


Figure 33. Japanese Garden, View Southwest of the Contemplation Area, Bridge, Waterfall and Water Basin (ESA 2016)



Figure 34. Pond, View North, Note Arched Pine Tree Over Pond (ESA 2016)



Figure 35. Southwest Corner of Japanese Garden Featuring Concrete Lanterns, View Southwest (ESA 2016)



Figure 36. Southern Entrance into Japanese Garden with Tall Vertical Stone and Monument, View Southeast (ESA 2016)

Recommendations

The Japanese garden is an important feature on the campus representing the cultural history of RHS and the broader Japanese American history of Boyle Heights and California, and current students continue to use the

garden. ESA recommends that the District consider retaining the Japanese garden as part of any future redevelopment plan, if feasible. It would be ideal if the garden remained in its current location and if its important features, including the 'natural' shaped pond, waterfall, concrete lanterns, arched bridge, a concrete basin, rocks, and various plantings, were retained. If relocation is necessary, ESA recommends that the District relocate the garden to an area of the campus that is easily accessible to students. Existing landscaping features, such as mature plantings, monuments, and other elements should be relocated and reused to the extent feasible There is archival information and historical photographs housed in the Japanese American National Museum archives and an excellent publication about Japanese gardens published by the NPS Manzanar National Historic Site, which could be consulted during a redevelopment plan to gather design concepts for a new garden.[20]

In the event that the Japanese Garden is not retained in its current form or location, ESA recommends that the District consider undertaking complete documentation of the Japanese Garden before relocation or removal. This documentation could include sketches, descriptions, photographs, and interviews and these materials should be kept as archival material on the school site. Furthermore, a new interpretive plaque should be included along with the old in order to present the full history of the Japanese Garden at Roosevelt and its cultural relevance today.

Central Quad and Gazebo

Historic Background and Current Physical Description

The central quad and gazebo was created after the campus expanded to the west and the Administration and Classroom Building 5 was constructed in 1969. The gazebo has a Division of the State Architect construction date of 1975.[21] Buildings 1, 2, 4 and 5 frame the central quad and gazebo. The quad is a formally designed space with clearly designated pathways and grassy areas with the focal point being a gazebo (Figure 37). Students use the quad during lunch time and as a central social space.

[20] Burton, Jeffery F. *Garden Management Plan: Gardens and Gardeners at Manzanar*. National Park Service, Manzanar National Historic Site, 2015. https://www.nps.gov/manz/learn/management/upload/Manzanar-Garden-Management-Plan-2015.pdf, accessed January 27, 2017.

[21] Johnson Favora, Roosevelt High School: Site Evaluation, Prepared for LAUSD Facilities Planning & Development (December 2010): 5.2.



Figure 37. Central Quad and Gazebo, View Southwest (ESA 2016)

Recommendations

ESA recommends that the District consider retention of large, open space for social interactions akin to the existing central quad as part of any future redevelopment project. If feasible, the gazebo could be relocated to a new space.

Benches

Historic Background and Current Physical Description

A collection of red benches dated 2005 are located throughout the RHS campus (Figures 38 and 39). Benches are located adjacent to the Lindbergh Memorial Fountain courtyard, in the courtyard between the East Classroom Building and the Industrial Arts Building, and in front of the Physical Education Building. The benches are generic and appear to be made of concrete. Three elements, however, provide decoration: two tiles that match the tiles on the Lindberg Memorial Fountain are on either side of the bench, a Rough Rider relief is centrally located along the back of the bench, and a commemorative plague surrounds the relief. An artist named Licari signed the Rough Rider reliefs. Plaques such as “donated by the Enriquez Family, 1962, '64, 66, 67” or “Ellis Paint Company, RSHBeautification.com” suggest the community sponsored the benches.



Figure 38. Red Bench in the Lindbergh Memorial Fountain Courtyard (ESA 2016)



Figure 39. Red Benches in the Lindbergh Memorial Fountain Courtyard (ESA 2016)

Recommendations

ESA recommends that the District consider retention and rehabilitation of the benches as part of any future redevelopment project. If not feasible, ESA recommends that the District consider relocating them to other courtyards on campus. Or, in the event of their removal, the plaques could be relocated either to a new outdoor setting or, as suggested for class tiles, relocated to an interior setting, complete with an interpretive display, or

stored in a safe location. This option would allow donors to be commemorated while also educating students, staff, and visitors on RHS history and community relationships. In the event of relocation, the donors and contributors should be contacted such that community relationships are maintained.

Murals

RHS has a long-standing history of student involvement with social issues affecting the community and education. The book *Critical Media Pedagogy: Teaching for Achievement in City School,* co-written by RHS teacher Jorge Lopez, states:

> *Roosevelt High has a long history of community engagement, demonstrating a culture of resistance that dates back to the 1940s and characterized by radical Jewish youth clubs, community organizing against the 1954 "Operation Wetback," the student walkouts of the late 1960s, and student's continuing involvement in both the Chicano movement and the immigrant rights struggle. Students have always been at the forefront of movements of resistance that address unjust wars and laws and overcrowded schools and demand ethic studies classes, educational justice and equitable school conditions, and an end to the criminalization of youth.*[22]

The author states student meetings would occur in classrooms during lunch or after school; however, not all meetings were held exclusively at RHS. During the 1960s walkouts, students from the Eastside would meet in a community space across the street from RHS, while other meetings would occur in classrooms or during lunch, or in community spaces, such as Primera Taza Café, Self-Help Graphics, Casa 101, Corazon del Pueblo, or InnerCity Struggle.[23]

The campus murals are powerful expressions of the RHS student social activism, culture, and community struggles. The Art for Revolutionary Teens Club (ART Club) was founded in 2009 by a small group of students who received a grant to paint a mural incorporating elements of the urban graffiti art style. Eventually the ART Club earned the financial support of the Salesian Boys and Girls Club and became a weekly club meeting where students would plan mural and oral history projects. In part, Mr. Lopez is responsible for the success of the afterschool art program through his relentless proposal and grant writing campaigns that would garner financial aid to support the program. Mr. Lopez also brought in the support of prominent community muralists, including Raul Gonzalez from Mictlan Murals and Wenceslao Quiroz, a former RHS student, who would help the club develop the social themes, iconography and designs of the murals.

Four exterior murals and one interior mural will be discussed further in this section, including the Harvey Milk Day of Service mural, three agricultural murals, and the Avenue of the Athletes mural.

[22] Ernest Morrell, Rudy Duena, and Veronica Garcia. *Critical Media Pedagogy: Teaching for Achievement in City Schools* (New York, NY: Teachers College Press, 2013): 135.
[23] Ibid, p. 135.

Historic Background and Physical Description

Harvey Milk Day of Service Mural

The Harvey Milk Day of Service mural (Figure 40) is painted on the north wall of the lobby in the Classroom and Auditorium Building 1. The mural wraps around the corners to the east and west walls. This mural project was led by prominent muralist Wenceslao Quiroz, along with the ART Club, Taking Action, Student Voices, and the Gay Straight Alliance. Painted in a street style and inspired by famous muralist Diego Rivera, the mural addresses the "community's history of struggle and resistance and empowers young people with images of youth protesting and engaging in direct action to secure ethnic studies and educational justice."[24] The mural includes images of the Mexican Revolution, the Zoot Suite riots, the 1968 walkouts, the student struggle for Chicano/a studies, and Harvey Milk. At the top center of the mural, above the display case, is Ramona, a Zapatista indigenous leader from Chiapas, Mexico who symbolizes mother earth. With her out-stretched arms, Ramona is shackled from her wrists and chains are connected to students protesting below her. The background is infilled with multi-colored dots representing protestors, some of whom are holding signs exclaiming 'Si Se Puede,' 'Arte es Vida,' 'Resist' and 'Knowledge of Self.' A photo of the mural taken shortly after completion shows an image of Harvey Milk was painted within the display case, but at the time of ESA's site visit, paper was covering this area (Figure 41). At the bottom of the east wall, the following is written 'Harvey Mike Day of Service = Roosevelt, CNMT, Ben Gertner, Principal" along with a list of organizations and donors. The mural is not signed by the artists involved with the work or dated (Figure 42).



Figure 40. Harvey Milk Day of Service Mural, View North (ESA 2016)

[24] Ibid, p. 141.



Figure 41. Mural after Completion (Harvey Milk Day of Services Mural Project, circa (Ernest Morrell, Rudy Duena, and Veronica Garcia. *Critical Media Pedagogy: Teaching for Achievement in City Schools, p. 142).*



Figure 42. Harvey Milk Day of Service Mural, View East (ESA 2016)

Agricultural Murals (3)

Mr. Lopez worked with local artist Raul Gonzalez, local artist Sonji Mictlan, and RHS students to create the murals on portable buildings 38 and 39 facing the planting beds in March 2012.[25] The mural on the south elevation of building 39 depicts a hummingbird flying over a surrealist agricultural landscape where the continental land masses are pulling away from earth (Figures 43 and 45). Hummingbirds and butterflies are imagery often depicted in Ms. Mictlan's work. While the mural on the north elevation of building 38 is more realistic; a contemporary Hispanic woman and Monarch butterfly tends to vegetable plots with a Mayan temple in the background (Figures 44 and 45). Both of these murals are not signed or dated.

The third mural (Figure 46) is located on the south elevation of portable building 38. The focal point is two pairs of hands dropping seeds in an open book. The left background shows a traditional agricultural landscape with workers toiling in the fields contrasted against the right background showing Downtown Los Angeles amidst the protests of students and a young man carrying balancing the weight of culture on his shoulders. This mural is signed by the following artists at the bottom left corner (Figure 47): Jorge Lopez, Basilio Carmona, Michael Estrada, Now Ramos, Alexis Resendiz, Keyla Ramos, and Claudia Torres. The bottom right corner is dated 2013 and listing the following organizations and artists (Figure 48): Cornerstone Theater Food Justice Class, David Hernandez, Cesar Ramos, Brian Mora, Saul Rosas, Francisco "Enuf" Garcia.



Figure 43. Located on South Elevation of Building 39 (ESA 2016)

[25] "A New Arts Movement Seeks to Preserve Storied Murals and Paint New Ones, *Boyle Heights Beat*, http://www.boyleheightsbeat.com/a-new-arts-movement-seeks-to-preserve-storied-murals-and-paint-new-ones-1106, accessed January 30, 2017.

Artist Curriculum Vitae, Sonji Art, https://sonjiart.wordpress.com/about-urban-butterfly/artist-curriculum-vitae/, accessed January 30, 2017.



Figure 44. Located on North Elevation of Building 38 (ESA 2016)



Figure 45. Agricultural Murals Facing Each Other on Buildings 38 and 39 (ESA 2016)



Figure 46. Located on South Elevation of Building 38 (ESA 2016)



Figure 47. List of Artists at Bottom Left (ESA 2016)



Figure 48. List of Artist at Bootom Right (ESA 2016)

Avenue of the Athletes

Avenue of the Athletes mural by Carlos Callejo (class of 1969), Alvaro Alvares (class of 1979) and Mike Moline (class of 1979) is located just north of the entrance steps to the Auditorium and Classroom Building on the north elevation of portable building 39. ESA interviewed Carlos Callejo regarding his participation in creating the Avenue of the Athletes mural (Figure 49).[26] Mr. Callejo attended RHS and participated in the Chicano Liberation Movement, including the 1968 East Los Angeles walk-outs at RHS. Mr. Callejo, now a renowned muralist, was asked to create a mural about RHS athletes, which portrays students from the school that went on to become professional athletes. Mr. Callejo explained that the project was a pleasure to work on and he expressed that he still feels a connection to RHS and the Boyle Heights community.

The composition of the Avenue of the Athletes mural is divided into colorful triangles. The middle triangle depicts the Los Angeles Memorial Coliseum and is flanked by the RHS school mascots in circles. At the forefront of the mural are a collection of prominent athletes and in the background are other athletes actively engaging in their sports. Each athlete is identified by name. The mural's artists are identified in the bottom right hand corner of the mural (Figure 50). The mural is not dated.

In front of the mural is a bronze plaque (Figure 51) naming the area the 'Avenue of the Athletes' and providing acknowledgements to individuals and companies involved with the beautification project.

[26] ESA, *Interview with Carlos Callejo*, October 7, 2016.



Figure 49. Avenue of the Athletes Mural, View South (ESA 2016)

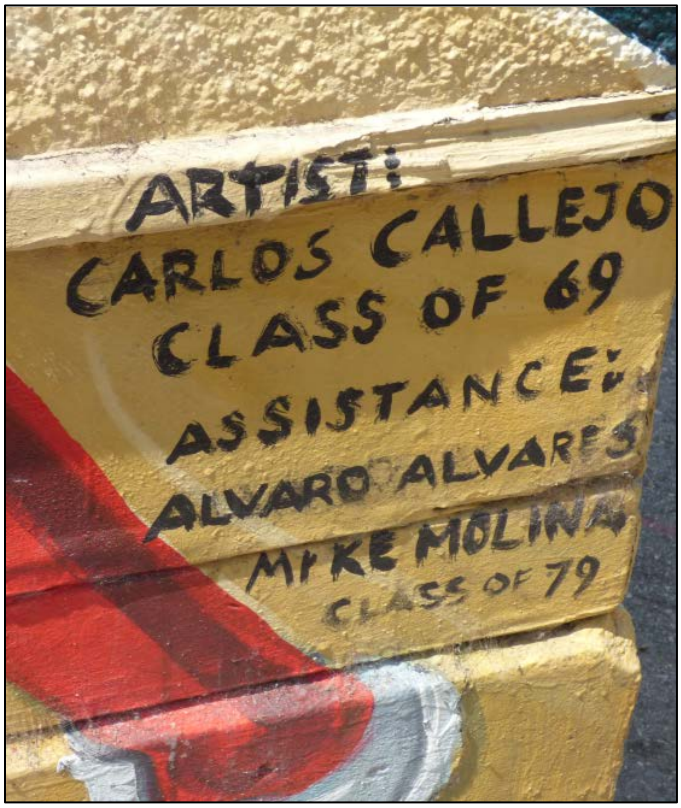


Figure 50. Artists who Created the Avenue of the Atheletes Mural, Bottom Righ Corner (ESA 2016)

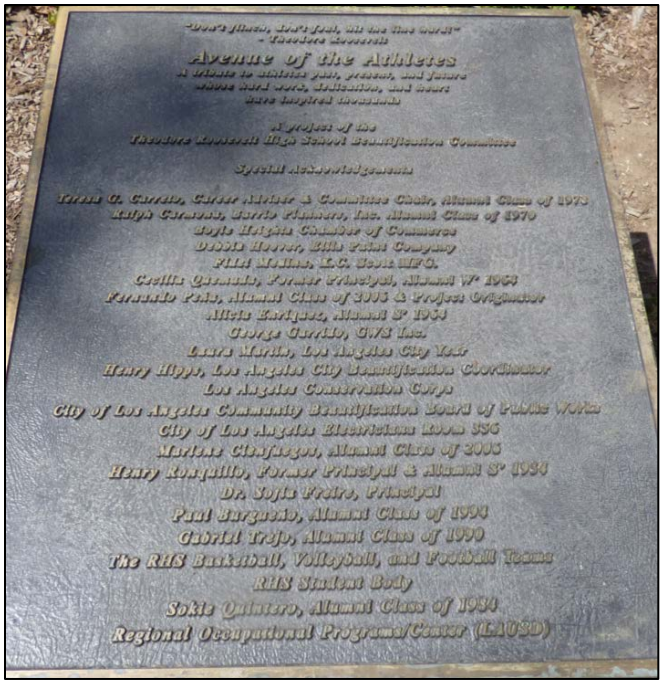


Figure 51. Bronze Plaque in Front of Mural (ESA 2016)

Recommendations

If the District is unable to retain the murals in a future redevelopment project, ESA recommends that the murals be documented and if possible, salvaged and relocated. If the murals cannot be removed from the portable buildings or from the interior wall of the Classroom and Auditorium Building 1, ESA recommends that the District follow the applicable District and City policy on mural preservation and guidelines set forth under the California Art Preservation Act, provided below. The school could engage students in creating an interpretive exhibit or a documentary of the murals through the use of videos and oral interviews of current students, alumni, faculty, and current students. Because the murals are associated with the culture of the school and neighborhood, ESA also recommends that the District consider including areas where student, faculty and alumni can create new murals as part of future redevelopment projects.

California Art Preservation Act

Described in California Civil Code §987, the California Art Preservation Act protects the artist's moral rights of integrity and paternity and contains specific provisions covering the right of integrity for art incorporated into buildings. Passed in 1979, The California Art Preservation Act provides protection for "fine art" which includes paintings, murals, sculptures, drawings or works of art in glass of "recognized quality." These rights exist for fifty years past the artist's death.[27]

Special accommodations are provided for integrity rights for art attached to buildings. If the art cannot be removed from the building without damage to the art, the owner is free from liability for damage caused by such removal, unless the owner waives the right of removal in an instrument in writing signed by the building owner.

[27] California Civil Code §987, http://leginfo.ca.gov/cgi-bin/displaycode?section=civ&group=00001-01000&file=980-989, accessed September 30, 2013.

If this right is waived and the instrument is properly recorded, then subsequent building owners are bound by the writing. Art which can be removed from a building without damage to the art is protected by the statute. In the latter circumstance, if the owner has made a diligent attempt to notify the artist, without success, or if after receiving such notice, the artist fails to remove or pay for the art's removal within ninety days, then the moral rights protections do not apply.

City of Los Angeles Mural Ordinance

On October 12, 2013, the City of Los Angeles adopted a Mural Ordinance No. 182706 to allow for the creation of new Original Art Murals on private property.[28] The City's Department of Cultural Affairs administers the Citywide Mural Program (http://culturela.org/murals/) which seeks to establish a comprehensive network of mural activity and engagement by muralists, property owners, community stakeholders, educators, technicians, technologists, and preservationists in an effort to stimulate Los Angeles' mural resurgence.

Conclusion

In this Memorandum, ESA analyzed the cultural significance of seven features and spaces on the RHS campus: Classroom and Auditorium Building 1 Entrance Steps, Lindberg Memorial Fountain and Courtyard, Class Tiles, Japanese Garden, Central Quad and Gazebo, Benches, and Murals. Included in the following bullet points are a summary of the recommendations for each of the seven features and spaces:

- Entrance Steps: ESA recommends that the District consider the incorporation of the entrance steps as part of any future redevelopment plan, if feasible. In particular, the District should consider incorporating the historical design features of the steps, including the wide entrance, shallow concrete stairs, two deep landings, and pedestals in a new building.

- Lindberg Memorial Fountain: ESA recommends that the District consider retention and restoration of the fountain to its historic appearance as part of any future redevelopment project. If retention and restoration are not feasible, ESA recommends that the District consider creating a new fountain incorporating qualities of the original setting, in addition to the documentation of the current fountain.

- Class Tiles: ESA recommends that the District consider keeping the class tiles associated with the Lindbergh Memorial Fountain as part of any future redevelopment project, if possible. However, if not feasible, the class tiles could be relocated to another exterior wall or an interior space along with documentation and an interpretive exhibit or stored in a safe location.

- Japanese Garden: ESA recommends that the District consider retaining the Japanese garden in-situ as part of any future redevelopment plan, if feasible. If retention is not feasible, ESA recommends that the District document the garden, create an interpretive exhibit, and relocate the mature plantings, monuments, and features to a new site on campus to create a similar garden.

[28] http://planning.lacity.org/Code_Studies/Misc/Adop_MuralOrd182706.pdf

- Central Quad: ESA recommends that the District consider retention of large, open space for social interactions akin to the existing central quad as part of any future redevelopment project. If feasible, the gazebo could be relocated to a new space.

- Benches: ESA recommends that the District consider retention and rehabilitation of the benches as part of any future redevelopment project, if feasible. If impractical, ESA recommends that the District consider relocating the benches or, in the event of their removal, the plaques could be relocated either to a new outdoor setting or, as suggested for class tiles, relocated to an interior setting, complete with an interpretive display, or stored in a safe location.

- Murals: If the District is unable to retain the murals in a future redevelopment project, ESA recommends that the murals be documented and if possible, salvaged and relocated. However, if the murals cannot be salvaged, ESA recommends that the District follow the applicable District and City policy on mural preservation and guidelines set forth under the California Art Preservation Act. Lastly, ESA also recommends that a future redevelopment project consider including areas where student, faculty and alumni can create new murals to continue the tradition on campus.

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Oral History with Bud Weber, interviewed by Margaret Roderick, Intern Architectural Historian, ESA, October 8, 2016

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Attachment A – Oral Interviews

Interviewees

1. Bruce Kaji
2. Bud Weber
3. Carlos Callejo, muralist for Avenue of the athletes

Questions

1. What is your relationship to Roosevelt HS?
2. In your option, what are the school's most memorable spaces? Or what do you remember best about your time at RHS?
3. Did you spend a lot of time in the garden or X?/Where did you spend your free time?
4. What features of the garden or X do you think are the most important and why?
    a. Material?
    b. Aesthetic?
    c. Cultural?
5. What does the garden or X mean to you?
    a. And what do you think it meant to other students at the time? How about now?
6. Tell me about your role in designing/creating/reconstructing the garden or X. Aka…how did you get involved and what was your role?
    a. What was the experience like?
    b. What issues or conflicts presented and how were they resolved? Any opposition?
7. Have you been involved in the school in other ways…how so?
8. What do you hope for the future of the garden or x?

Response Summaries

Bruce Kaji (Interviewed 10/10/2016)

Kaji, Roosevelt HS Class of 1944, lived at 470 S. Mott Street which was just across from the Japanese Garden. He was familiar with the garden more so from this rather than spending time there as a student. Kaji played sports and was involved in music while attending Roosevelt HS. He was not a member of the Japanese Club but participated in various school activities.

Kaji explained that he was friends with many students of various ethnic backgrounds and his being Japanese-American was not an issue among the student body. Along with this he discussed the neighborhood as having a high Jewish population. Also discussed the Boyle Heights community and what it was like growing up there in the 1930s-1940s. He also said he had a good experience at Roosevelt HS.

Family removed from Boyle Heights to Manzinar

Later in life he got involved in the Japanese American Museum in Downtown Los Angeles and also got involved in the post-WWII Japanese Garden project at Roosevelt HS. Memory of the garden and its function were and are important. Kaji mentioned that they hired Japanese gardeners to design the garden. After several discussions they decided on the garden plan that was implemented.

He would like to see the Japanese Garden preserved in the future because it has a long history.

Bud Weber (Interviewed 10/8/2016)

Weber, class of 1944, was involved in many activities in the community and at Roosevelt HS including Student Body President and sports such as football, tennis, and gymnastics. He also worked at a nearby playground as an assistant playground director. Like Kaji, he recalls his time at Roosevelt HS fondly.

Weber was drafted into WWII.

Weber became a volunteer at the Japanese-American Museum and worked with a principal of Roosevelt to ensure that all students affected by WWII who were unable to obtain their High School Diploma (Japanese and those drafted) in the 1940s received it later in life through various ceremonies.

Weber did not seem to remember much about the Japanese Garden but did mention that his time at Roosevelt HS was the best in his mind. He feels that the school has changed quite a bit and would like to see it returned to its former glory.

Carlos Callejo (Interviewed 10/7/2016)

Callejo, class of 1969, also recalls his time at Roosevelt HS fondly. He discussed how it was an exciting time to be a student at Roosevelt HS in Boyle Heights in the late 1960s and that his experiences there have a very important role in the development of his character. He participated in the 1968 Walk-Out where Chicano students protested against their poor education, etc. He mentioned that he hung out in the lunch area.

There is a group of alum from 1968-1972 that have strong connections with one another and, while he hadn't participated in other school-related activities since graduation, he did/does keep in contact with this group. Since graduation he has become a well-known muralist. He returned to Los Angeles about seven (7) years ago and was asked to participate in the athletic mural. He indicated the subject matter was given to him but it was up to him to work out the mural visually. There was a small budget so he had to research and paint at the same time, rather than research and plan, then paint. Despite this, he said it was a pleasure to work on the project.

He said he would like to see more public art at Roosevelt HS in the future and that new generations should be able to impart their experiences, too. He also indicated that he appreciated the older architecture of the school and that the sensitivity to architecture is an aspect of mural painting such that the muralist must consider the building as not a blank canvas.

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June 20, 2017

Jessica Kirchner Flores
Impact Sciences
28 North Marengo Avenue
Pasadena, California 91101

Draft Supplemental Historic Resource Evaluation Report for Roosevelt Senior High School, Los Angeles, Los Angeles County, California

Dear Ms. Flores:

This letter is a Supplemental Historic Resource Evaluation Report (HRER) of the historical significance of the Roosevelt Senior High School (SH) campus, a Los Angeles Unified School District (LAUSD) school located at 456 South Mathews Street in the Boyle Heights neighborhood of Los Angeles, Los Angeles County, California. ASM Affiliates, Inc. (ASM) prepared this evaluation in advance of a comprehensive modernization project at the campus. Contained in this letter are the results of ASM's findings regarding the association of Roosevelt SH with significant themes and events in Latino history. The evaluation is limited to the school's eligibility for listing in the National Register of Historic Places (NRHP) under Criteria A and B and the California Register of Historical Resources (CRHR) under Criteria 1 and 2, and as a California Environmental Quality Act (CEQA) historical resource. The evaluation was conducted in conformance with NRHP guidance on conducting historic building evaluations (specifically NRHP Bulletin *How to Apply the National Register Criteria for Evaluation* [1998]) and the California Office of Historic Preservation's (SHPO) *Instructions for Recording Historical Resources 1995, with Status Codes updated 2003*, Technical Assistance Series #7 *How to Nominate a Resource to the California Register of Historical Resources,* and CEQA.

EXECUTIVE SUMMARY

The approximately 22.7-acre Roosevelt SH campus is bounded by East 4th Street on the northeast, Mott Street on the southeast, East 6th Street on the southwest, and South Mathews Street on the northwest. Hollenbeck Middle School occupies the parcel across East 6th Street. The remainder of the surrounding neighborhood is primarily a mix of single- and multiple-family residential properties, with a scattering of small commercial properties on East 6th Street. The parcel (APN 5185-004-929) is located within the Boyle Heights Community Plan Area (CPA) of the City of Los Angeles (Figure 1).

This report considers the school's eligibility for listing in the NRHP and the CRHR under Criteria A/1 and B/2, and as a CEQA historical resource. Evaluation was guided by the *LAUSD Historic Context Statement, 1870–1969*, specifically the theme of *LAUSD and the Civil Rights Movement, 1954-1980* (LAUSD 2014), and the *SurveyLA Latino Los Angeles Historic Context Statement* (GPA and Nicolaides 2015), under the themes of *Education 1930–1980* and *The Civil Rights Movement, 1920–1980.* Particular attention was paid to the role of Roosevelt SH, along with four other East and Central Los Angeles (L.A.) LAUSD high

schools, in the 1968 student walkouts (known as "Blowouts"), which were an important early activity in the Chicano civil rights movement.[1]

A prior HRER, prepared by PCR in 2015, recommended Roosevelt SH not eligible as a historical resource under any criteria. LAUSD determined that the prior evaluation did not adequately consider the school's historical association within the *LAUSD Historic Context Statement, 1870–1969* and the *SurveyLA Latino Los Angeles Historic Context Statement* (GPA and Nicolaides 2015). This supplemental evaluation addresses those potential historical associations, relevant to eligibility under Criteria A/1 and B/2.

The 2014 SurveyLA field survey of the Boyle Heights CPA found the Roosevelt SH campus to be potentially eligible as a historic district under Criteria A/1, for its association with the Chicano civil rights movement in 1968, and under Criteria C/3, specifying that only two buildings that date to the 1930s were considered (Architectural Resources Group 2014a).

After careful consideration of the historical significance of the 1968 East L.A. high school Blowouts within the context of Latino civil rights and the activities that took place on the Roosevelt SH campus, ASM recommends Roosevelt SH eligible as a historic district under Criteria A/1. ASM also recommends Roosevelt SH eligible as a historic district under Criteria B/2 for its association with Salvatore ("Sal") Castro, who played a central role in the 1968 protests at Roosevelt and four other East L.A. high schools. Castro became a symbol of the Blowouts, and was the only teacher to participate.

INTRODUCTION

This assessment was prepared by ASM to determine the historical significance of the Roosevelt SH campus, specifically as it relates to the student protests of 1968 and 1970 (Criteria A/1) and to important persons associated with those events (Criteria B/2). In reaching the conclusions presented in this report, ASM also considered the relative historical significance of four other LAUSD high schools associated with the student walkouts, also known as "Blowouts": Lincoln, Garfield, Belmont, and Wilson. The results of this analysis will assist LAUSD in determining whether the campus should be considered as historically significant for planning purposes in compliance with CEQA. This property is not listed in the NRHP or the CRHR. This report expands on SurveyLA's identification of the school as a potential historic district under Criteria A/1 for its association with the 1968 Chicano civil rights movement (Architectural Resources Group 2014b:117).

The report contains the following sections: methodology, a summary of previous evaluations, historic overview specific to Chicano events and the Civil Rights Movement at Roosevelt SH and other LAUSD high schools, survey findings, eligibility criteria, significance evaluation of Roosevelt SH, and references. Also included are figures (Attachment A), suggestions for an interpretative plan (Attachment B), and a more comprehensive bibliography of readings and sources relating to civil rights in LAUSD schools (Attachment C).

Following Escobar's (1993) definition, in this report, the term Chicano is used to identify people involved in political action, in other words, people in the Chicano movement. The terms Mexican and Mexican-American generally signify people of Mexican descent who are not specifically part of the movement. Latino refers to a broader group comprising any person of Latin American descent who lives in the United States.

METHODOLOGY

To begin this evaluation, ASM conducted background research into the Blowouts and the Roosevelt SH campus, concentrating on the Chicano civil rights activities in 1968 and 1970. Sources included databases of historic newspapers such as the *Los Angeles Times* and *La Raza*, Los Angeles County Assessor's maps, historic photographs, documentary and fictionalized video accounts of the Chicano civil rights movement at schools in East Los Angeles, and historic aerial photographs. Historic architectural drawings and construction documents provided by the LAUSD Office of Environmental Health and Safety (OEHS) were reviewed prior to visiting the campus. A number of academic and professional sources were consulted, including PhD dissertations and articles from scholarly periodicals, and a number of books on the subject of the Blowouts were consulted (titles are listed in Attachment C: Bibliography). Attempts were made to contact teachers and students who were associated with Roosevelt SH during the walkouts, including teachers who taught students about the Blowouts in subsequent years. Roosevelt SH yearbooks from 1968 through 1971 held at the Roosevelt SH Library were searched for information about the campus at the time of the protests. Los Angeles Board of Education minutes available at the UCLA Special Collections were examined for pertinent information. A site survey was conducted by ASM Architectural Historians Shannon Davis and Marilyn Novell on February 9, 2017, to document the campus through photographs and extensive notes. Particular attention was paid during the survey to identifying on-campus sites associated with the 1968 walkouts, based on background research.

ASM carefully considered the Roosevelt SH campus as potentially significant under NRHP and CRHR, for its association with important events in Chicano history (Criteria A/1) and important people (Criteria B/2) associated with the 1968 walkouts at Roosevelt and other LAUSD high schools, as well as protest activities that continued at Roosevelt through 1970.

ASM reviewed the SurveyLA findings for the Boyle Heights CPA and other prior reports, including a preliminary historic resource evaluation report. ASM referred to the *LAUSD Historic Context Statement, 1870-1969* (LAUSD 2014) for guidance in the evaluation of the Roosevelt SH campus as a historic district within the context of LAUSD's nearly 800 campuses and the *Latino Los Angeles Historic Context Statement* prepared for City of Los Angeles Department of City Planning (GPA and Nicolaides 2015).

PREVIOUS EVALUATIONS

ASM reviewed the SurveyLA findings for the Boyle Heights CPA (Architectural Resources Group 2014a) and other prior reports, including a preliminary HRER for Roosevelt SH (PCR 2015).

SurveyLA

The SurveyLA report for the Boyle Heights CPA found Roosevelt SH to be an excellent example of an LAUSD high school under Criteria A/1 and C/3. SurveyLA recommended the school as significant under Criteria A/1 for its association with the East L.A. Blowouts. The period of significance for this context is 1968, the year that the Blowouts occurred. The campus was found to be a significant example of institutional development of high schools associated with the Chicano civil rights movement under the theme of *Education and Ethnic/Cultural Associations, 1876-1980.* According to the Boyle Heights CPA survey report, "the walkouts represent a pivotal moment in the Chicano civil rights movement of the 1960s and 1970s" (Architectural Resources Group 2014b:114-117).

The SurveyLA report also recommended the campus eligible under Criteria C/3. According to the report:

> the school represents LAUSD campus planning and design concepts from the post-1933 Long Beach *Earthquake* period of school construction, with a period of significance of

> 1936, when the campus was reconstructed to its present configuration. Although multiple phases of development are represented on the campus, the evaluation pertains only to the former administration building and a classroom building that date to the 1930s [Building 1 and Building 7]. The classroom building is the work of noted Los Angeles architect Sumner Spaulding [Architectural Resources Group 2014b:114-117].

Although Roosevelt SH was not considered for eligibility under Criteria B/2, the SurveyLA report mentions several significant people who graduated from Roosevelt over the course of the years, including former Los Angeles mayor Antonio Villaraigosa.

In the SurveyLA *Latino Los Angeles Historic Context Statement*, prepared after the Boyle Heights survey was conducted, the student walkouts of 1968 are cited as an important early activity of the growing Chicano movement (also known as the Chicano Civil Rights Movement or El Movimiento) (GPA and Nicolaides 2015:59-60).

Preliminary Historic Resource Evaluation Report

The *Preliminary Historic Resource Evaluation Report for Theodore Roosevelt Senior High School* (PCR 2015) considered Roosevelt HS under several LAUSD themes: *Progressive Education Movement: Pre-1933 Long Beach Earthquake School Plants (1910-1933)*, *Post-1933 Long Beach Earthquake School Plants (1933-1945)*, and *Educating the Baby Boom—The Postwar Modern, Functionalist School Plant (1945-1969)*. The evaluation found the campus not eligible under any of these themes because of lack of integrity. However, the discussion is restricted to the school's significance as it relates to architecture (Criteria C/3), whereas these themes are clearly defined in the LAUSD Historic Context Statement (LAUSD 2014) as associated with significant events (Criteria A/1).

Under Criteria A/1, the PCR report finds Roosevelt SH not eligible as it relates to activities by the Chicano Liberation Front (CLF), which "do not appear to have been a significant event that shaped the history of the campus or the pursuits of the terrorist group" (PCR 2015:10). This report appears to disregard the 1968 Blowouts, in which the CLF could not have participated because the group was not formed until 1970 or 1971. A self-described revolutionary organization, the group claimed responsibility for numerous bombings in Southern California, including those at Roosevelt SH in 1970 (Notes from Aztlán 2014).

Under Criteria B/2, the PCR report finds Roosevelt SH not eligible because it "is not identified with the productive life of any individual District teachers, principals, administrators, students, or any other persons important in our past" (PCR 2015:10).

Regardless, the report is valuable for its detailed history of the expansion and construction of the campus and for its descriptions of the campus and the individual buildings.

BACKGROUND AND HISTORY OF THE EAST LOS ANGELES BLOWOUTS

The SurveyLA *Latino Los Angeles Historic Context Statement* describes the roots of segregation and discrimination against Mexican students in Los Angeles public schools in the Progressive era, when "Americanization" was the goal in educating immigrants (GPA and Nicolaides 2015:43-44). Mexican-Americans at the time had a similar attitude, and in 1929, the oldest Latino civil rights group in the United States (U.S.), the League of United Latin American Citizens (LULAC), was founded with a mission of empowering Mexican-Americans through assimilation. A combination of good intentions and prejudice against Mexicans over decades led to the placement of Mexican students in vocational rather than academic programs and resulted in widespread segregation in the schools. These conditions had become institutionalized by the 1940s, setting the stage for the 1954 landmark *Brown v. Board of Education* decision

that officially ended school segregation, although factors such as ethnically separate neighborhoods, language, and economic status contributed to a continuation of de facto segregation (GPA and Nicolaides 2015:52-56).

Although it is difficult to trace the East L.A. Blowouts to one particular group or person, the Mexican American Youth Leadership Conferences for high school students held at Camp Hess Kramer were certainly a contributing factor. Hundreds of Mexican-American student leaders gathered at the annual conferences, which were intended to promote citizenship but also became forums for discussing problems at the schools (Tejeda 2011:38). In 1963, Sal Castro had just begun his teaching career at Belmont High and volunteered at the conference. There he found hundreds of students from all over L.A. County who all expressed similar grievances about poor conditions in the schools and lack of opportunity for Mexican-American students. At the time, dropout rates for Mexican-American students in 1968 in East L.A. were among the highest in the nation: 45 percent at Roosevelt, 57 percent at Garfield, 39 percent at Lincoln, and 35 percent at Belmont. Castro described the conferences and the 1968 Blowouts as "one big package" (Ochoa 2010). The low rumble of unrest became clearly audible when Castro came across the infamous article in *Time* magazine called "Minorities: Pocho's Progress," which described "the bleak barrios" of East L.A. as full of "rollicking cantinas with the reek of cheap red wine and greasy taco stands and the rat-tat-tat of low-riding cars down the avenue" (Time 1967). Castro was enraged that his community and people were viewed in that way and began organizing meetings with students from Lincoln, Wilson, Roosevelt, and a few other schools. This loose organization eventually led to the 1968 Blowouts (Ochoa 2010).[2]

Under this cloud of unrest, in the fall before the Blowouts took place, Castro was teaching at Lincoln High. Students there told him they wanted to walk out in protest and asked for his help. "Don't walk out," Castro advised them, "organize." A Blowout Committee was formed at four East L.A. schools (Roosevelt, Lincoln, Garfield, and Wilson), and another committee included students from all four schools. Belmont High was not among the original four schools that organized the Blowouts. Belmont had a lower percentage of Mexican-American students, but they formed their own Blowout Committee soon after and walked out on March 8, along with the other schools (Torgerson 1968). The result was what some called the "Mexican-American revolution of 1968." In the largest chain of events of its kind, for a week and a half students, parents, activists, and teachers participated in walkouts and demonstrations, made speeches, and held sit-ins. Anxious officials responded by calling in law-enforcement and holding emergency sessions of the Board of Education (Torgerson 1968).

Heeding Castro's advice, students had taken their grievances to the Board before organizing the walkouts. The Board invited them to speak at the upcoming meeting, but the students notified Board member Julian Nava of their intention to walk out of school and instead requested that Board members meet with them the following morning at a neutral location—either Hazard Park or adjacent to a nearby school district office (Board 1968a). Nava, the only Mexican-American on the Board, played an important role in this meeting. He introduced the students' list of demands, a Brown Berets pamphlet,[3] and an anti-walkout flyer by a Mexican-American student organization with a headline reading "NO MORNING WALKOUT!!!" The documents illustrated a lack of unity among the Mexican-American students regarding the walkouts (Sosa 2013:120).

[2] The book co-authored by Sal Castro, *Blowout! Sal Castro & the Chicano Struggle for Educational Justice* (García and Castro 2011), provides a detailed, first-hand chronology and description of the Blowouts. The Edward James Olmos–directed film "Walkout" was based on this book.

[3] The Brown Berets were an organized group of young Chicano students, many of them college students, who were self-proclaimed radical activists who espoused "Brown Power." They participated in the organization of the walkouts and in some of the protests. They were seen by some as agitators who were responsible for the Blowouts (Torgerson 1968).

The first round of Blowouts took place at five LAUSD schools in East L.A. and near downtown. Roosevelt, as well as the other high schools that participated in the first round of protests—Lincoln, Garfield, Belmont, and Wilson—had predominately Mexican-American student populations (80 to 82 percent at Roosevelt) (Reich 1968). Preceding the planned Blowouts, on March 1, 1968, approximately 500 student protesters walked out of Wilson High in a spontaneous reaction to the cancellation of a school play that was considered inappropriate.[4] In solidarity, the central Blowout Committee swiftly called for walkouts at the remaining schools. Then, on Tuesday, March 5, the first organized "official" walkouts took place simultaneously at Garfield, Roosevelt, and Lincoln high schools.

At first, school and police officials did not know how to respond to the walkouts. At Lincoln High, administrators allowed the students to leave the school grounds peacefully, and police escorted them to a nearby park where they held rallies. When the walkouts began to spread to other schools, officials from the school district and the Los Angeles Police Department (LAPD) took a harder line. At Roosevelt High on March 5, administrators locked the gates that surrounded the school to prevent striking students from leaving, and LAPD squad cars massed around the campus to intimidate the strikers (Escobar 1993:1495).

On Wednesday, March 6, students at Roosevelt walked out again and gathered outside the school on 4th Street and on Mott Street (Figures 2 and 3). At about 2 p.m., police broke up the groups of students and took several into custody. Two days later, when Roosevelt principal Thomas C. Dyer heard students discussing whether or not to walk out, he invited them to attend an assembly in the school auditorium. At the assembly, he emphasized restraint in the protests and pledged that there would be no disciplinary action as long as there was no violence. After the assembly, Dyer decided to dismiss school early and enlisted 10 or 12 teachers to escort students to exits where they would not have to cross police lines. Meanwhile, students were coming up to Dyer to report on ongoing violence against Roosevelt students. Although Dyer believed that some of the reports were exaggerated, he later stated he thought both the police and the students had overreacted (Reich 1968).

Other reports of the events vary from the account provided by Dyer. According to reports to the Board, officials alleged that students at Roosevelt left classes at the urging of outsiders, including members of the Brown Berets. Another account adds that Victoria Castro, a college student who was formerly at Roosevelt, attached her car to the locked gate in the chain-link fence and pulled it open, allowing the students out in the street (1968 Student Walkout n.d.). The crowd walked to Evergreen Park and returned to the school to urge other students to leave classes, whereupon the crowd assembled on the sidewalks outside the school. The students purportedly began hurling objects at passing motorists. The police arrived and declared an unlawful assembly, attempting to clear the sidewalks and break up the crowd. Violence reportedly ensued, and a police officer was hospitalized. The police took numerous youths into custody and placed a 15-year-old under arrest in connection with the injured officer. The administration dismissed classes, and the student demonstrators soon left (Sosa 2013:119).

On March 7, Belmont students walked out. Later that day, a large crowd began to assemble at the Board meeting Figures 4 and 5). The group included African American students, parents, community organizers, and Chicano students and activists from East L.A. Although African American students at Jefferson High in South-Central L.A. were simultaneously protesting, they took a different approach than the Chicanos. The African American students presented only four demands, whereas the East L.A. students presented many more. The East L.A. students also had to contend with dissent from other students within the school as well as the community. Although the Jefferson students appeared to be walking out in solidarity with the

[4] Wilson High was sometimes omitted from lists of the first schools to participate in the protests, perhaps because the walkout was spontaneous in that case. (The Chicano newsletter *La Raza* [March 31, 1968] shows photos of student protests at Garfield, Roosevelt, Belmont, and Lincoln.) Belmont was sometimes omitted from the earliest descriptions of the events, arguably because the school came on board with its own Blowout Committee a little later than the others. Regardless, essentially there were five schools involved in the initial Blowouts (a *Los Angeles Times* map from March 12 shows all five).

Mexican-American students, these differences resulted in separate demonstrations and distinctly different calls for change (Sosa 2013:113) (Figures 6–11).

On Friday, March 8, more than 1,000 students boycotted classes for the fourth straight day at Roosevelt, Garfield, Lincoln, and Wilson high schools. The same day, teachers at predominately black Jefferson High dismissed classes as a concession to student militants (McCurdy 1968). Nineteen juveniles and one young adult were arrested at two other schools. Student leaders vowed to continue the boycott unless the Board agreed to meet with them at Lincoln High or on some other neutral ground. The students convened at Hazard Park, 2230 Norfolk Avenue, for a mass protest. Also at the meeting were Board members Julian Nava and Ralph Richardson, and state representative Edward Roybal. Nava pledged that no disciplinary action would be taken as long as no violence [by protesters] occurred.

At a special meeting on March 11, 1968, student body representatives from Garfield, Lincoln, Wilson, Belmont, Roosevelt, Jefferson, Hamilton, and Marshall high schools spoke before the Board and presented a list of 36 demands. Meanwhile, School Superintendent Jack Crowther was seeking ways to establish control over students. In a memo dated the same day addressed to selected school administrators, Crowther set forth mandates that would assign responsibility for future demonstrations "on or adjacent to school sites caused by an individual or a group whether students or otherwise." The memo stated that law enforcement would "be in charge of all law enforcement aspects of the situation utilizing all appropriate means available" and that school officials or community organizations were not to interfere with the operations of law enforcement. Crowther (1968a) singled out "Garfield, Lincoln, Roosevelt, and Wilson in East Los Angeles; Belmont in downtown Los Angeles; and Jefferson and Carver Junior High School in South Central Los Angeles." By establishing a policy that applied to those specific schools and not the district as a whole, all students attending these schools became suspect, regardless of their degree or lack of participation in the demonstrations (Sosa 2013:130).

At a subsequent special Board meeting on March 26, held at the Lincoln High School auditorium at the request of the students, the Board presented their responses to each of the 36 demands. Sal Castro, advisor to the protesting students, presented a student representative of the Blowout Committee from each of four schools (Lincoln, Roosevelt, Wilson, and Garfield). Presentations were also made by students, parents, and teachers from the high schools, and a member of the Brown Berets (Board 1968b). Although the Board was in agreement with many of the demands, the responses essentially refuted or defended against each, citing inaccuracy of statements regarding conditions and financial constraints. The Board also presented figures to illustrate their claim that the pupil-to-teacher ratios at the four schools were comparable to or lower than those of schools in more privileged areas (Crowther 1968b) (Figure 12).

Thirteen activists (who came to be called the East L.A. 13), including Lincoln High teacher Sal Castro, were indicted by the County Grand Jury a few months after the protests. Charged with conspiracy for having planned the demonstrations, the organizers faced a total of 66 years in prison if convicted. Charges were struck down two years later by the California State Appellate Court (Berta-Ávila et al. 2011:xi).

The Legacy of the Blowouts

In the immediate aftermath of the Blowouts, a lengthy *Los Angeles Times* article was titled with the query "Start of a Revolution?" (Torgerson 1968). The story placed the recent demonstrations within the context of the past and speculated about the future of education in East L.A. Since World War II, leaders of the Mexican-American community had been calling for "unity, change, better education, civil rights, economic opportunity, and an end to what they called second-class citizenship" (Torgerson 1968). When the students walked out in March of 1968, the community supported them. People of a previously conservative older generation jammed the school Board meetings and shouted their approval of the demonstrations, and parents joined their sons and daughters in marches and sit-ins. Within a week after the Blowouts, claims

were already being made that they heralded a powerful new unity in "brown power" that was drawing national attention and enthusiasm. Some were less optimistic about the long-term effects, saying "they'll wait a while before they'll believe a few thousand school children can lead the typically divided, splintered Mexican-American millions into becoming a unified power" (Torgerson 1968). They did not have to wait long.

The 1968 walkouts "focused national attention, for the first time, on urban Chicanos as a vocal, assertive minority group" (Del Olmo 1978). "It was a definite break with the past," stated Mexican-American historian Rudy Acuña. "Before the walkouts," he continued, "all through the civil rights movement, people said Chicanos didn't do things the way the blacks did. But when they saw the results of the blowouts, there was no turning back" (Del Olmo 1978). Dr. Julian Nava, a member of the Board of Education during the walkouts, said "[t]he schools will not be the same hereafter" (Del Olmo 1978).

The 1968 Blowouts differed from previous protests by Mexican-Americans in that the students who walked out of schools in Los Angeles were explicit in insisting that it was education as a social institution that was failing for Latinos and in demanding educational equality. As one Latino scholar put it, "[t]he walkouts of 1968 were fundamentally important because, far from simply turning away from schooling, Chicana/o students intended to take back their schooling" (Tejeda 2011:31). Concurrent with the national climate of unrest surrounding civil rights in the 1960s, Mexican-American students in Los Angeles began to request and demand smaller classes, more Latino teachers, bilingual classes, counseling for college entrance rather than automatically channeling Latino students into vocational programs, and a curriculum that addressed Latino history and interests.

As an indication of the significance and continuing influence of the walkouts to the Mexican-American community and the population at large, the Blowouts have been the subject of numerous books and articles, both popular and academic. The events were also memorialized in a 2006 HBO film directed by Edward James Olmos titled "Walkout." The movie, filmed at Garfield High, presents a fairly accurate but fictionalized account of the events of 1968. A 1996 four-part PBS documentary titled "Chicano!" featured the Blowouts in an episode called "Taking Back the Schools" (PBS 1996).

Many of the student organizers went on to live lives of accomplishment. Paula Crisostomo, a Lincoln High student, became a school administrator where she continues to fight for reform in education. An actor played Crisostomo as the main protagonist in the film "Walkout" (Olmos 2006). Victoria Castro was elected to the LAUSD Board, where she served as president from 1998 to 2001 (Smith 1998). Moctesuma Esparza, one of the students charged with disrupting the schools, became a successful film producer and remains an activist by creating opportunities for Chicanos in entertainment and in other fields. Harry Gamboa, Jr., became an artist and writer. Carlos Muñoz, Jr., went on to a distinguished teaching and research career in the Department of Ethnic Studies at the University of California, Berkeley.

On the tenth anniversary of the walkouts, the effects of the protests were still being felt. The *Los Angeles Times* published an article following up on some of the major players in the 1968 events titled "No Regrets, Chicano Students Who Walked Out Say: '68 Protest Brought Better Education, Most Believe Strike Helped, Ex Students Say" (Del Olmo 1978). However, accounts on the twentieth anniversary of the Blowouts depicted East L.A. schools as having changed little, citing dropout rates of 30 percent to 49 percent at five schools (Belmont, Garfield, Lincoln, Roosevelt, and Wilson), although the number of Latino teachers and administrators had increased markedly, and at that time there were 6,000 bilingual classrooms (Woo 1988). In another look back 40 years later, a *Los Angeles Times* story titled "'68 to '08—We're Not Finished" claimed that although there had been improvements in the conditions of Latino students, such as the end to the previous ban on speaking Spanish in school, there was much more to be accomplished (Los Angeles Times 2008). Regardless of the failure to achieve all the goals of the protesters, the Blowouts had a broad effect on the equal treatment of all minorities in the educational system and on civil rights in general.

Teaching materials reflecting on the fortieth anniversary of the Blowouts emphasized the importance of teaching Chicana/Chicano high school students about their history in the schools to enable them to see that so-called student failure is not rooted in individual students, families, and teachers but in an ongoing legacy of educational injustice (Ochoa 2008). Thus, the Blowouts continue to be taught today, at Roosevelt as well as at other schools.

SURVEY FINDINGS

An intensive pedestrian site survey of the Roosevelt campus conducted on February 9, 2017, by ASM architectural historians found the campus essentially unchanged from the conditions reported in the June 19, 2015, preliminary evaluation (PCR 2015). During the survey, each extant building constructed by 1968 and earlier was viewed and recorded through extensive photography and field notes. Interiors were recorded when accessible, including the halls, steps, and auditorium in Building 1, which were confirmed to be directly related to the 1968 Blowouts. Careful attention was paid to potential historic district boundaries and integrity of potential contributing resources and the district as a whole to the period of the Blowouts.

ELIGIBILITY CRITERIA

National Register of Historic Places

Authorized by the National Historic Preservation Act of 1966, the National Park Service's NRHP is part of a national program to coordinate and support public and private efforts to identify, evaluate, and protect America's historic and archeological resources. The NRHP is the official list of the nation's historic places worthy of preservation. The quality of significance in American history, architecture, archaeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity and:

A. are associated with events that have made a significant contribution to the broad patterns of our history; or

B. are associated with the lives of persons significant in our past; or

C. embody distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or have yielded, or

D. may be likely to yield, information important in prehistory or history.

Note that only criteria A and B are applicable to this evaluation.

Integrity

In order to be eligible for listing in the NRHP and CRHR, a property must retain sufficient integrity to convey its significance. The NRHP publication *How to Apply the National Register Criteria for Evaluation*, National Register Bulletin 15, establishes how to evaluate the integrity of a property: "Integrity is the ability of a property to convey its significance" (National Park Service, National Register of Historic Places 1998). The evaluation of integrity must be grounded in an understanding of a property's physical features and how they relate to the concept of integrity. Determining which of these aspects are most important to a property requires knowing why, where, and when a property is significant. To retain historic integrity, a property must possess several, and usually most, aspects of integrity:

1. *Location* is the place where the historic property was constructed or the place where the historic event occurred.
2. *Design* is the combination of elements that create the form, plan, space, structure, and style of a property.
3. *Setting* is the physical environment of a historic property, and refers to the character of the site and the relationship to surrounding features and open space. Setting often refers to the basic physical conditions under which a property was built and the functions it was intended to serve. These features can be either natural or manmade, including vegetation, paths, fences, and relationships between other features or open space.
4. *Materials* are the physical elements that were combined or deposited during a particular period or time, and in a particular pattern or configuration to form a historic property.
5. *Workmanship* is the physical evidence of crafts of a particular culture or people during any given period of history or prehistory, and can be applied to the property as a whole, or to individual components.
6. *Feeling* is a property's expression of the aesthetic or historic sense of a particular period of time. It results from the presence of physical features that, when taken together, convey the property's historic character.
7. *Association* is the direct link between the important historic event or person and a historic property.

California Register of Historical Resources

The CRHR program encourages public recognition and protection of resources of architectural, historical, archaeological, and cultural significance; identifies historical resources for state and local planning purposes; determines eligibility for state historic preservation grant funding; and affords certain protections under CEQA. The criteria established for eligibility for the CRHR are directly comparable to the national criteria established for the NRHP.

In order to be eligible for listing in the CRHR, a building, object, or structure must satisfy at least one of the following four criteria. Note that only criteria 1 and 2 are applicable to this evaluation.

1. It is associated with events that have made a significant contribution to the broad patterns of local or regional history or the cultural heritage of California or the United States.
2. It is associated with the lives of persons important to local, California, or national history.
3. It embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of a master or possesses high artistic values.
4. It has yielded, or has the potential to yield, information important to the prehistory or history of the local area, California, or the nation.

Historical resources eligible for listing in the CRHR must also retain enough of their historic character or appearance to be recognizable as historical resources and to convey the reasons for their significance. For the purposes of eligibility for the CRHR, integrity is defined as "the authenticity of an historical resource's physical identity evidenced by the survival of characteristics that existed during the resource's period of significance" (California Office of Historic Preservation 2001). This general definition is generally strengthened by the more specific definition offered by the NRHP—the criteria and guidelines on which the CRHR criteria and guidelines are based upon.

California Environmental Quality Act

CEQA Section 15064.5 *Determining the Significance of Impacts to Archeological and Historical Resources* requires that all private and public activities not specifically exempted be evaluated against the potential for environmental damage, including effects to historical resources. Historical resources are recognized as part of the environment under CEQA. It defines historical resources as "any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California."

Lead agencies have a responsibility to evaluate historical resources against the CRHR criteria prior to making a finding as to a proposed Project's impacts to historical resources. Mitigation of adverse impacts is required if the proposed Project will cause substantial adverse change to a historical resource. Substantial adverse change includes demolition, destruction, relocation, or alteration such that the significance of an historical resource would be impaired. While demolition and destruction are fairly obvious significant impacts, it is more difficult to assess when change, alteration, or relocation crosses the threshold of substantial adverse change. The CEQA Guidelines provide that a Project that demolishes or alters those physical characteristics of an historical resource that convey its historical significance (i.e., its character-defining features) can be considered to materially impair the resource's significance. The CRHR is used in the consideration of historical resources relative to significance for purposes of CEQA. The CRHR includes resources listed in, or formally determined eligible for listing in, the NRHP, as well as some California State Landmarks and Points of Historical Interest. Properties of local significance that have been designated under a local preservation ordinance (local landmarks or landmark districts), or that have been identified in a local historical resources inventory, may be eligible for listing in the CRHR and are presumed to be significant resources for purposes of CEQA unless a preponderance of evidence indicates otherwise.

Generally, a resource shall be considered by the lead agency to be a "historical resource" if it:

1. Is listed in, or determined to be eligible by the State Historical Resources Commission, for listing in the California Register of Historical Resources (PRC Section 5024.1, Title 14 CCR, Section 4850 et seq.).
2. Is included in a local register of historical resources, or is identified as significant in an historical resource survey meeting the requirements of PRC Section 5024.1(g).

SurveyLA Latino Los Angeles Historic Context Statement

To evaluate the significance of Roosevelt SH, ASM referred to the *Latino Los Angeles Historic Context Statement* prepared for City of Los Angeles Department of City Planning (GPA and Nicolaides 2015). The SurveyLA Latino context identifies Roosevelt SH as a known resource associated with Latino history (GPA and Nicolaides 2015:62). Applicable themes are *Education 1930–1980* and the *Civil Rights Movement, 1920-1980.* The historic context narrative related to the theme includes a section titled "1940-1980: The Struggle for Educational Equity," which discusses the landmark court cases that addressed segregation in California schools and the student walkouts at Roosevelt SH and other schools in the 1960s (GPA and Nicolaides 2015:57-61). The Latino context cites the 1968 Blowouts as an important early Chicano activity and states that youth activism was a critical factor in the Chicano movement, noting the actions of groups like the Brown Berets, a group of activists who helped organize and participated in the 1968 Blowouts, and student protestors at high schools and colleges demanding educational equity and cultural recognition (GPA and Nicolaides 2015:71). Applicable contexts and themes are as follows:

Theme 3: EDUCATION, 1930-1980

A resource evaluated under this theme may be significant in the areas of education, ethnic heritage, and/or social history for its association with the Latino community. Although Latinos played a central role in the creation of the public school system in Los Angeles, they were marginalized by the end of the nineteenth century and spent much of the twentieth century struggling for equal treatment.

Period of Significance: 1930-1980

Period of Significance Justification: The period of significance begins in 1930. Even though Latinos were primarily responsible for creating the public school system in Los Angeles, the earliest known resources related to this theme do not appear until the 1930s. 1980 is the end date for SurveyLA and may be extended as part of future survey work.

Geographic Locations: Citywide, but with the highest concentration in the areas between Downtown and Boyle Heights

Area(s) of Significance: Education, Ethnic Heritage, Social History

Criterion: A

Associated Property Types: Institutional–Elementary School, Middle School, High School, and Language School

Property Type Description: Property types under this theme include public elementary, middle, and high schools and private language schools or institutions that sought to teach Mexican immigrants English as well as American values and customs

Property Type Significance: Properties significant under this theme represent the limitations and opportunities of education for Latinos in Los Angeles

Eligibility Standards: Represents an important association with the Latino community in Los Angeles

Character-Defining/Associative Features

- For NRHP, properties associated with events that date from the last 50 years must possess exceptional importance
- Retains most of the essential character-defining features from the period of significance
- As a whole, retains most of the essential character-defining features from the period of significance (for campuses)
- May be important for its association with historic figures (who attended a school) for the cumulative important of those figures to the community
- May represent a significant event or movement in the social history of Los Angeles
- May represent issues relating to equal access to education or school desegregation

Integrity Considerations

- Should retain integrity of Location, Design, Feeling, and Association from the period of significance
- Integrity is based on the period during which the significant institution occupied the property
- Some original materials may have been removed or altered
- The mid-1930s may be considered a baseline for evaluating integrity of Design, Materials, and Workmanship as virtually every school in Los Angeles was rehabilitated after 1933

Theme 4: CIVIL RIGHTS MOVEMENT, 1920-1980

Theme: Important Events and Institutions in the Latino Civil Rights Movement

A resource evaluated under this theme may be significant in the areas of ethnic heritage and social history for its association with the Latino civil rights movement. By 1900, Mexicans began forming organizations to foster community cohesion and mutual support. The Latino civil rights movement gained critical momentum in the 1930s as it intersected with the labor movement. In the 1960s and 1970s, the struggle for civil rights accelerated with the rise of the Chicano movement.

Geographic Locations: Citywide, but with the highest concentration in the areas between Downtown and Boyle Heights

Area(s) of Significance: Ethnic Heritage, Social History

Criteria: A/1

Associated Property Types:

- Institutional – Church Building and Courthouse
- Commercial – Retail Building and Office Building

Property Type Description: Property types under this theme include commercial and institutional buildings used by groups that played an important role in the Latino civil rights movement. In addition, property types include the locations of important events such as demonstrations.

Eligibility Standards: Is directly associated with events and institutions that were pivotal in the history of the Latino civil rights movement

Character-Defining/Associative Features

- For NRHP, properties associated with events that date from the last 50 years must possess exceptional importance
- Retains most of the essential character-defining features from the period of significance
- Interior spaces that functioned as important gathering/meeting places must remain readable from the period of significance
- May be associated with Chicano women's groups and organizations

Integrity Considerations: Should retain integrity of Location, Feeling, Design, and Association from the period of significance

Theme: Important Persons in the Latino Civil Rights Movement, 1920-1980

A resource evaluated under this theme may be significant in the area of ethnic heritage and social history for its association with persons who played an important role in the Latino civil rights movement. In many cases, significant individuals were involved with numerous groups, some of which only functioned briefly. Thus, the residence of an individual is often the property that best represents their productive life.

Period of Significance: 1920-1980

Justification: The period of significance begins in 1920 with the rise of mutual aid societies, or *mutualistas*. 1980 is the end date for SurveyLA and may be extended as part of future survey work.

Geographic Locations: Citywide, but with the highest concentration in the areas between Downtown and Boyle Heights

Area(s) of Significance: Ethnic Heritage, Social History

Criteria: B/2

Associated Property Types: Residential – Single-Family Residence and Multi-Family Residence

Property Type Description: Property types under this theme include single-family and multi-family residential buildings that were the homes of prominent Latino leaders in the civil rights movement

Property Type Significance: Properties significant under this theme are directly associated with important persons in the Latino civil rights movement

Eligibility Standards

- Individual must be proven to have played a significant and influential role in the Latino civil rights movement
- Is associated with a person who made important individual contributions to the Latino civil rights movement
- Is directly associated with the productive life of the person

Character-Defining/Associative Features

- For NRHP, properties associated with individuals whose significant accomplishments date from the last 50 years must possess exceptional importance
- For residential properties, the individual must have resided in the property during the period in which he or she achieved significance
- For multi-family properties, the apartment or room occupied by the person must be readable from the period of significance
- Retains most of the essential character-defining features from the period of significance

Integrity Considerations

- Should retain integrity of Location, Feeling, and Association from the period of significance
- Some materials may have been removed or altered

Los Angeles Unified School District Historic Context Statement

The *LAUSD Historic Context Statement, 1870–1969* (HCS) (LAUSD 2014) establishes guidelines for evaluating the significance of LAUSD campuses. The HCS outlines historic contexts and themes, with eligibility standards, character-defining features, and integrity considerations for each. The Roosevelt SH campus was considered under the appropriate contexts and themes, and associated property types, period of significance, areas of significance, and geographic location. The applicable context framework, applicable eligibility standards, and integrity considerations for both individual significance and significance as a historic district are provided in the HCS (LAUSD 2014:141–143) and reiterated below. Note that

Context: Public and Private Institutional Development / Education

Theme: LAUSD and the Civil Rights Movement, 1954–1980

Property Type: Institutional/Educational

Property Subtypes: Elementary Schools, Junior High Schools, and High Schools

Period of Significance: 1954 to 1980

Area of Significance: Education/Ethnic Heritage

Geographic Location: Citywide

Criteria: A/1 and/or B/2

Eligibility Standards

- Was constructed during the period of significance
- Was the site of significant integration initiatives, challenges, or activities related to the Civil Rights Movement and school integration
- Directly reflects the movement for equal access to schools and/or to employment opportunities in LAUSD schools
- Has a well-established, long-term association with a figure who was significant in the Civil Rights Movement and school integration (eligibility under B/2)
- Is directly associated with events and institutions that were pivotal in the history of the Latino civil rights movement (Latino context)

Character-Defining Features

- Retains most of the associative and character-defining features from the period of significance

Integrity Considerations

- Retains integrity of Location, Design, Setting, Feeling, and Association
- Some materials may have been removed or altered
- If there are multiple buildings on campus constructed during the period of significance, these should be evaluated as a potential historic district

EVALUATION OF ELIGIBILITY

Historic District Evaluation

ASM carefully considered whether the Roosevelt SH campus is eligible as a historic district for the NRHP or CRHR under Criteria A/1 for its association with events that have made a significant contribution to the broad patterns of local or regional history, and/or under Criteria B/2 for an association with the lives of persons important to local, California, or national history. Particular attention was paid to applicable themes related to the Chicano Civil Rights movement as defined in SurveyLA *Latino Los Angeles Historic Context Statement* and the LAUSD Historic Context Statement.

The Roosevelt SH campus meets all of the eligibility criteria listed in the LAUSD HCS under the theme of *LAUSD and the Civil Rights Movement, 1954–1980.* Specifically, the recommended historic district and its contributors were constructed or extant during the period of significance; the campus was the site of significant integration initiatives, challenges, or activities related to the Chicano Civil Rights Movement and school integration; the campus directly reflects the movement for equal access to schools in LAUSD schools; the campus has a well-established, long-term association with Sal Castro, who was significant in the Chicano Civil Rights Movement and school integration (eligibility under B/2); and it is directly associated with events and institutions that were pivotal in the history of the Latino civil rights movement (from the SurveyLA Latino context). The campus retains most of the associative and character-defining features from the period of significance. Following the LAUSD guidelines, the multiple buildings extant during the period of significance are evaluated in this report as comprising a potential historic district.

ASM recommends all buildings present on the campus in March 1968 at the time of the Blowouts be considered contributors to the proposed Roosevelt Senior High School Historic District (Figure 13). The contributors and the priority of significance of each are listed in Table 1 (below).

Table 1. Roosevelt Senior High School Historic District Contributors

Bldg. No.	Building Name	Year Built	Priority
1	Auditorium and Classroom Building	1922	Primary
7	Classroom Building	1937	Primary
6	Industrial Arts Building	1968	Secondary
8	Instrumental Music Building	1959	Secondary
17	Classroom Building	1964	Secondary
18	Classroom Building	1964	Secondary
19	Physical Education Building	1968	Secondary
10	Flammable Storage Building	1953	Tertiary
11	Field Sanitary Building	1958	Tertiary
12	Equipment Field Storage	1941	Tertiary
16	Field Light Controls	1949	Tertiary
20	Utility Building	1968	Tertiary
	Track		Tertiary
	Landscaping		Tertiary

ASM considered whether any of the current buildings or landscaped areas were built in response to the protests, and whether Fickett Street, which at one time cut through the campus in front of/west of Building 1, was vacated in response to the protests. A master plan for the campus had already been submitted by 1966, when plans for $1,730,725 in new facilities for Roosevelt SH were approved by the Board. Projects included a new physical education building, renovation of an industrial arts building, and a new industrial arts building (Los Angeles Times 1966). A 1966 street profile plan and as-built civil drawings from the same year show Fickett Street passing through the school in plan (LAUSD dwg. 8829.00.023 and 8829.00.024). Further indication that the master plan had been initiated previous to 1968 is the early filing of a redrawn tract map that shows Fickett Street vacated and incorporated into the campus (Figure 13). An historic aerial dated January 3, 1968 (University of California Regents 1968), shows that these projects were complete by the time of the 1968 protests, rather than in response to them (Figure 14). A cafeteria and domestic science building and a shop building, shown southeast of Building 1 in 1966 LAUSD drawings (LAUSD Vault dwg. 8829.00.027) and in a 1968 aerial view, have since been demolished (Figure 15). As such, ASM concluded that there were no buildings or modifications to the school that were the direct result of the Blowouts.

Primary Contributors

Auditorium and Classroom Building (Building 1). Building 1 appears to have been a primary location of activities related to the 1968 walkouts. Built in 1922 and redesigned after the 1933 Long Beach earthquake, the former administration building remains an iconic representation of the campus. The Deco features of the main entrance, in particular, are recognizable as the entrance to the school, with a focus on the Bauhaus-style raised metal lettering spelling out the name of the school. Leading to the entrance are two flights of a wide concrete stairway set between sets of simple beveled-edge stucco stoops. Four sets of single-light double doors are recessed into a two-story plain stucco wall with a fluted column at the center and two sets of high multi-light transoms above (Figure 16).

The interior of Building 1 was closely associated with the walkouts. Immediately inside the primary entrance is a lobby with a ticket booth and entrances to the auditorium to the right and a flight of concrete stairs beneath a concrete arch leading to the main hallway straight ahead. This area was associated with an assembly called by the school administration two days after the original walkouts, in which the principal urged the students to avoid violence in further protests (Reich 1968). Brian Gibbs, a teacher at Roosevelt for 15 years (1995-2010), included the Blowouts in his curriculum at the school. Gibbs based his lessons on research and personal conversations with other teachers and individuals with first-hand knowledge of the events, and continued the curriculum that had been taught for years before his tenure at Roosevelt. According to Gibbs, after the assembly, the students staged a sit-in on the lobby stairs. Police entered and began trying to disperse the students, using violent means. To escape, the students ran up the stairs, down the central hall, and out the other side of Building 1. At that point they ran to the right, through one of the classroom buildings, and onto Mott Street (Gibbs 2017). Later, Gibbs used the lobby and stairs leading to the main hallway to teach how the built environment can be seen as a "text" that tells a story (Gibbs 2010). After showing his students an episode of the PBS series *Chicano!* (Part 3: "Taking Back the Schools"), which includes scenes from Roosevelt, he gathered them on the stairs and told the story of the Blowouts (Figures 17–19). After the students had observed first-hand the place where the conflict took place, Gibbs (2010:6) reports "[t]heir school's stairwell [became] a monument to be recognized and honored."

Classroom Building 7. On the day of the sit-ins at Roosevelt, students were said to have run out of the back of Building 1 toward Mott Street and toward the right, where Building 7 is located. Oral histories say the students ran through Building C, which has been demolished but was located "where the current ball field is," and into Mott Street. Photo evidence showing Building 7 at the time of the walkouts and the location of the building, with an entrance toward the interior of the campus and a second entrance immediately on Mott Street, suggest it is more likely the students ran through Building 7 into the street (Gibbs 2017).

Secondary Contributors

Major buildings extant in early 1968 are considered secondary contributors. These include the Instrumental Music Building (Building 8), which was built in 1959. Buildings constructed in the 1960s—the Industrial Arts Building (Building 6), Classroom Building 17, Classroom Building 18, and the Physical Education Building (Building 19)—were all completed by the time of the walkouts.

Tertiary Contributors

Tertiary contributors are utilitarian buildings that were extant at the time of the walkouts and that are some of the earliest on campus. These include the Equipment Field Storage (Building 12), which dates from 1941, and the Field Light Controls (Building 16), with a built year of 1949. Buildings from the 1950s that were extant are the Flammable Storage Building (Building 10; 1953) and the Field Sanitary Building (Building 11; 1958). The Utility Building (Building 20), built in 1968, is also a tertiary contributor to the historic district.

Because of the changing nature of landscaping, fields and landscaped areas around the primary contributing buildings are considered tertiary contributors. Although the bleachers have been replaced, the track configuration remains the same as it was in 1968; although the track at Roosevelt has not been confirmed as directly related to the protests, the track was a gathering place for protesters during the walkouts at some of the other participating schools, and it is likely that the track at Roosevelt served the same purpose. The playing field to the northeast of the physical education building remains an open space, as it was in 1968. The mature trees and other landscaping, especially the shady areas southeast of Building 1 toward Building 7 and Mott Street, are included in this category.[5]

[5] The story of the Japanese garden at the southeast corner of Building 1, as told by former Roosevelt teacher Brian Gibbs (Gibbs 2017), provides anecdotal evidence of the continuing role of Boyle Heights as home to new immigrants of various ethnicities. In the 1930s and 1940s, Japanese-American students at Roosevelt established a Japanese garden on campus. When Executive Order

Integrity

All of the recommended contributors retain integrity to the period of significance of location, design, setting, materials, workmanship, feeling, and association.

Period of Significance

ASM considered whether the recommended period of significance would be limited to 1968, when the Blowouts occurred, or continue through 1970 or later, when a series of additional protests took place. A major protest in 1970 at Roosevelt SH appears to be of a different nature than the well-organized and generally non-violent events of 1968. The 1970 Chicano Moratorium Against the Viet Nam War is arguably related to the Blowouts, but was organized and took place after the student walkouts in 1968. In 1970 and after, Roosevelt, as well as many other schools in East L.A. and nationwide, was affected by this less-organized, more violent movement. Unlike the 1968 protests, in 1970, the school was heavily vandalized and severely damaged by fires, breaking of windows, and bombs. The 1970 protest also appears to have been a more spontaneous event and to have involved more non-students. In the later events, the CLF, a militant Marxist-Leninist group that advocated violence as a means to an ends, became involved. Multiple smaller protests also took place into the 1970s, but none that had the broad implications and significance of the Blowouts. For these reasons, the recommended period of significance is limited to 1968.

Area of Significance: A/1

ASM carefully considered whether the Roosevelt SH campus is eligible as a historic district under Criteria A/1 for its association with the 1968 Blowouts, in which Mexican-American students and their parents and sympathizers staged nearly simultaneous walkouts at five East L.A. high schools. Roosevelt SH students walked out of class repeatedly in the first weeks of March 1968. Roosevelt students conducted a second protest two days later, when they attended an assembly in the auditorium and staged a sit-in on the steps in the lobby of Building 1.

Building on the legacy of Mexican-Americans who had been protesting school segregation as early as the 1930s and 1940s, the Blowouts were widely considered the first major protest against racism and educational inequality staged by Mexican-Americans in the United States. The East Los Angeles students were said to have ignited the Mexican-American civil rights movement. Considered in context with the black Civil Rights movement, the historical significance of the Blowouts had similarities with the 1960 student sit-ins in Greensboro, North Carolina (Berta-Ávila et al. 2011:xi). As an indication that the Blowouts were a significant contributor to the broader Chicano civil rights movement, one of the Blowout participants, Carlos Munoz, describes a National Chicano Youth Conference held in Denver the following year, bringing together for the first time activists who were in involved in both campus and community Chicano politics (Munoz 1989:75).

The Blowouts were an important event in the Chicano Civil Rights movement that focused national attention, for the first time, on Chicanos, and served as a catalyst for the movement in Los Angeles that spread throughout the U.S. Therefore, Roosevelt SH is recommended eligible as a historic district under Criterion A/1 for its association with an event important in our history.

9066 ordering the internment of all people of Japanese ancestry was authorized by President Roosevelt in 1942, those students were abruptly removed from campus and the garden was eventually demolished. In 1992, on the fiftieth anniversary of the internment, the former students returned to campus and established the current Japanese garden adjacent to Building 1.

Area of Significance: B/2

The Roosevelt SH campus was found to be associated with the lives of significant persons in the LAUSD Civil Rights movement. Sal Castro, who took the lead in organizing students at the East L.A. high schools who initiated the Blowouts, was a charismatic Mexican-American teacher at Lincoln High at the time of the protests, and at Lincoln High earlier in his career, where he began to observe the lack of opportunity for Mexican-American students compared to Anglos. At Belmont, he encouraged students to speak Spanish, not realizing that it was not allowed (Ochoa 2010). Castro encouraged students to make their grievances public after they failed to get the attention of school administrators and the Board. Castro was instrumental in the coordinated walkouts at Roosevelt, as well as Garfield, Lincoln, Wilson, and Belmont high schools. Castro was one of the "East L.A. 13" who were arrested and indicted for conspiring to plan the demonstrations. After firing Castro, the Board received numerous letters from students, parents, and other teachers both in support and objecting to his reinstatement when the charges were dropped two years later. Castro is highlighted in the SurveyLA Latino context for the active role he played in the struggle for educational equality associated with the Blowouts (GPA and Nicolaides 2015:23-24). Castro was so well-regarded by the District that on June 5, 2010, a school was dedicated in his honor (Sal Castro Middle School, adjacent to Belmont SH) (Sosa 2013:110).

Because of the importance of Sal Castro in encouraging Chicano students to assert their rights to an equal education and his role in helping organize the Blowouts, Roosevelt SH is recommended eligible as a historic district under Criterion B/2 for its association with a person important in our past.

Recommendations for Further Research

Full evaluations of all of the East L.A. high schools that participated in the initial walkouts are out of the scope of this report. However, recommendations for further evaluation under Criteria A/1 and B/2 are as follows:

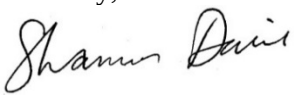
- Lincoln High (3501 N. Broadway): Although Lincoln High was not surveyed for this report, it appears to be fully intact with buildings from the 1930s and 1940s buildings. In fact, in 1999 the school was partially restored when intrusive visible portions of a $2-million air-conditioning system were removed, in response to pressure from the community and architects (Los Angeles Times 1999). The campus also has the potential to be eligible under Criteria B/2 because it is the school where Castro taught.
- Garfield High (5101 E. Sixth Street): This campus retains a few buildings dating from 1967 and 1968, as well as several newer buildings. The school was among the original four schools to form a Blowout Committee and participated in the early activities of the movement. Further research is needed to determine eligibility.
- Belmont High (1575 W. Second Street): Belmont was not in the original plan of four schools and had a lower percentage of Mexican-American students, but the students joined the multi-school Blowout Committee soon after it was organized (Torgerson 1968). The school participated in the original Blowouts and has major pre-1968 buildings. Further research is needed to determine eligibility.
- Wilson High (4500 Multnomah Street): The current campus was under construction in 1968 and was not completed until the early 1970s (Board 1968b; LAUSD 2010); therefore, the campus retains no integrity to the period of significance and would likely be found not eligible.

CONCLUSION

The evaluation in this Supplemental HRER is limited to Criteria A/1 and B/2 of the NRHP and the CRHR. ASM carefully considered the potential significance of Roosevelt SH under these criteria, as described above. ASM recommends the campus eligible as a historic district for the NRHP and the CRHR under Criteria A/1 and B/2. The campus is also historically significant under the guidelines set forth by the *SurveyLA Latino Los Angeles Historic Context Statement* and the *LAUSD Historic Context Statement, 1870-1969*. As such, ASM finds that Roosevelt High is a historic resource in accordance with CEQA.

Please contact me as needed, if you have questions or concerns.

Sincerely,



Shannon Davis, M.A., RPH
Director, Architectural Historian
ASM Affiliates, Inc.
20 North Raymond Avenue, Suite 220
Pasadena, California 91103
(626) 793-7395
sdavis@asmaffiliates.com

Attachment A: Figures
Attachment B: Interpretive Plan
Attachment C: Bibliography

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Attachment A: FIGURES

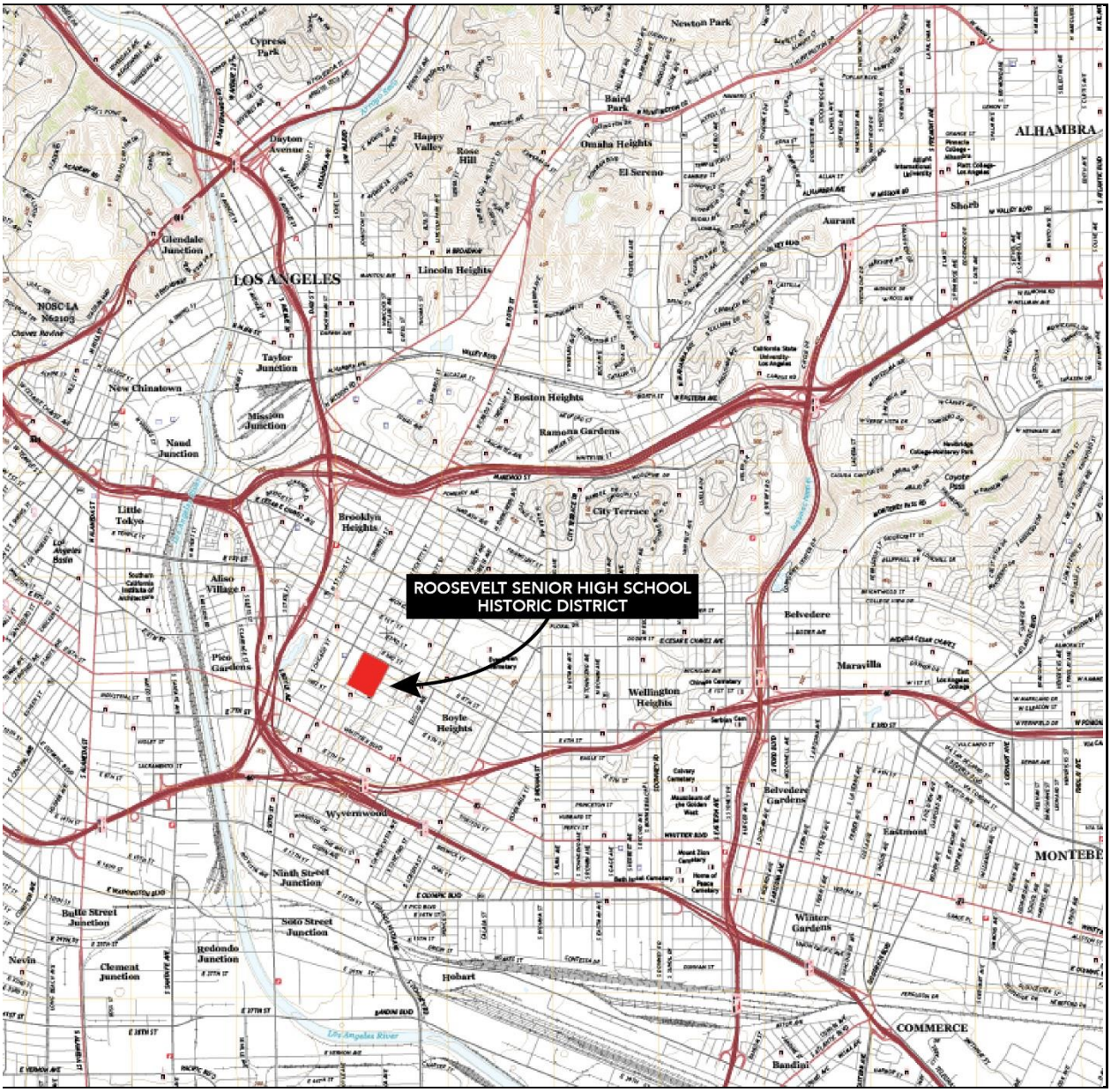


FIGURE 1. Project location



FIGURE 2. A Los Angeles Police Department photo of students and Brown Berets at Roosevelt SH. Source: Notes from Aztlán, March 5, 1968.



FIGURE 3. Students and police on Mott Street adjacent to Roosevelt SH.
Source: Photographer George Rodriquez, 1968.



FIGURE 4. Activist Monte Perez speaking to striking students across the street from Roosevelt SH. Source: Raul Ruiz, n.d.

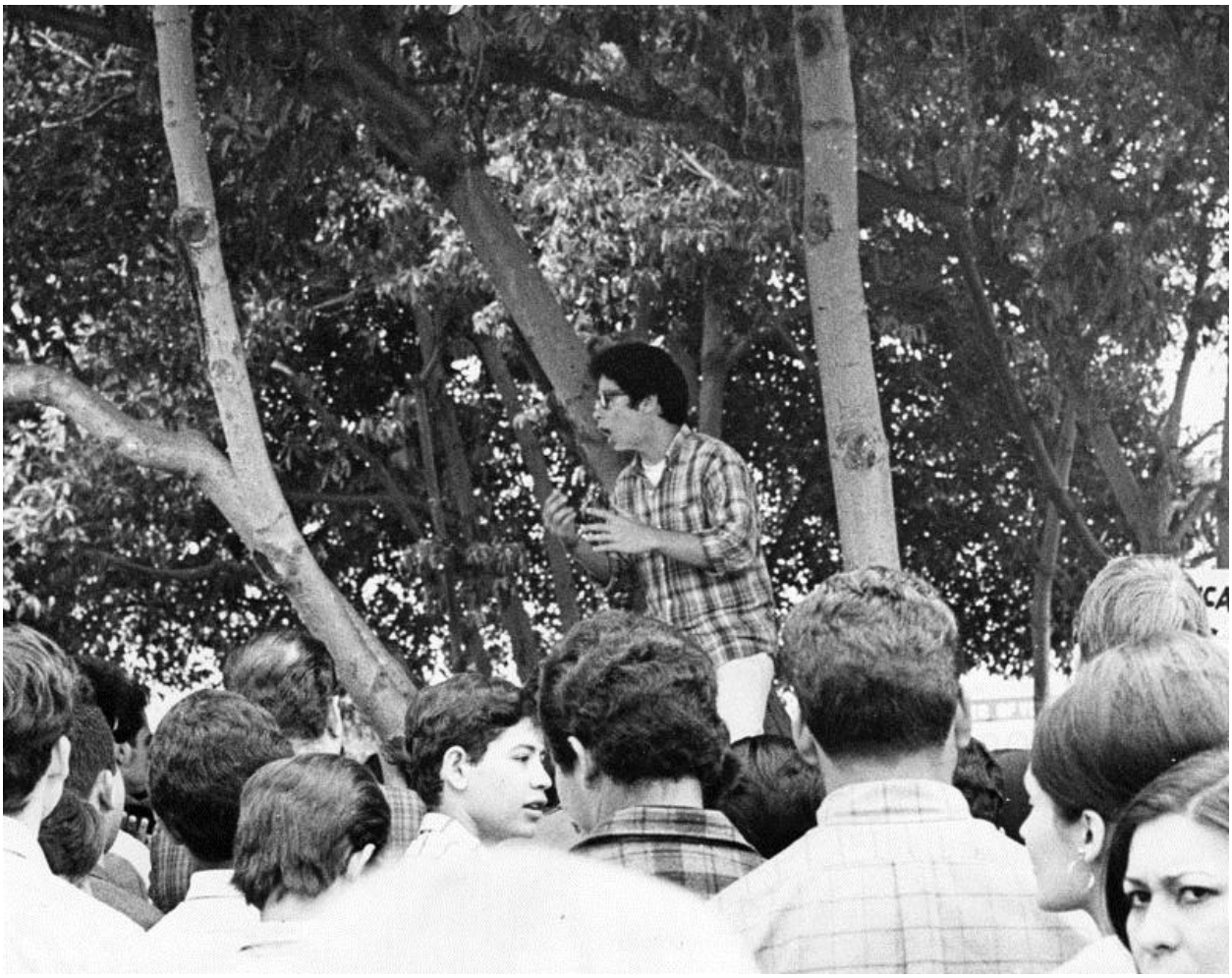


FIGURE 5. John Ortiz, Mexican-American student leader at James A. Garfield High School, addressing assembled students during a walkout. Source: Photographer H. Q. McCarthy. Los Angeles Public Library, Herald Examiner Collection, March 7, 1968.



FIGURE 6. Principal Reginald Murphy, Garfield High School, at a special assembly, appealing to students to return to classes. Assembly is outside, possibly on sports field, with students overflowing from bleachers. Source: Los Angeles Public Library, Herald Examiner Collection, March 7, 1968.



FIGURE 7. Police handcuff two women on sidewalk in front of Belmont High School during disturbance at school. Several police cars are on the street and a man watches the arrests in the background. One woman is a Brown Beret; the other carries a camera and is reported to be a photographer for the Free Press. Source: Los Angeles Public Library, Herald Examiner Collection, March 8, 1968.

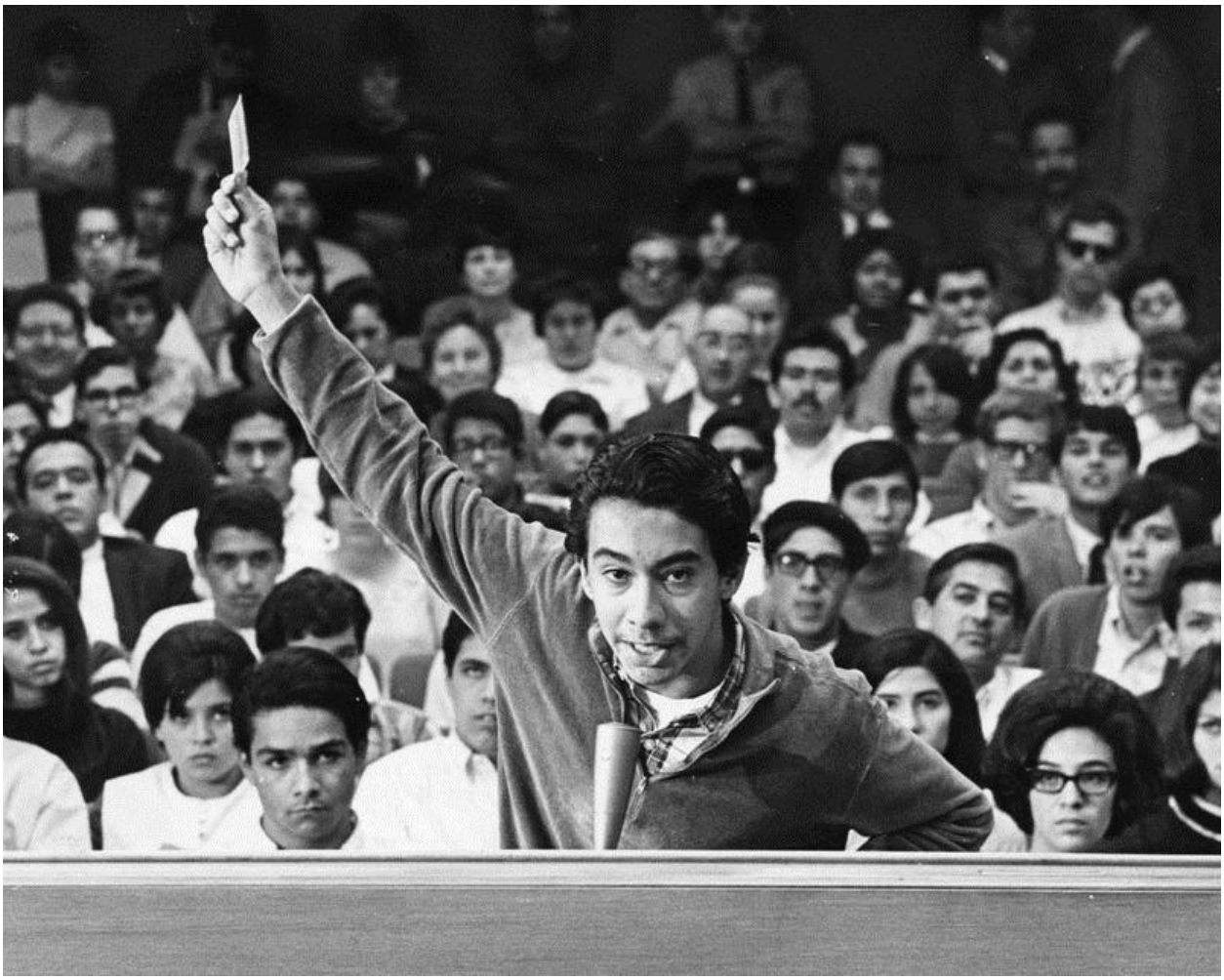


FIGURE 8. Protesters, mainly students, at doorway attempting to enter Board meeting.
Source: Los Angeles Public Library, Herald Examiner Collection, March 12, 1968.



FIGURE 9. Students demonstrating outside the Board.
Source: Raul Ruiz, March 1968.



FIGURE 10. Students protesting the arrest of students during the Blowout at Roosevelt SH. Source: UCLA Digital Collections, ca 1970.



FIGURE 11. Brown Berets at Lincoln High School. Source: Photographer Oscar R. Castillo, UCLA Chicano Studies Research Center, 1968.

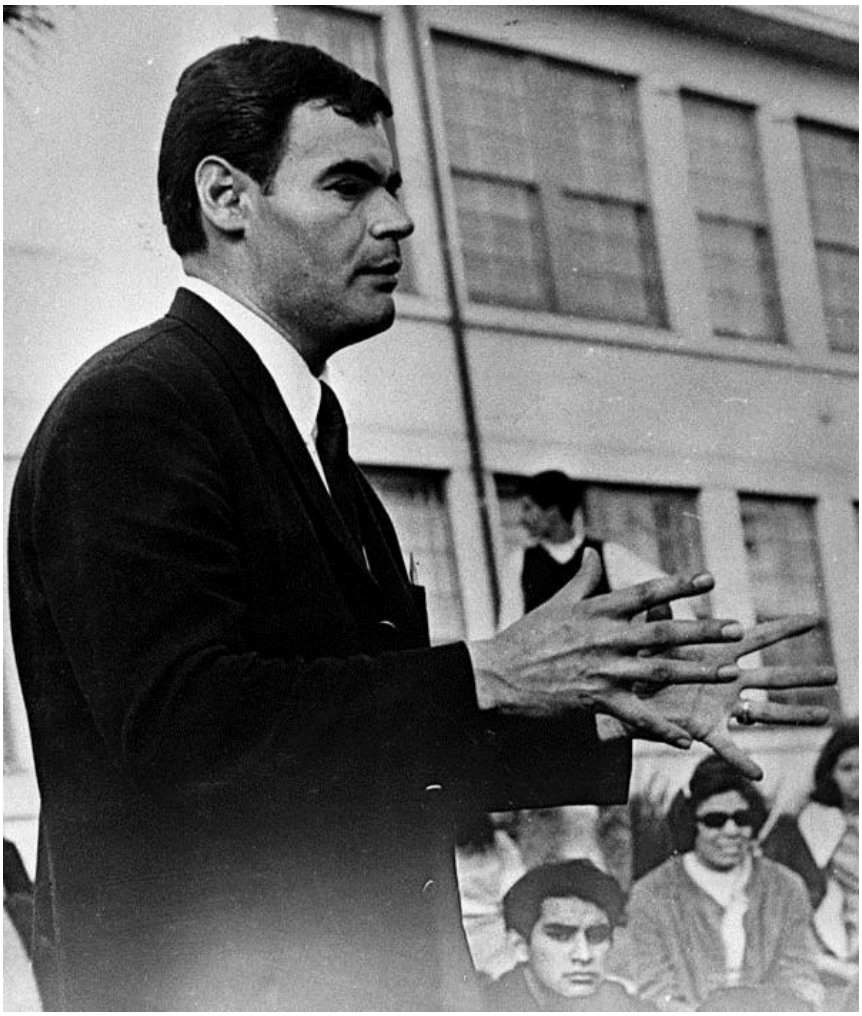


FIGURE 12. Sal Castro, teacher and leader of boycott to protest inferior educational opportunities for Mexican-American students. Source: Photographer Jim Ober, Los Angeles Public Library, Herald Examiner Collection, March 12, 1968.

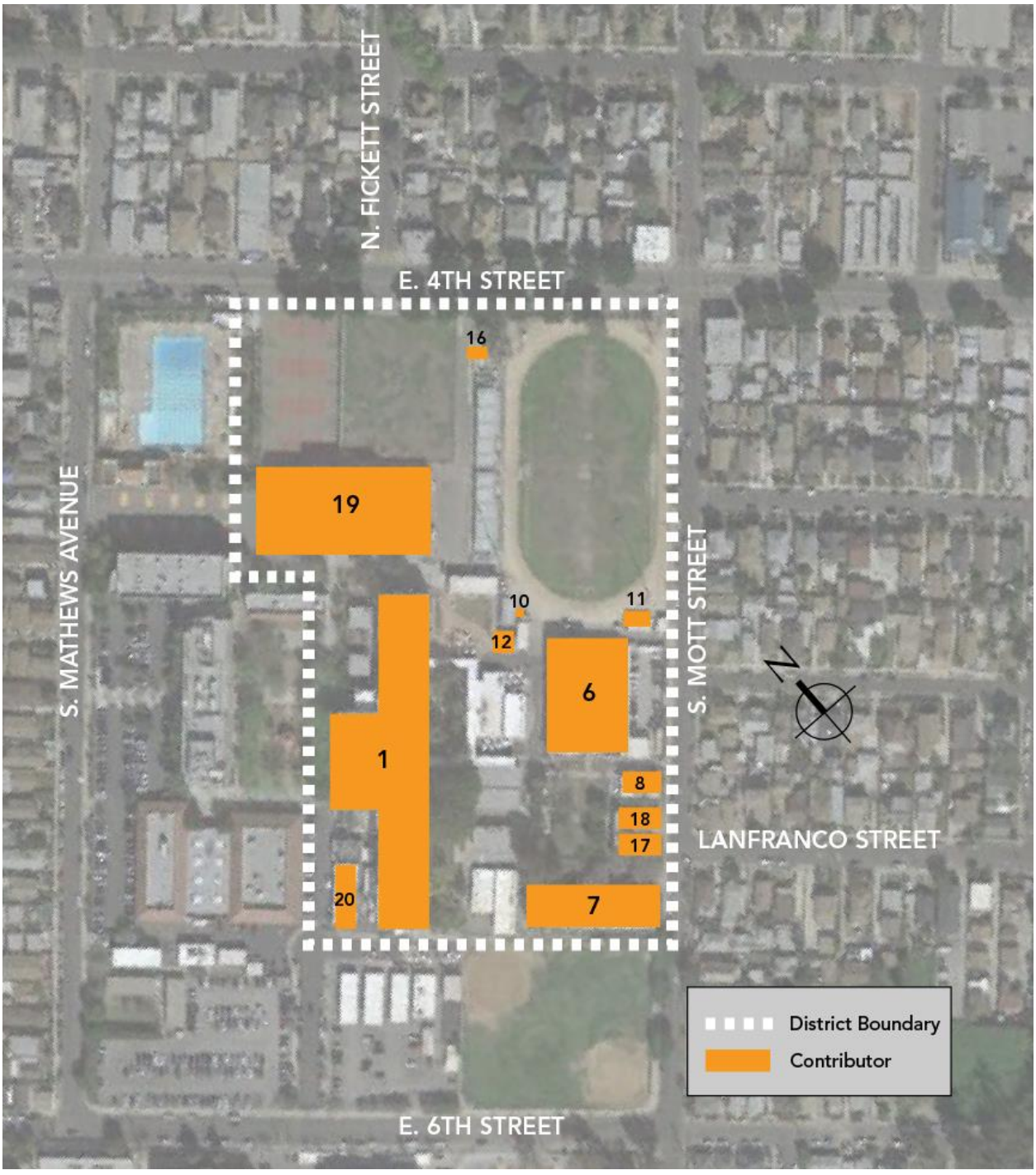


FIGURE 13. Recommended boundary and contributors to the proposed Roosevelt Senior High School Historic District. Source: ASM, March 23, 2017.

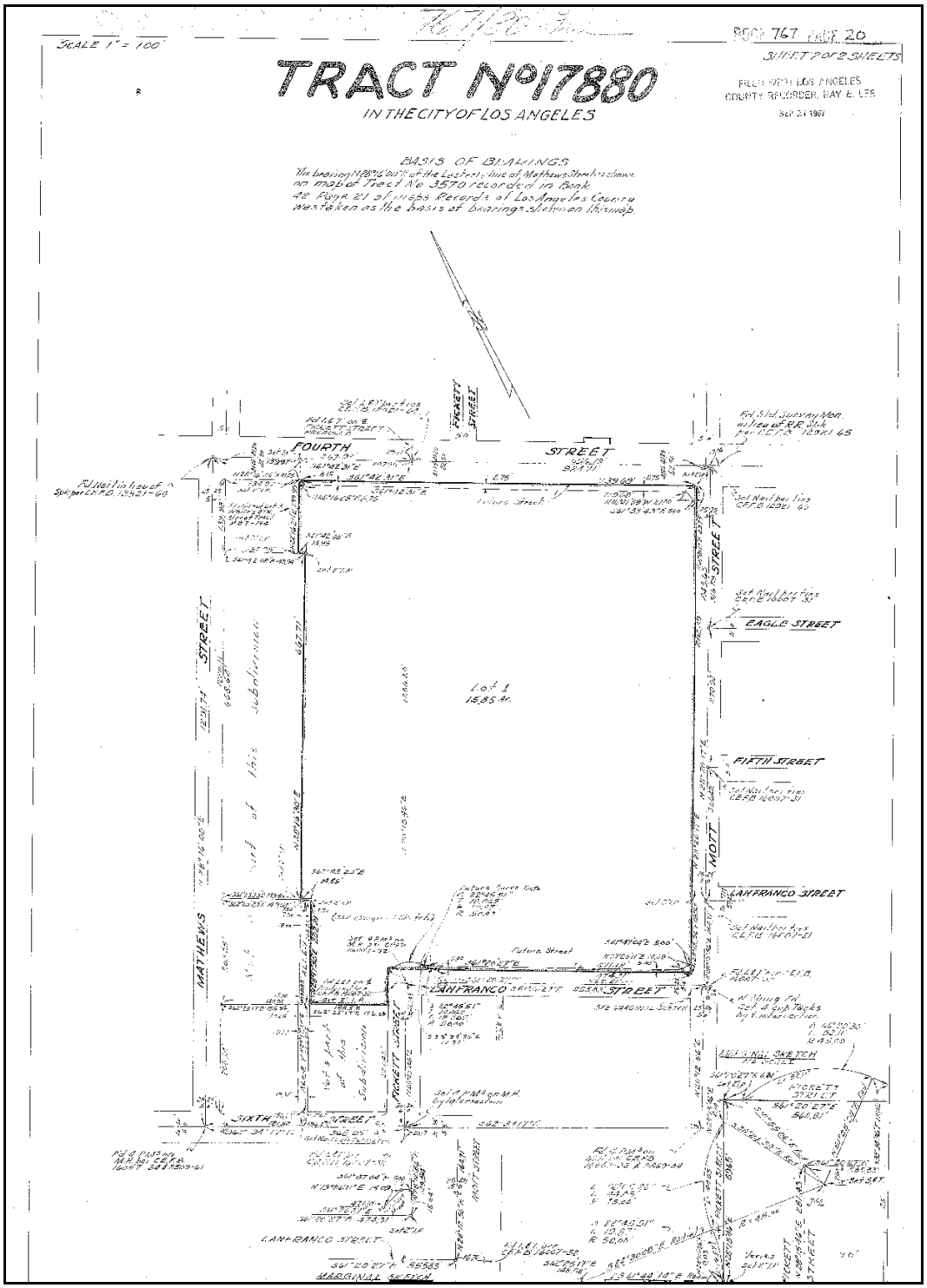


FIGURE 14. A preliminary tract map encompassing Roosevelt SH showing Fickett Street vacated (formerly forming the northwest boundary of campus). Source: City of Los Angeles Records, Tract No. 17880, 1967.



FIGURE 15. A 1968 aerial view of the Roosevelt SH campus showing extant buildings in March 1968. Source: University of California Regents, March 1, 1968.



FIGURE 16. The primary entrance to Building 1. Source: ASM, February 15, 2017.

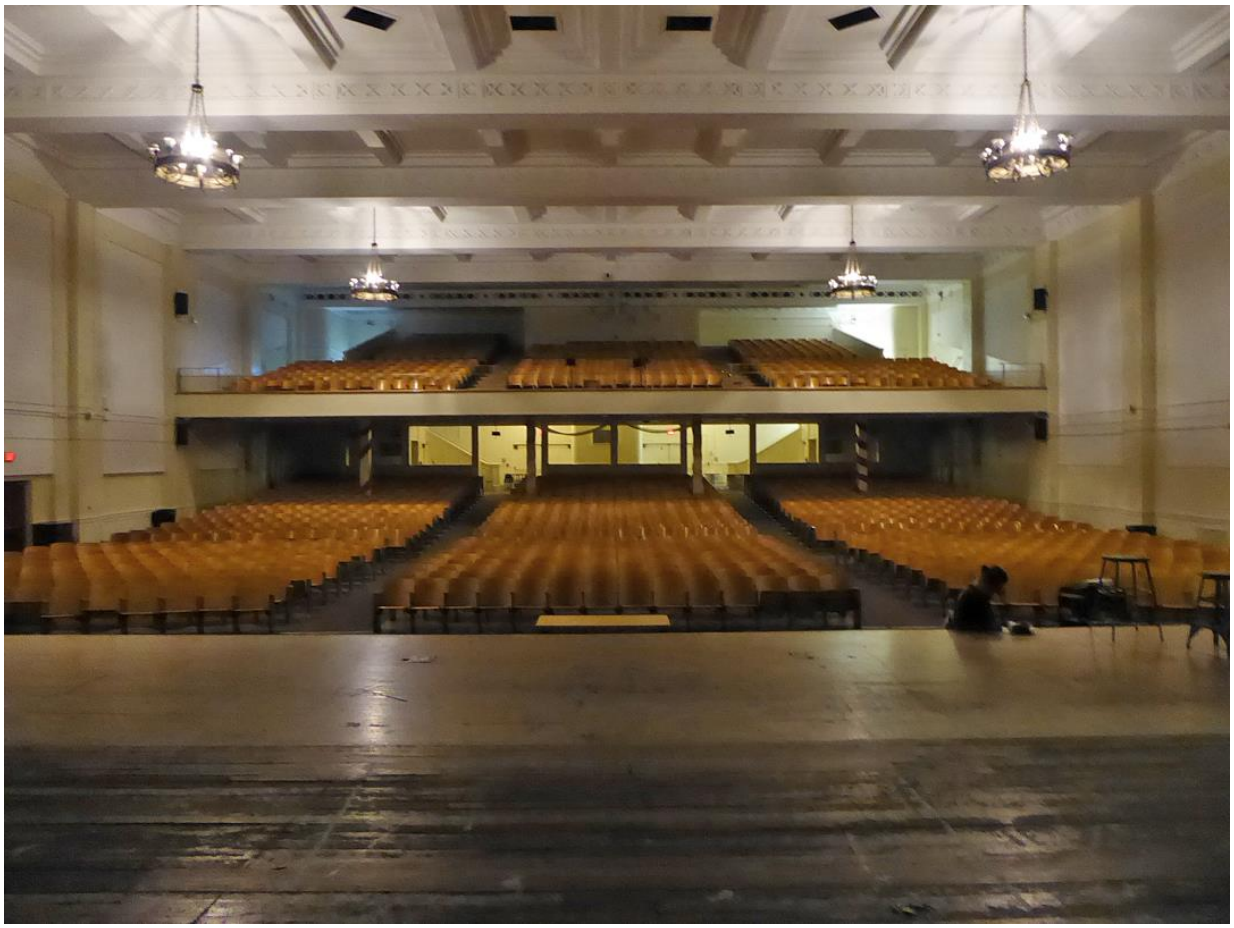


FIGURE 16. The auditorium in Building 1. Source: ASM, February 15, 2017.



FIGURE 16. The lobby and staircase outside the auditorium in Building 1.
Source: ASM, February 15, 2017.



FIGURE 17. Roosevelt students re-enacting the Blowouts on the historic staircase.
Source: Photographer Eduardo "Eddie" Lopez, from former Roosevelt teacher Brian Gibbs, n.d.

Attachment B: INTERPRETIVE PLAN

This attachment contains an interpretive plan to commemorate the events, people, and places involved in the 1968 walkouts at Roosevelt SH. This plan consists of two sections:

- Identification of materials, programs, and events that could be developed by LAUSD in the future
- Sample narratives for use in interpretative panels at Roosevelt SH

Materials, Programs, and Events

ASM recommends the following activities to further the knowledge and interpretation of the 1968 walkouts at Roosevelt SH and other schools within LAUSD:

1) Intensive Survey of Similar Resources

Conduct intensive surveys and evaluations of the other East L.A. schools associated with this significant event, specifically Garfield, Wilson, Lincoln, Belmont, and Jefferson, as well as Hazard Park. This evaluation would be focused on each school's associations with the Blowouts under Criterion A/1, and their association with any significant individuals, such as Sal Castro or other members of the East L.A. 13, under Criterion B/2. The evaluation reports should be done following the guidelines provided by the *LAUSD Historic Context Statement, 1870–1969* under the theme *of LAUSD and the Civil Rights Movement, 1954-1980,* and the *SurveyLA Latino Los Angeles Historic Context Statement* under the themes of *Education 1930–1980* and *The Civil Rights Movement, 1920–1980* and comply with CEQA.

2) Development of Features for the Roosevelt SH Website

Develop the content, including narrative and graphics, for a feature for the Roosevelt HS website: *rooseveltlausd.org*. The web feature would provide a full narrative history of the events, as well as historic photographs, to fully interpret this significant event, as well as Sal Castro's involvement with the Blowout Committee at Roosevelt. Interpretative panels (see subsequent section) will include a Quick Response code (QR code) that will link to this web feature, or provide the same content. As part of this activity, efforts should be made to gather additional historic photographs, including those by photographer Oscar Castillo, housed at UCLA Chicano Studies Research Center, and *LA Times* historic photos, held in the Los Angeles Times Photographic Archives in the Library Special Collections at UCLA.

3) Oral Histories with Teachers

Conduct and record a series of oral histories with teachers who can be identified that were present at Roosevelt in 1968, or have extensive knowledge of the events from teaching about them as part of their class curriculum. Interviews should be conducted following the *Principles* and *Best Practices* established by the Oral History Association,[1] including the recommended methods for digital recordation and translation. Oral histories should be conducted by historians who meet the *Secretary of the Interior's Professional Qualification Standards* or individual who have participated in training to conduct oral histories. Release forms should be signed by each narrator through which her or she transfers his or her rights to the interview to the repository or designated body. Oral histories should be recorded using at least two separate audio recorders, utilizing at least one external microphone, as well as one video recorder. Oral histories should be archived at UCLA through the Oral History Program, and also in consultation with the UCLA Chicano Studies Research Center.

[1] Available at: http://www.oralhistory.org/about/principles-and-practices/

4) Commemorative Events for the 50th Anniversary of the Blowouts

Organize commemorative events to recognize the importance of the Blowout events and this period of Roosevelt SH's history. Activities in March 2018 could include screenings of the PBS documentary "Chicano!" and the film "Blowout!" to be held on the Roosevelt HS campus. Activities in the fall of 2018 (after the class reunion, see #5 below) could include first-hand recounting of the events by any teachers or students in front of an audience. Teachers who were not present at the Blowouts but who taught the events over the years would also be likely participants.

5) Presence at Class of 1968 50th High School Reunion

Coordinate with the organizers of the Roosevelt SH Class of 1968 reunion to arrange a medium to collect stories from the students attending the reunion. For example, a recording booth/area could be arranged during the reunion events in which students could be free to stop by and provide on-camera a less than five-minute account of their recollections and feelings about the events. The recording booth would be organized and monitored by professional historians who would then contact those students with the most direct involvement in the Blowouts after the reunion and ask them to be part of an oral history project (see #6 below).

6) Oral Histories with Students

Conduct and record a series of oral histories with students who can be identified as present at Roosevelt in 1968. Interviews should be conducted following the *Principles* and *Best Practices* established by the Oral History Association,[2] including recommended methods for digital recordation and translation. Oral histories should be conducted by historians who meet the *Secretary of the Interior's Professional Qualification Standards* or individual who have participated in training to conduct oral histories. Release forms should be signed by each narrator through which her or she transfers his or her rights to the interview to the repository or designated body. Oral histories should be recorded using at least two separate audio recorders, utilizing at least one external microphone, as well as one video recorder. Oral histories should be archived at UCLA through the Center for Oral History Research and also in consultation with the Chicano Studies Research Center.

[2] Available at: http://www.oralhistory.org/about/principles-and-practices/

Sample Panel Narratives

Below are five sample narratives that can be utilized in the future for interpretive panels (approximately 200 words for each narrative).

PANEL #1: ROOSEVELT
The 1968 Student "Blowouts"

On March 5, 1968, hundreds of Mexican-American students walked out of Roosevelt High as part of an organized protest known as the "Blowouts." The Blowouts were part of a larger effort by East L.A. students to improve their schools. Before walking out, student took a list of demands to the school board. Demands included smaller class size, more Latino teachers, bilingual classes, counseling for college entrance (rather than automatically channeling Latino students into vocational programs), and a curriculum that addressed Latino history and interests. When the school board failed to respond, students took action and planned a series of walkouts. Students at other predominately Mexican-American schools—Wilson, Lincoln, Garfield, and Belmont highs—joined the Roosevelt students in walking out of class to draw attention to educational inequality.

The Blowouts are widely considered the first major protest against racism and educational deficiencies staged by Mexican-Americans in the United States. Although Mexican-Americans had been complaining about school segregation as early as the 1930s, the actions at the heavily Mexican-American schools focused national attention, for the first time, on what was to become a vocal, assertive minority group. The initial walkouts at East L.A. high schools triggered a chain reaction of protests that rapidly spread, involving up to 10,000 students in Los Angeles and serving as a catalyst for the larger Chicano civil rights movement.

PANEL #2: ROOSEVELT
The Legacy of the Blowouts at Roosevelt

In the first week of March 1968, Roosevelt students joined thousands of Mexican-American students who walked out of East L.A. high schools as part of an organized protest known as the "Blowouts." At Roosevelt, students walked out of class and gathered in the streets outside the school. Later in the day, police arrived to disperse them. The students resisted and violence erupted, leading to the arrest of fifteen protesters. Two days later, law enforcement was prepared when Roosevelt students attended an assembly in the school auditorium to discuss the ongoing volatile situation. After the assembly, teachers escorted some of the students to exits where they would not have to cross police lines. Other Roosevelt students staged a sit-in on the steps in the lobby outside the auditorium, where accounts say police entered the school and used forceful means to break up the peaceful demonstration. To escape, the students ran up the stairs, down the central hall, out the other side of the main building, through a classroom building, and onto Mott Street. Although protests continued for years after, in the first few days of the Blowouts, Roosevelt was the only school that experienced significant violence. Nearly fifty years later, teachers at Roosevelt continue to teach the Blowouts as an example of the effects of organized protests that focused national attention, for the first time, on Chicanos as a vocal, assertive minority group.

PANEL #3: ROOSEVELT OR LINCOLN
Salvatore ("Sal") Castro

Sal Castro was an influential East L.A. high school teacher and activist who was instrumental in organizing Mexican-American students in several high schools to walk out of class in protest of educational inequality. In 1963, Castro was teaching at Belmont High and volunteered at the Mexican American Youth Leadership

Conferences intended to promote citizenship for high school students. There he found hundreds of students from all over L.A. County who expressed similar complaints about lack of opportunity for Mexican-American students. At the time, dropout rates for Mexican-American students in East L.A. were among the highest in the nation. Castro was enraged that his community and people were treated dismissively and began organizing meetings with students from Lincoln, Wilson, Roosevelt, and other East L.A. schools.

A few years later, Castro was teaching at Lincoln High, where students wanted to walk out in protest and asked for his help. "Don't walk out," Castro advised them, "organize." Castro began meeting with students from Lincoln, Wilson, Roosevelt, and other schools and helped them form what they called "Blowout Committees." Failing in their attempts to be heard by the school board, under Castro's leadership, students in East L.A. walked out simultaneously in March of 1968 in demonstrations known as "Blowouts." Castro was arrested, along with twelve others, for his association with the demonstrations and charged with conspiracy. Charges against the group, known as East L.A. 13, were dropped in 1972.

PANEL #4: LINCOLN (and can be edited for the other schools)
Lincoln High and the 1968 Student Blowouts

In March 1968, hundreds of Mexican-American students walked out of Lincoln High as part of an organized protest at known as the "Blowouts." Sal Castro, a teacher at Lincoln, was instrumental in bringing the students from East L.A. high schools together to voice their complaints and a list of demands to the school board. When the school board failed to respond, students took action and planned a series of walkouts. Students at predominately Mexican-American schools—Wilson, Roosevelt, Garfield, and Belmont highs—joined the Lincoln students in walking out of class to draw attention to poor schools and educational inequality.

The Blowouts were widely considered the first major protest against racism and educational deficiencies staged by Mexican-Americans in the United States. Although Mexican-Americans had been complaining about school segregation as early as the 1930s, the actions at the heavily Mexican-American schools focused national attention, for the first time, on what was to become a vocal, assertive minority group. The initial walkouts at East L.A. high schools triggered a chain reaction of protests that rapidly spread, involving up to 10,000 students in L.A. and serving as a catalyst for the larger Chicano civil rights movement.

PANEL #5: Any of the five schools
The East L.A. 13

The "East L.A. 13" was a group of thirteen organizers of the 1968 Mexican-American student protests known as the "Blowouts." The activists, including Lincoln High teacher Sal Castro, were indicted by the Los Angeles County Grand Jury a few months after the demonstrations and charged with fifteen counts of conspiracy for disrupting public schools and fifteen counts of conspiracy for disturbing the peace, amounting to a total of sixty-six years in prison if all were convicted. Legal defense was provided by the Chicano Legal Defense Committee and the American Civil Liberties Union, and charges were struck down two years later by the California State Appellate Court. The Blowouts initially took place at Wilson, Roosevelt, Lincoln, Garfield, and Belmont high schools, and rapidly caught fire, spreading to schools throughout Los Angeles and across the nation. The student protests were an important early activity in the Chicano civil rights movement.

Attachment C

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Draft Cultural Resources Technical Report for Roosevelt High School, Los Angeles, Los Angeles County, California

Draft Report
January 2018



Prepared for:

Ed Paek
LAUSD | OEHS
333 South Beaudry Avenue 21-225-04
Los Angeles, California 90017

Prepared by:

Shannon Davis, M.A., RPH
Marilyn Novell, M.S.
Sherri Andrews, M.A., J.D., RPA

20 North Raymond Avenue
Suite 220
Pasadena, California 91103
(626) 793-7395

ASM Project Number 28120.01

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Draft Cultural Resources Technical Report for Roosevelt High School, Los Angeles, Los Angeles County, California

Prepared for:

Ed Paek
LAUSD | OEHS
333 South Beaudry Avenue 21-225-04
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Shannon Davis, M.A., RPH
Marilyn Novell, M.S.
Sherri Andrews, M.A., J.D., RPA

ASM Affiliates, Inc.
20 North Raymond Avenue, Suite 220
Pasadena, California 91103

January 2018
PN 28120.01

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EXECUTIVE SUMMARY

ASM Affiliates, Inc. (ASM), under contract to Impact Sciences, has prepared this Cultural Resources Technical Report (CRTR) in support of the Environmental Impact Report (EIR) being prepared for the Comprehensive Modernization Project (Project) at Roosevelt Senior High School (SH), located at 456 South Matthews Street in the Boyle Heights neighborhood of Los Angeles, Los Angeles County, California. The Project includes demolition of multiple buildings, construction of new buildings, site upgrades, seismic and fire and safety upgrades, and Americans with Disabilities Act (ADA) improvements. The EIR is being prepared in accordance with the California Environmental Quality Act (CEQA). An Initial Study for the Project prepared in October 2017 determined that the Project would potentially create a significant impact on cultural resources (Impact Sciences 2017:47).

The Los Angeles Unified School District (LAUSD) recognizes that several buildings at Roosevelt SH have been identified as contributors to a potential historic district eligible for listing in the National Register of Historic Places (NRHP) and California Register of Historical Resources (CRHR) under Criteria A/1 and B/2 (ASM 2017). Additionally, one of the primary contributors (Building 1) is considered individually eligible under these same criteria. This report considers whether the proposed Project would impact any identified historic resources within the project's Area of Potential Impacts (API), encompassing a one-parcel buffer around the boundaries of Roosevelt SH. The Project proposes demolition of the two primary contributors to the historic district as well as all of the secondary contributors and construction of new buildings. This report provides an assessment and evaluation of potential direct and indirect impacts to those historical resources and the identified Roosevelt Senior High School Historic District as a result of the proposed Project.

This assessment of impacts was conducted in compliance with CEQA and guided by the *Secretary of the Interior's Standards for the Treatment of Historic Properties* (*SOI Standards*). CEQA Guidelines Section 15064.5 defines significant impacts as a substantial adverse change to a historic resource, encompassing "demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resource would be materially impaired" (AEP 2016:140). The Guidelines also state: "Generally, a Project that follows the Secretary of the Interior's Standards for Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring and Rehabilitating Historic Buildings … shall be considered as mitigated to a less than significant level" (AEP 2016:141).

Because the Project site includes the NRHP-eligible Roosevelt Senior High School Historic District, as determined by the 2017 ASM supplemental Historical Resources Evaluation Report (HRER), which was also found potentially eligible by SurveyLA under Criteria A/1 and C/3 (ARG 2014), the Project poses the potential to cause significant direct and/or indirect impacts to historical resources. The design for the Project, as proposed, would require demolition of all of the primary and secondary contributors to the potential historic district and thus would result in direct and possibly indirect impacts to the historic district as identified in the previous HRER (ASM 2017). The potential for adverse indirect visual effects to previously identified historical resources within a one-parcel buffer is also considered.

As part of this report, an intensive archaeological survey was conducted of the entire Roosevelt SH campus. No previously undocumented archaeological resources were identified as a result of the survey. However, the records search revealed the potential subsurface presence of an historic water conveyance feature, a branch of the Zanja Madre, that ran across the northwest corner of the Project site in the late nineteenth century.

INTRODUCTION

This report describes the goals, methods, and findings of the impacts analysis conducted by ASM Affiliates, Inc. (ASM), for the Roosevelt Senior High School (SH) Comprehensive Modernization Project (Project) in Los Angeles, Los Angeles County, California. LAUSD proposes the construction of the Project within the Roosevelt SH campus, which encompasses a previously identified historic district. The California Environmental Quality Act (CEQA) applies to discretionary projects undertaken, approved, or funded by a public agency. As such, the proposed Project is subject to CEQA. LAUSD is the "lead agency" under CEQA and is responsible for the design, funding, construction, and operation of the campus modernization Project. ASM has prepared this report to evaluate whether the proposed Project would either directly or indirectly impact the Roosevelt Senior High School Historic District or its contributors within the Project's Area of Potential Impacts (API). The following introductory sections present a description of the Project and the applicable regulatory framework.

PROJECT LOCATION AND SETTING

The proposed Project is located within the boundaries of the Roosevelt SH campus. The approximately 22.7-acre campus is located at 456 South Mathews Street, Los Angeles, California, and bounded by East 4th Street on the northeast, Mott Street on the southeast, East 6th Street on the southwest, and South Mathews Street on the northwest. Hollenbeck Middle School occupies the parcel across East 6th Street. The remainder of the surrounding neighborhood is primarily a mix of single- and multiple-family residential properties, with a scattering of small commercial properties on East 6th Street. The parcel (APN 5185-004-929) is located within the Boyle Heights Community Plan Area of the City of Los Angeles (Figures 1 and 2).

Boyle Heights is among the oldest communities in Los Angeles and one of the most densely populated. In the 1870s, the arrival of the Southern Pacific Railroad sparked the first major real estate boom in Southern California. When the local economy abruptly suffered a severe downturn, development temporarily came to a halt, becoming re-energized in the 1880s, when Boyle Heights began to take on the characteristics of a residential suburb. Between the 1890s and the 1920s, commercial and institutional development grew to serve the needs of the residents. Place names like Brooklyn Street (Cesar Chavez Avenue) and Prospect Park identified Boyle Heights as a center of the Jewish community during the first half of the twentieth century. After World War II, the routing of the San Bernardino, Golden State, Santa Ana, and Pomona freeways through the heart of Boyle Heights resulted in the fracturing of the once coherent community. As upwardly mobile Jewish families relocated to the westside of Los Angeles, a Latino population was drawn to the relatively affordable, accessible housing (ARG 2014).

The setting of the Roosevelt SH campus reflects the early development of Boyle Heights, with housing from the early 1900s predominating. The properties surrounding the Project site are primarily single- and multi-family residential, with some institutional (e.g., school, hospital, and church), commercial, and recreational uses. Immediately south of the site, across East 6th Street is Hollenbeck Middle School. Several small parks, recreation centers, and libraries are located in the surrounding area, including Hollenbeck Park 0.32 miles (mi.) to the west, Boyle Heights Sports Center Facility 0.3 mi. to the south, Evergreen Recreation Center approximately 0.25 mi. to the northeast, and Benjamin Franklin Library 0.5 mi. to the northwest.

PROJECT DESCRIPTION

LAUSD is proposing a comprehensive modernization of Roosevelt SH Roosevelt High (Project). The proposed Project is designed to address the most critical physical concerns of the buildings and grounds at the campus while upgrading, renovating, modernizing, and reconfiguring the campus to provide facilities

that are safe, secure, and better aligned with the current instructional program. A site plan of the campus as it currently exists can be compared with a conceptual site plan show the footprint and layout of the proposed Project (Figures 3 and 4). A detailed description of the proposed Project's components and design is provided in an Initial Study (Impact Sciences 2017). The proposed Project is required to undergo an environmental review pursuant to CEQA.

METHODOLOGY

ASM began the Project by requesting a records search from the South Central Coastal Information Center (SCCIC) for a 0.25-mi. buffer surrounding the Project area on December 11, 2017. A response was received on January 11, 2018. The anticipated direct API for the Project is limited to the school campus; the indirect API includes a one-parcel buffer surrounding the campus. ASM has previously conducted an intensive-level survey of the architectural resources within the direct API and referred to our prior report and survey; the direct API was not resurveyed. On December 12, 2017, ASM conducted a second field survey of the campus to assess potential impacts in the indirect API. ASM did not conduct an intensive survey of the indirect API but relied on recent SurveyLA findings for this neighborhood to identify potentially eligible resources. ASM documented only viewsheds toward and from those resources from the Project area. It was assumed that five potential historical resources within the indirect API require consideration: three (3) individual buildings as recommended potentially eligible by SurveyLA and two (2) known eligible historical resources (Hollenbeck Middle School and a residence at 2700 Eagle Street that is a local landmark). No additional archival research was conducted for this report. ASM also reviewed the prior Historical Resources Evaluation Report (HRER) for Roosevelt SH prepared by PCR in 2015 for any gaps in the evaluation of the architectural significance of Roosevelt SH, and to address any deficiencies. ASM did not reevaluate Roosevelt SH for its associational significance, but utilized our prior evaluation of the campus (2016) for its association with Latino history and the 1968 walk-outs (ASM 2017). ASM prepared California Department of Parks and Recreation (DPR) forms for each of the contributors to the previously identified historic district (Appendix A).

An archaeological pedestrian survey of the entire Project area was undertaken on December 12, 2017, by ASM Senior Archaeologist Sherri Andrews. The survey was limited to the direct API and concentrated on areas of ground surface visibility.

ASM contacted the California Native American Heritage Commission (NAHC) to request a Sacred Lands File search. A list of five tribal contacts who may have interest in the Project area was provided with the NAHC response (Appendix B).

PROJECT PERSONNEL

ASM Senior Architectural Historian, Shannon Davis, M.A., was the team leader conducting the impacts analysis, as well as Project Manager for ASM. Ms. Davis exceeds the professional qualification standards for Architectural Historian and Historian as identified in the *Secretary of the Interior's Standards for Archeology and Historic Preservation* (36 CFR 61). As an Architectural Historian at ASM, Ms. Davis has documented and evaluated numerous cultural resources for CEQA and Section 106 of the National Historic Preservation Act (NHPA) compliance, impacts/effects analysis, Historic Structures Reports (HSRs), Historic American Building Survey (HABS), and NRHP nominations. Ms. Davis additionally has past professional experience with the cultural resources programs of the National Park Service, including eight years as an Historian with the NRHP.

ASM Architectural Historian, Marilyn Novell, M.S., meets the professional qualification standards for Architectural Historian and Historian as identified in the *Secretary of the Interior's Standards for Archeology and Historic Preservation* (36 CFR 61). As an Architectural Historian, Ms. Novell has

conducted historic and cultural resource assessments for projects throughout Los Angeles County and California. Ms. Novell has experience in developing historical and cultural resources reports and in evaluating properties under federal, state, and local criteria, including NRHP, Section 106, CRHR, and CEQA compliance.

ASM Senior Archaeologist Sherri Andrews, M.A., conducted the archaeology sensitivity study. Ms. Andrews exceeds the professional qualification standards for Archaeology as identified in the *Secretary of the Interior's Standards for Archeology and Historic Preservation* (36 CFR 61). As an Archaeologist at ASM, Ms. Andrews has served as Principal Investigator, Co-Principal Investigator, and Field Director, and has experience in all aspects of project management, ranging from records searches and fieldwork to report writing and preparation.

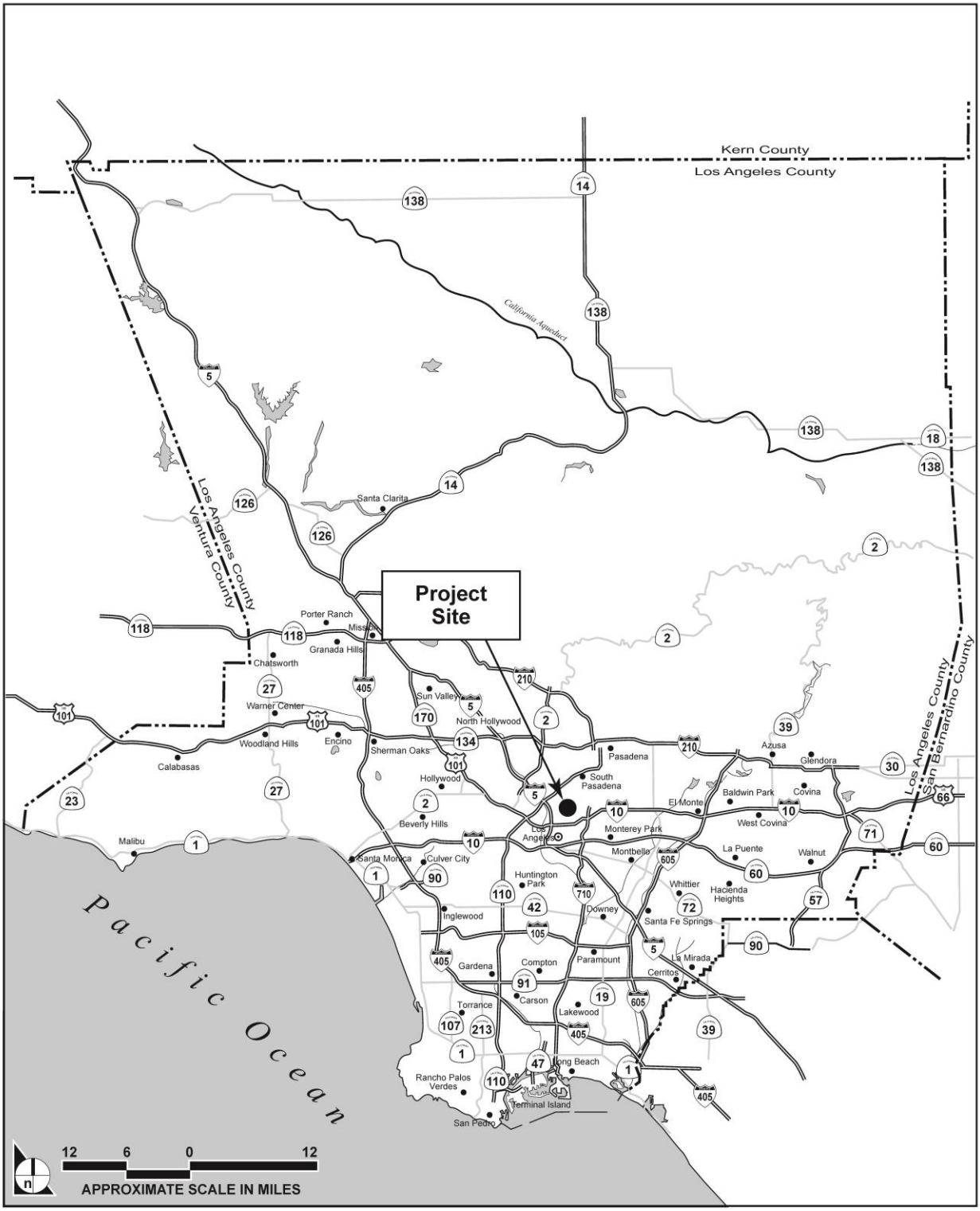


Figure 1. Regional location map.

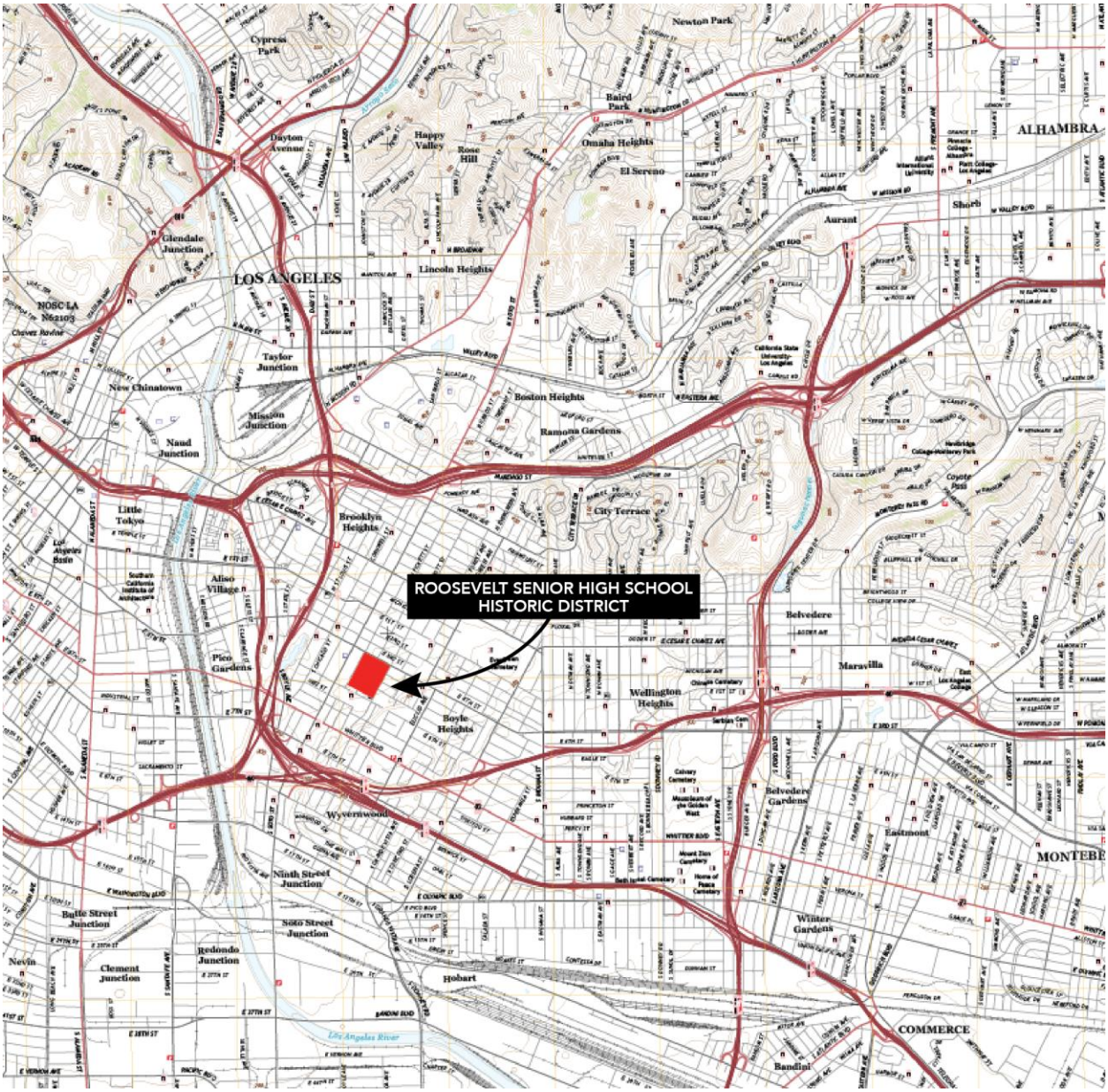


Figure 2. Vicinity location map. Source: ASM and USGS Los Angeles, CA (2015) topographic quadrangle.



Figure 3. Current site plan of Roosevelt Senior High School. Source: LAUSD Pre-Planning Survey, December 2010.



Figure 4. Proposed Project site plan. Source: LAUSD, 2017.

REGULATORY FRAMEWORK

NATIONAL REGISTER OF HISTORIC PLACES

Authorized by the National Historic Preservation Act of 1966, the National Park Service's NRHP is part of a national program to coordinate and support public and private efforts to identify, evaluate, and protect America's historic and archeological resources. The NRHP is the official list of the nation's historic places worthy of preservation. The quality of significance in American history, architecture, archaeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity and:

A. are associated with events that have made a significant contribution to the broad patterns of our history; or

B. are associated with the lives of persons significant in our past; or

C. embody distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or have yielded, or

D. may be likely to yield, information important in prehistory or history.

Integrity

In order to be eligible for listing in the NRHP and CRHR, a property must retain sufficient integrity to convey its significance. The NRHP publication *How to Apply the National Register Criteria for Evaluation*, National Register Bulletin 15, establishes how to evaluate the integrity of a property: "Integrity is the ability of a property to convey its significance" (National Park Service, National Register of Historic Places 1998). The evaluation of integrity must be grounded in an understanding of a property's physical features and how they relate to the concept of integrity. Determining which of these aspects are most important to a property requires knowing why, where, and when a property is significant. To retain historic integrity, a property must possess several, and usually most, aspects of integrity:

1. *Location* is the place where the historic property was constructed or the place where the historic event occurred.
2. *Design* is the combination of elements that create the form, plan, space, structure, and style of a property.
3. *Setting* is the physical environment of a historic property, and refers to the character of the site and the relationship to surrounding features and open space. Setting often refers to the basic physical conditions under which a property was built and the functions it was intended to serve. These features can be either natural or manmade, including vegetation, paths, fences, and relationships between other features or open space.
4. *Materials* are the physical elements that were combined or deposited during a particular period or time, and in a particular pattern or configuration to form a historic property.
5. *Workmanship* is the physical evidence of crafts of a particular culture or people during any given period of history or prehistory, and can be applied to the property as a whole, or to individual components.

6. *Feeling* is a property's expression of the aesthetic or historic sense of a particular period of time. It results from the presence of physical features that, when taken together, convey the property's historic character.
7. *Association* is the direct link between the important historic event or person and a historic property.

CALIFORNIA REGISTER OF HISTORICAL RESOURCES

The CRHR program encourages public recognition and protection of resources of architectural, historical, archaeological, and cultural significance; identifies historical resources for state and local planning purposes; determines eligibility for state historic preservation grant funding; and affords certain protections under CEQA. The criteria established for eligibility for the CRHR are directly comparable to the national criteria established for the NRHP.

In order to be eligible for listing in the CRHR, a building must satisfy at least one of the following four criteria:

1) It is associated with events that have made a significant contribution to the broad patterns of local or regional history or the cultural heritage of California or the United States.
2) It is associated with the lives of persons important to local, California, or national history.
3) It embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of a master or possesses high artistic values.
4) It has yielded, or has the potential to yield, information important to the prehistory or history of the local area, California, or the nation.

Historical resources eligible for listing in the CRHR must also retain enough of their historic character or appearance to be recognizable as historical resources and to convey the reasons for their significance. For the purposes of eligibility for the CRHR, integrity is defined as "the authenticity of an historical resource's physical identity evidenced by the survival of characteristics that existed during the resource's period of significance" (California Office of Historic Preservation 2001). This general definition is generally strengthened by the more specific definition offered by the NRHP—the criteria and guidelines on which the CRHR criteria and guidelines are based upon.

CEQA REGULATIONS

CEQA Guidelines 15064.5 *Determining the Significance of Impacts to Archeological and Historical Resources* requires that all private and public activities not specifically exempted be evaluated for potential environmental impacts, including impacts to historical resources. CEQA Section 21084.1 states that significant impacts may occur if "a project may cause a substantial adverse change in the significance to a historic resource." CEQA defines historical resources as "any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California."

Lead agencies have a responsibility to evaluate a project's impacts to historical resources and to determine whether those impacts are significant. Mitigation of significant impacts is required if the proposed Project will cause substantial adverse change to a historical resource. Substantial adverse change includes "demolition, destruction, relocation, or alteration such that the significance of an historical resource would be impaired." While demolition and destruction are fairly obvious significant impacts, it is more difficult

to assess when change, alteration, or relocation crosses the threshold of substantial adverse change. The CEQA Guidelines provide that a project that demolishes or alters those physical characteristics of an historical resource that convey its historical significance (i.e., its character-defining features) can be considered to materially impair the resource's significance.

For purposes of CEQA, a "historical resource" is a resource listed in or eligible for listing in the CRHR. The CRHR includes resources listed in, or formally determined eligible for listing in, the NRHP, as well as some California State Landmarks and Points of Historical Interest. Properties of local significance that have been designated under a local preservation ordinance (local landmarks or landmark districts), or that have been identified in a local historical resources inventory, may be eligible for listing in the CRHR and are presumed to be historic resources for purposes of CEQA unless a preponderance of evidence indicates otherwise.

Generally, a resource shall be considered by the lead agency to be a "historical resource" if it:

1. Is listed in, or determined to be eligible by the State Historical Resources Commission, for listing in the CRHR (PRC Section 5024.1, Title 14 CCR, Section 4850 et seq.).
2. Is included in a local register of historical resources, or is identified as significant in an historical resource survey meeting the requirements of Section 5024.1(g) of the PRC.
3. Is a building or structure determined to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California. Generally, a resource is considered "historically significant" if it meets the criteria for listing in the CRHR.

SECRETARY OF THE INTERIOR'S STANDARDS

The SOI Standards were codified in 1995 (36 CFR Part 68) to establish professional standards that apply to all proposed development grant-in-aid projects assisted through the National Historic Preservation Fund and serve as general guidance for work on any other historic building (Weeks and Grimmer 2017). The SOI Standards for *Rehabilitation* are the appropriate approach to apply to this Project, as Standard 8 addresses impacts to archaeological resources, and Standards 9 and 10 address additions and new construction related to historic properties (Weeks and Grimmer 2017). The Standards apply to historic resources of all periods, styles, types, materials, and sizes. The Standards also encompass related landscape features, the site, and environment as well as attached, adjacent, or related new construction. The 10 Standards for *Rehabilitation* are:

1. A property will be used as it was historically or be given a new use that requires minimal change to its distinctive materials, features, spaces, and spatial relationships.
2. The historic character of a property will be retained and preserved. The removal of distinctive materials or alteration of features, spaces, and spatial relationships that characterize a property will be avoided.
3. Each property will be recognized as a physical record of its time, place, and use. Changes that create a false sense of historical development, such as adding conjectural features or elements from other historic properties, will not be undertaken.
4. Changes to a property that have acquired historic significance in their own right will be retained and preserved.
5. Distinctive materials, features, finishes, and construction techniques or examples of craftsmanship that characterize a property will be preserved.

6. Deteriorated historic features will be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive feature, the new feature will match the old in design, color, texture, and, where possible, materials. Replacement of missing features will be substantiated by documentary and physical evidence.
7. Chemical or physical treatments, if appropriate, will be undertaken using the gentlest means possible. Treatments that cause damage to historic materials will not be used.
8. Archeological resources will be protected and preserved in place. If such resources must be disturbed, mitigation measures will be undertaken.
9. New additions, exterior alterations, or related new construction will not destroy historic materials, features, and spatial relationships that characterize the property. The new work will be differentiated from the old and will be compatible with the historic materials, features, size, scale and proportion, and massing to protect the integrity of the property and its environment.
10. New additions and adjacent or related new construction will be undertaken in such a manner that, if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired.

CRITERIA FOR ASSESSING VISUAL IMPACTS

Because there is no universally accepted yardstick for measuring visual impacts, and because those impacts do not always damage the defining characteristics of an historic property in any physical manner, assessing them can be difficult and complicated. If we are to consider that an historic property is affected when its historic significance and integrity have been diminished, determining how a project harms a resource's historical significance and integrity is essential to any assessment. In assessing the indirect impacts for historic resources, the criteria for significance and the aspects of integrity are factors that require careful evaluation and can provide a defensible qualitative method for determining visual impacts on historic resources.

To ensure a thorough and complete analysis of visual impacts, ASM augmented the nationally recognized guidance of Section 106 (36 CFR 800) regulations of the NHPA and SOI Standards with more specific guidance that has been developed by two state agencies—the Delaware State Historic Preservation Office (Delaware SHPO 2003) and the Wyoming Bureau of Land Management and Wyoming State Historic Preservation Office (Wyoming BLM 2006).

DEFINITIONS

For purposes of this analysis, the following definitions have been used:

Historic Property or Historic Resource: a historic site, district, building, structure, or object that is either eligible for inclusion in the NRHP, or listed therein.

Adverse Visual Impact: an impact that negatively affects the integrity of the setting or feeling of an historic property, to the extent that significance and eligibility for listing in the NRHP are compromised. In particular, adverse visual impacts can be seen as negatively affecting the following characteristics of integrity: setting, feeling, or association.

Obstructive Visual Impacts: any visual impact that carries the potential to obstruct any part of the view of an historic property, or the scenic view from such a resource. Adverse obstructive impacts can obstruct all or a portion of an historic property and/or its viewshed, in turn negatively affecting the property's historic character.

Scenic Views: any scenic resources or resources that are visually and aesthetically important and that contribute to an historic property's significance.

Viewsheds: those areas visible from a specified location or locations.

Visual Impacts: any aspect of a proposed undertaking that will be seen from or will be in the view of an historic property. A visual impact may be beneficial or adverse and may affect the historic property in an aesthetic or obstructive manner. The determination that a visual impact exists does not automatically imply that the impact is adverse.

ADVERSE VISUAL IMPACTS

Adverse visual impacts may be created when an undertaking is visible within the viewshed of the historic property, when it blocks a view toward the historic property, or when it introduces an element that is incompatible with the criteria under which the property is eligible.

Simply because an undertaking will be visible from an historic property does not mean it automatically will create an adverse visual impact. Therefore, it is necessary to evaluate the visual changes and alterations the undertaking will introduce to the resource. In assessing adverse visual impacts on a historic property, it is necessary to identify the criterion or criteria under which the resource is eligible and what qualities or characteristics of the resource contribute to its significance or eligibility. For example, if a resource is eligible for its innovative engineering qualities, visual impacts on the property may not be adverse, whereas if the property is eligible on the basis of its architectural significance, an adverse impact very well may be created.

An adverse visual impact may be obstructive, which is to say it may block the view to or from an historic property; it may also not be obstructive and still create an adverse visual impact in that it introduces elements so incompatible with the criterion or criteria under which the property is eligible for listing that it diminishes the property's significance to a substantial degree. For example, a highway proposed to run alongside a historic rural church, although it would not directly obstruct the view to or from the building, might still introduce an element so incompatible with the rural setting of the property that it would have a diminishing impact on the integrity of the property's setting.
Adverse visual impacts should be determined on a case-by-case basis, weighing the following factors:

- **Significance.** An historic built-environment resource's historical significance and its key aspects of integrity must be taken into account in order to evaluate the project's impacts on the property's eligibility for listing in the NRHP.

- **Character-Defining Features.** The alteration of character-defining features at the project location (including open space) can affect the view from the historic built-environment resource and possibly the location, feeling, setting, and association of that resource.

- **Compatibility.** Whether in an open space or a developed area, the compatibility of the project with the character of the project's location and surrounding area, including historic resources, is important. The character of the historic property's site and architectural features should be the basis for determining the appropriate characteristics of the proposed project. The compatibility of the project is determined by:

    - Mass – the arrangement of the project's spaces;

- Scale and proportion—the size and the proportion of the project to the surrounding structures and features;
- Height—sometimes it may be necessary that a project height extend beyond that of the surrounding buildings and other features within view of the project; it is important that the height of the project not cause the line of sight to move so far up that the surrounding features are out of view, thereby detracting from the original view;
- Shadows;
- Color;
- The degree to which the project would contribute to the area's aesthetic value;
- The degree of contrast, or lack thereof, between the project and the background, surrounding scenery, or neighborhood; and
- The amount of open space.

- **Obstructive Impacts.** Whether a project is on or near an historic property, it can block the resource from being viewed, or block a view seen from that resource, thereby possibly diminishing its integrity. Determination of adverse obstructive impacts should be made on a case-by-case basis, considering the following factors:

  - The historic property's significance. It is necessary to understand the resource's historic significance and its key aspects of integrity in order to evaluate the project's impacts on the resource's eligibility for listing in the NRHP.
  - Nature and quality of the view from the historic property. This includes such features as natural topography, settings, man-made or natural features of visual interest, and other historic property seen from the historic built-environment resource, any of which would contribute to its significance and integrity.
  - Extent of obstruction. This includes total blockage, partial interruption, or interference with a person's enjoyment and appreciation of a scenic view or historic property viewed from the historic property, to the extent it affects the integrity of the historic property.
  - Obstruction of an historic property. The project might obstruct the historic property from being viewed from the project site or other area. If the historic property is visually appreciated from surrounding viewpoints, obstructing its view may affect its feeling, setting, location, or association.

IDENTIFICATION OF HISTORICAL RESOURCES

DESCRIPTION OF THE AREA OF POTENTIAL IMPACT

The API for the proposed Project includes all areas that could potentially be directly or indirectly impacted by the proposed project. The area of direct impact is limited to the boundaries of the Roosevelt Senior High School Historic District within the Roosevelt SH campus (Figure 5). The area of potential indirect impacts (indirect API) includes all historic resources that could be affected visually, audibly, atmospherically, or by temporary or permanent vibration. The indirect API was determined based on the expected visibility of the Project from identified historic resources within a one-parcel buffer in the surrounding area (Figure 6).



Figure 5. Area of Direct Impact/Boundaries of the Roosevelt Senior High School Historic District. Source: ASM, 2017.

REVIEW OF EXISTING INFORMATION

No archival research was conducted in preparation of this CRTR beyond what information was available in previous reports. ASM reviewed prior evaluations of the Roosevelt SH campus and the surrounding community, including a Supplemental Historical Resources Evaluation Report (HRER) prepared by ASM (ASM 2017), a Preliminary HRER for Roosevelt SH (PCR 2015), and SurveyLA findings for the Boyle Heights CPA (ARG 2014). The campus has been evaluated several times with varying findings.

For this report, ASM confirmed our previous recommendation of the historic district as eligible under Criteria A/1 and B/2 (ASM 2017). Other prior evaluations are divided regarding individual eligibility of Building 1 under Criteria C/3. The PCR evaluation considered it to lack integrity because it was extensively altered after the 1933 Long Beach Earthquake, and thus not eligible (PCR 2015). The ARG evaluation recommended Building 1 potentially eligible for architecture as it stands today, which displays the post-earthquake design (ARG 2014).

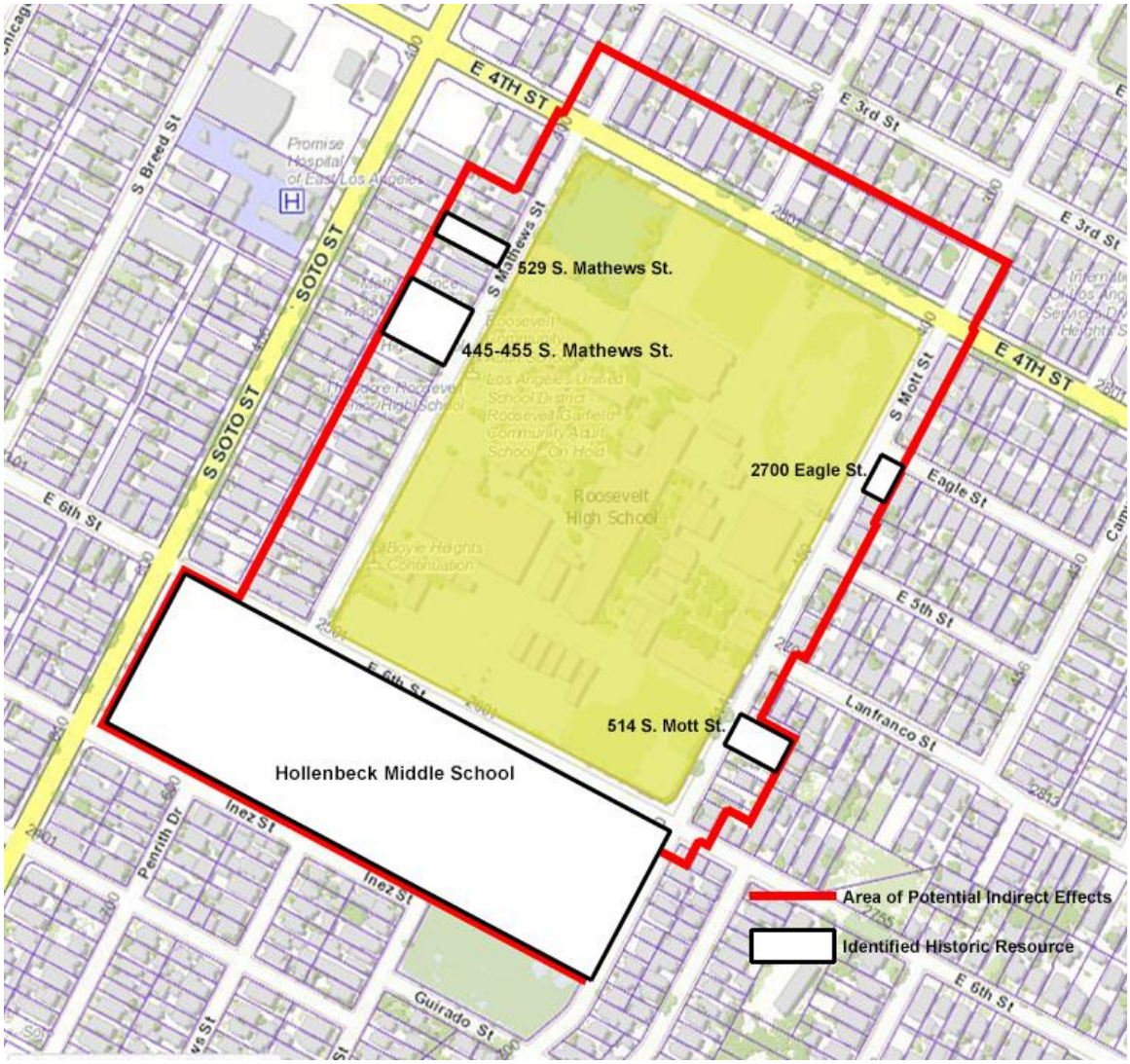


Figure 6. Map of Project area and area of indirect impact with previously identified historic resources highlighted. Source: Los Angeles Assessor's Office and ASM.

Supplemental Historical Resources Evaluation Report

The Supplemental Historical Resources Evaluation Report (ASM 2017) recommended Roosevelt SH eligible for listing in the NRHP and the CRHR under Criteria A/1 and B/2, and as a CEQA historical resource. Evaluation was guided by the *LAUSD Historic Context Statement, 1870–1969*, specifically the theme of *LAUSD and the Civil Rights Movement, 1954-1980* (LAUSD 2014), and the *SurveyLA Latino Los Angeles Historic Context Statement* (GPA and Nicolaides 2015), under the themes of *Education 1930–1980* and *The Civil Rights Movement, 1920–1980.* Roosevelt SH, along with four other East and Central Los

Angeles (L.A.) LAUSD high schools, was associated with the 1968 student walkouts (known as "Blowouts"), an important early activity in the Chicano civil rights movement.[1]

ASM considered the historical significance of the 1968 East L.A. high school Blowouts within the context of Latino civil rights and the activities that took place on the Roosevelt SH campus, and identified a part of the campus as eligible as a historic district under Criteria A/1. The report also recommended Roosevelt SH eligible as a historic district under Criteria B/2 for its association with Salvatore ("Sal") Castro, who played a central role in the 1968 protests.

SurveyLA

The SurveyLA report for the Boyle Heights CPA identified Roosevelt SH as an excellent example of an LAUSD high school under Criteria A/1 for its association with the East L.A. Blowouts and Criteria C/3 for architecture (ARG 2014). The period of significance for this context under Criteria A/1 is 1968, the year that the Blowouts occurred. The campus was found to be a significant example of institutional development of high schools associated with the Chicano civil rights movement under the theme of *Education and Ethnic/Cultural Associations, 1876-1980.* According to the Boyle Heights CPA survey report, "the walkouts represent a pivotal moment in the Chicano civil rights movement of the 1960s and 1970s" (ARG 2014:114-117).

The SurveyLA report also recommended the campus eligible under Criteria C/3. According to the report:

> the school represents LAUSD campus planning and design concepts from the post-1933 Long Beach Earthquake period of school construction, with a period of significance of 1936, when the campus was reconstructed to its present configuration. Although multiple phases of development are represented on the campus, the evaluation pertains only to the former administration building and a classroom building that date to the 1930s [Building 1 and Building 7]. The classroom building is the work of noted Los Angeles architect Sumner Spaulding [ARG 2014:114-117].

Although Roosevelt SH was not considered for eligibility under Criteria B/2, the SurveyLA report mentions several significant people who graduated from Roosevelt over the course of the years, including former Los Angeles mayor Antonio Villaraigosa.

In the SurveyLA *Latino Los Angeles Historic Context Statement*, prepared after the Boyle Heights survey was conducted, the student walkouts of 1968 are cited as an important early activity of the growing Chicano movement (also known as the Chicano Civil Rights Movement or El Movimiento) (GPA and Nicolaides 2015:59-60).

Preliminary Historic Resource Evaluation Report

The *Preliminary Historic Resource Evaluation Report for Theodore Roosevelt Senior High School* (PCR 2015) considered Roosevelt SH under several LAUSD themes: *Progressive Education Movement: Pre-1933 Long Beach Earthquake School Plants (1910-1933), Post-1933 Long Beach Earthquake School Plants (1933-1945),* and *Educating the Baby Boom—The Postwar Modern, Functionalist School Plant (1945-1969).* The evaluation assigned a status code of 6Z to the campus, and recommended it not eligible under any of these themes because of lack of integrity. However, the discussion is restricted to the school's

[1] Following Escobar's (1993) definition, in this report, the term Chicano is used to identify people involved in political action, in other words, people in the Chicano movement. The terms Mexican and Mexican-American generally signify people of Mexican descent who are not specifically part of the movement. Latino refers to a broader group comprising any person of Latin American descent who lives in the United States.

significance as it relates to architecture (Criteria C/3), whereas these themes are clearly defined in the LAUSD Historic Context Statement (LAUSD 2014) as associated with significant events (Criteria A/1).

Under Criteria A/1, the PCR report recommends Roosevelt SH not eligible as it relates to activities by the Chicano Liberation Front (CLF), which "do not appear to have been a significant event that shaped the history of the campus or the pursuits of the terrorist group" (PCR 2015:10). This report appears to disregard the 1968 Blowouts, in which the CLF could not have participated because the group was not formed until 1970 or 1971. A self-described revolutionary organization, the group claimed responsibility for numerous bombings in Southern California, including those at Roosevelt SH in 1970 (Notes from Aztlán 2014).

Under Criteria B/2, the PCR report recommends Roosevelt SH not eligible because it "is not identified with the productive life of any individual District teachers, principals, administrators, students, or any other persons important in our past" (PCR 2015:10).

Under Criteria C/3, the PCR report recommends the Roosevelt SH not eligible because of lack of integrity, cited as the 1936 post-Long Beach Earthquake re-design.

Despite the shortcomings in the analysis of eligibility, the report is valuable for its detailed history of the expansion and construction of the campus and for its descriptions of the campus and the individual buildings.

RECORDS SEARCH RESULTS

The records search at the SCCIC identified 10 previous cultural resource studies that had been conducted within a 0.25-mi. radius (Table 1). One of the studies, LA-13239, encompassed the northwest corner of the Project area.

Table 1. Previous Cultural Resources Reports Addressing the Project Area and the 0.25-mi. Records Search Radius

Report No. (LA-)	Year	Author(s)/Affiliation	Title
02788	1992	Brown, Joan C. / RMW Paleo Associates, Inc.	Archaeological Literature and Records Review, and Impact Analysis for the Eastside Corridor Alternatives Los Angeles, California
09111	2007	Bonner, Wayne H. / Michael Brandman Associates	Cultural Resources Records Search and Site Visit Results for T-Mobile Candidate LA03093E (Soto & 2nd), 201 South Soto Street, Los Angeles, Los Angeles County, California
09142	2004	Bonner, Wayne H. / Michael Brandman Associates	Direct APE Historic Architectural Assessment for T-Mobile Candidate LA03093E (Soto & 2nd), 2012 South Soto Street, Los Angeles County, California
09844	2001	Greenwood & Associates and Eastside Corridor Transit Consultants	Draft: Los Angeles Eastside Corridor, Revised Cultural Resources Technical Report, Final Supplemental Environmental Impact Statement/Final Subsequent Environmental Impact Report
10805	2009	Gust, Sherri, and Amy Glover / Cogstone Resource Management, Inc.	Cultural Resources Mitigation Compliance Report for the Metro Gold Line Eastside Extension, City of Los Angeles, California for the Period 2004 to 2006
10806	2010	Loftus, Shannon L. / ArchaeoPaleo Resource Management, Inc.	Addendum-Paleontological and Cultural Resource Compliance Monitoring Report, Los Angeles County, Metropolitan Transit Authority, Eastside Gold Line Transit Corridor Project

Report No. (LA-)	Year	Author(s)/Affiliation	Title
10856	2004	Glenn, Brian K., and Sherri Gust / Cogstone Resource Management, Inc.	Cultural Resource Monitoring and Mitigation Plan for the Los Angeles County Metropolitan Transportation Authority Eastside Gold Line Transit Corridor, Los Angeles, Los Angeles County, California
11955	2012	Bonner, Wayne H. / Michael Brandman Associates	Cultural Resources Records Search and Site Visit Results for T-Mobile West, LLC Candidate LA03093E (Soto and 2nd Rt) 201 South Soto Street, Los Angeles, California
12966	2015	Fulton, Phil, Elisa Betchel, and Casey Tibbet / LSA Associates, Inc.	Cultural Resource Assessment Class III Inventory, Verizon Wireless Services, Lorena Facility, City of Los Angeles, County of Los Angeles, California
13239	2017	Gust, Sherri / Cogstone Resource Management, Inc.	Extent of Zanja Madre

A total of 23 cultural resources have been previously documented within the 0.25-mi. records search radius (Table 2). All of the resources are historic; one is a small historic refuse site, and the remainder are structures.

Table 2. Previously Recorded Cultural Resources within the 0.25-mi. Records Search Radius

Primary # (P-19-)	Trinomial (CA-LAN-)	OHP #	Recorded by / Date	Description / Name	Attribute Codes	Relationship to Project Area
004178	4178H		Ruzicka, D., and K. Richardson, ArchaeoPaleo Resource Management / 2009	Soto Station	AH4. Privies/dumps/trash scatters	0.25 mi. NE
150199			Slawson, D., Greenwood / 2001	Harvey K. Gregory Residence	HP2. Single family property	0.25 mi. NE
150206			Slawson, D., Greenwood / 2001	Brengartner Residence	HP2. Single family property	0.2 mi. N
150210			Slawson, D., Greenwood / 2001	Dr. John W. Bacon Residence	HP2. Single family property	0.25 mi. NE
150211			Slawson, D., Greenwood / 2001	Frederick W. Hamlin Residence	HP3. Multiple family property	0.25 mi. NE
150213			Slawson, D., Greenwood / 2001	Harvey H. Vincent Residence	HP2. Single family property	0.25 mi. NE
150219			Slawson, D., Greenwood / 2001	Charles N. Poundstone Residence	HP2. Single family property	0.2 mi. N
171729		025740	City of Los Angeles, Bureau of Engineering / 1981	2706 E. 4th St.	HP2. Single family property	adj. E
171730		025741	City of Los Angeles, Bureau of Engineering / 1981	2722 E. 4th St.	HP2. Single family property	0.1 mi. E

Primary # (P-19-)	Trinomial (CA-LAN-)	OHP #	Recorded by / Date	Description / Name	Attribute Codes	Relationship to Project Area
171739		025750		2639 E. 4th St.	HP6. 1-3 story commercial building	adj. E
171740		025751		2707 E. 4th St.	HP2. Single family property	adj. E
171741		025752		2718 E. 4th St.	HP2. Single family property	0.1 mi. E
171742		025753		2730 E. 4th St.	HP2. Single family property	0.1 m E
171743		025754		2811 E. 4th St.	HP2. Single family property	0.15 mi. E
171744		025755		2832 E. 4th St.	HP2. Single family property	0.18 mi. SE
171888		025899	City of Los Angeles, Bureau of Engineering / 1981	2721 Whittier Blvd.	HP2. Single family property	0.25 mi. S
171913		025924		412 S. Evergreen Ave.	HP2. Single family property	0.25 mi. E
175249		097758	McAvoy, C., HRG / 1994	Hollenbeck Junior High	HP15. Educational building	adj. S
175328		097886	McAvoy, C., HRG / 1994; Slawson, D., Greenwood / 2001	First St Elementary; First Street School	HP15. Educational building	0.25 mi. NE
187637		153614	Grimes, T. / 2005	Santa Fe Coast Lines Hospital	HP41. Hospital	0.25 mi. W
188049		161926	Slawson, D., Greenwood / 2001	Martha Sindell Residence	HP2. Single family property	0.25 mi. N
190086			Crawford, K. A., Crawford Historic Services / 2012	Chavez Apartments	HP3. Multiple family property	0.2 mi. N
192224			Bechtel, E., LSA / 2015	Euclid Heights Methodist Episcopal Church; Casa Del Mexicano	HP13. Community center/social hall	0.25 mi. SE

The Historic Property Data File search conducted by SCCIC lists a total of 122 locations within 0.25 mi. of the Project (Table 3), a few of which are duplicated from Table 2. One of the resources, the Zanja Madre, has been determined to have run through the northwestern portion of the Project area in the late nineteenth century (Figure 7). The Zanja Madre (Mother Ditch) is the original aqueduct that brought water to the Pueblo de Los Angeles from the Rio Porciuncula (Los Angeles River); it developed into an extensive water conveyance system that was vital to the early development of the city of Los Angeles. It was originally an open, earthen ditch which was completed by community laborers within a month of founding the pueblo in 1871, and eventually become more than 92 mi. of complex irrigation channels throughout the city and beyond, serving as the city's first municipal water system—and primary source of irrigation for more than a century. The zanjas served the city until 1902, when they were replaced with a system of underground pipes (waterandpower.org n.d.). The Zanja Madre has been nominated several times over the years to the NRHP but the applications were repeatedly denied because "there wasn't enough of it to represent the whole system" (Peleg 2017).

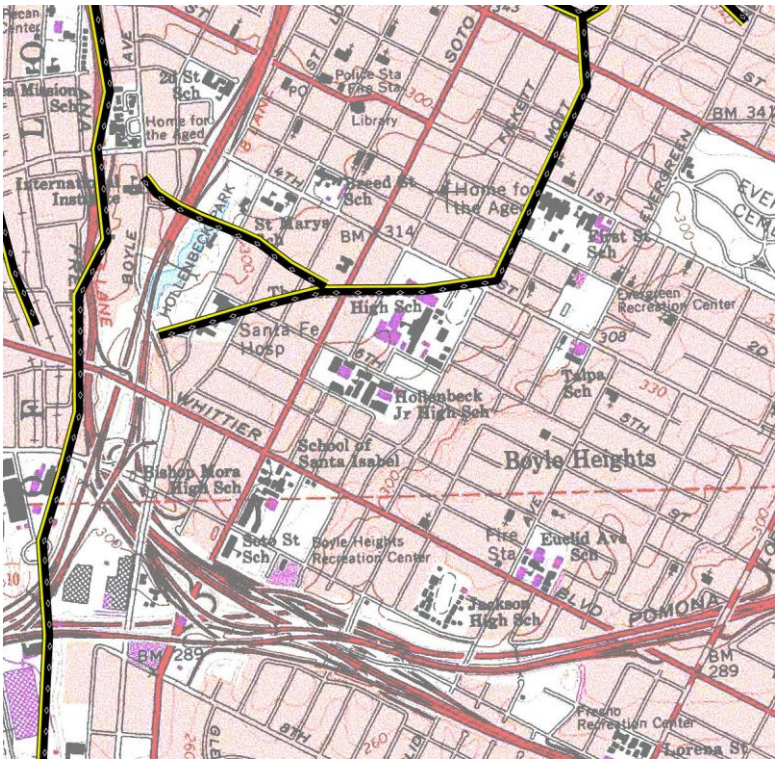


Figure 7. USGS topo map showing route of Zanja Madre through Roosevelt campus.

Table 3. Properties Identified in Historic Property Data File Search within the 0.25-mi. Records Search Radius

Primary # (P-19-)	OHP #	Street Address	Description / Name	Year of Construction	Status Code
166926	020849	401 S. Chicago St.	St. Mary's Roman Catholic Church	1924	3S
166963	020888	443 S. Soto St.	German Hospital / Lincoln Hospital	1904	7N
171728	025739	2616 E. 3rd St.		1893	3S
171729	025740	2706 E. 4th St.		1906	5S2
171730	025741	2722 E. 4th St.		1907	5S2
171731	025742	2901 E. 4th St.		1969	7R
171739	025750	2639 E. 4th St.		1923	7R
171740	025751	2707 E. 4th St.		1895	7R
171741	025752	2718 E. 4th St.		1915	7R
171742	025753	2730 E. 4th St.		1909	7R
171743	025754	2811 E. 4th St.		1905	7R
171744	025755	2832 E. 4th St.		1895	7R
171745	025756	2945 E. 4th St.		1908	7R
171746	025757	2957 E. 4th St.		1890	7R
171754	025765	2700 Eagle St.		1890	3S / 7N

Primary # (P-19-)	OHP #	Street Address	Description / Name	Year of Construction	Status Code
171755	025766	2718 Eagle St.		1906	7N
171759	025770	2706 Eagle St.		1909	7R
171760	025771	2707 Eagle St.		1912	7R
171761	025772	2719 Eagle St.		1908	7R
171762	025773	2726 Eagle St.		1910	7R
171769	025780	2708 E. 5th St.		1912	7R
171770	025781	2727 E. 5th St.		1912	7R
171788	025799	2922 Lanfranco St.		1912	7R
171790	025801	2700 Lanfranco St.		1908	7R
171791	025802	2719 Lanfranco St.		1907	7R
171793	025804	2800 E. 6th St.		1921	7N
171794	025805	2823 E. 6th St.		1912	7R
171795	025806	2837 E. 6th St.		1906	7R
171799	025810	2806 E. 6th St.		1910	7R
171800	025811	2828 E. 6th St.		1910	7R
171801	025812	2834 E. 6th St.		1910	7R
171848	025859	2811 E. Inez St.		1915	7R
171849	025860	2820 E. Inez St.		1935	7R
171850	025861	2828 E. Inez St.		1915	7R
171854	025865	2851 Guirado		1910	3S
171855	025866	2747 Guirado		1913	7R
171856	025867	2801 Guirado		1918	7R
171857	025868	2805 Guirado		1918	7R
171858	025869	2812 Guirado		1920	7R
171859	025870	2825 Guirado		1920	7R
171860	025871	2829 Guirado		1920	7R
171861	025872	2832 Guirado		1918	7R
171862	025873	2835 Guirado		1918	7R
171863	025874	2839 Guirado		1914	7R
171864	025875	2852 Guirado		1922	7R
171867	025878	2801 Oregon St.		1920	5S2
171868	025879	2819 Oregon St.		1910	5S2
171870	025881	2905 Oregon St.		1913	5S2
171872	025883	2808 Oregon St.		1918	7R
171873	025884	2812 Oregon St.		1918	7R
171874	025885	2813 Oregon St.		1918	7R
171875	025886	2822 Oregon St.		1918	7R
171876	025887	2826 Oregon St.		1918	7R

Primary # (P-19-)	OHP #	Street Address	Description / Name	Year of Construction	Status Code
171878	025889	2838 Oregon St.		1918	7R
171877	025888	2839 Oregon St.		1921	7R
171879	025890	2842 Oregon St.		1915	7R
171880	025891	2843 Oregon St.		1918	7R
171881	025892	2848 Oregon St.		1918	7R
171882	025893	2849 Oregon St.		1914	7R
171883	025894	2853 Oregon St.		1915	7R
171869	025880	2900 Oregon St.		1890	3S
171884	025895	2904 Oregon St.		1915	7R
171885	025896	2908 Oregon St.		1915	7R
171886	025897	2909 Oregon St.		1915	7R
171887	025898	2914 Oregon St.		1910	7R
171898	025909	404 S. Mott St.		1922	7N
171899	025910	514 S. Mott St.		1895	3S
171900	025911	656 S. Mott St.		1918	7R
171901	025912	700 S. Mott St.		1918	7R
171902	025913	744 S. Mott St.		1921	7R
171903	025914	745 S. Mott St.		1915	7R
171904	025915	629 Camulos St.		1906	7R
171905	025916	631 Camulos St.		1912	7N
171906	025917	753 Camulos St.	La Santa Cruz Lutheran Church	1955	7R
171907	025918	426 Camulos St.		1905	7R
171908	025919	500 Camulos St.		1910	6U
171909	025920	639 Camulos St.		1913	5S2
171910	025921	655 Camulos St.		1913	7R
171911	025922	445 S. Evergreen Av.		1910	7N
171912	025923	624 S. Evergreen Av.		1912	5S2
171913	025924	412 S. Evergreen Av.		1913	7R
171914	025925	602 S. Evergreen Av.		1913	7R
171915	025926	628 S. Evergreen Av.		1913	7R
172755	026772	204 S. Evergreen Av.	Cemetery / Ivy Chapel & Cemetery	1877	2S2
172763	026781	230 S. Soto St.		1888	7N
172764	026782	560 S. Soto St.	Transformer / Los Angeles Railway	1910	3S
173873	069895	412 S. Evergreen Av.		1908	6Y
173881	069904	214 Fickett St.		1924	6Y
174514	083149	505 S. Breed St.		1924	6Y
174866	087643	2610 Gleason Av.			6Y

Primary # (P-19-)	OHP #	Street Address	Description / Name	Year of Construction	Status Code
175249	097758	2510 E. 6th St.	Hollenbeck Junior High School	1923	2S2
175828	099406	2510 E. 6th St.	Girls' Gymnasium - Hollenbeck Junior High School	1923	2D2
175830	099408	2510 E. 6th St.	Home Economics & Cafeteria Building - Hollenbeck Junior High School	1931	2D2
175832	099411	2510 E. 6th St.	Administration Building - Hollenbeck Junior High School	1936	2D2
175833	099412	2510 E. 6th St.	East Building - Hollenbeck Junior High School	1936	2D2
175834	099413	2510 E. 6th St.	West Building - Hollenbeck Junior High School	1936	2D2
175835	099414	2510 E. 6th St.	Industrial Arts / Shop Building - Hollenbeck Junior High School	1936	2D2
175836	099415	2510 E. 6th St.	Auditorium - Hollenbeck Junior High School	1936	2D2
175837	099416	2510 E. 6th St.	Boys' Gymnasium - Hollenbeck Junior High School	1954	6Y
175838	099417	2510 E. 6th St.	Instrumental Music Building - Hollenbeck Junior High School	1954	6Y
176002	100391	2744 E. 4th St.		1924	6Y
	089815	2426 4th St.	Torilleras (Mural)	1975	7R
	089819	2700 E. 1st St.	Mural	1975	7R
	089831	213 S. Soto St.	Ya Basta and Revolucion	1974	7R
	089832	724 S. Soto St.	Tierra y Libertad (Mural)	1974	7R
	089874	2605 E. 4th St.	Viva la Raza Unida hasta la Victor (Mural)	1978	7R
	089876	2101 4th St.	Raza Mestiza Barrios Unidos (Mural)	1977	7R
	116386	2601 E. 1st St.		1900	6U
	123767	727 W. Mott St.		1923	6Y
	123846	601 Mott St.		1924	6Y
	126001	2606 E. 1st St.		1900	6U
	127497	520 S. Chicago St.			6Y
	127577	2722 E. 3rd St.		1922	6Y
	148683	2201 E. 2nd St.		1905	6Y
	153043	554 S. Soto St.		1920	6U
	154068	642 S. Soto St.		1924	6U
	156828	641 S. Evergreen St.		1913	6Y
	161925	2507 E. 1st St.	Loyd Champion Residence	1895	2S2
	161926	2508 E. 1st St.	Martha Sindell Residence	1890	2S2
	161927	2631 E. 1st St.	James J. Scott Residence	1895	2S2
	162448	2736 E. 6th St.		1937	6U
	172501	425 S. Soto St.			6Y
	172542		Zanja Madre	1781	7W

2D2: Contributor to a district determined eligible for NR by consensus through Section 106 process. Listed in the CR; 2S2: Individual property determined eligible for NR by a consensus through Section 106 process. Listed in the CR; 3S: Appears eligible for NR as an individual property through survey evaluation; 5S2: Individual property that is eligible for local listing or designation; 6U: Determined ineligible for NR pursuant to Section 106 without review by SHPO; 6Y: Determined ineligible for NR by consensus through Section 106 process – Not evaluated for CR or Local Listing; 7N: Needs to be reevaluated (Formerly NR Status Code 4); 7R: Identified in Reconnaissance Level Survey – Not evaluated; 7W: Submitted to OHP for action – withdrawn

NATIVE AMERICAN HERITAGE COMMISSION SEARCH

On January 9, 2018, ASM contacted the California Native American Heritage Commission (NAHC) to request a search of their Sacred Lands File and to inquire regarding any registered cultural resources, traditional cultural properties, or areas of heritage sensitivity within the Project area. NAHC responded on January 10, 2018, indicating that no such resources were found as a result of the SLF search, but that the area is considered sensitive for cultural resources. However, the absence of specific site information in the SLF does not indicate the absence of Native American cultural resources within the Project area. A list of five tribal contacts who may have interest in the Project area was provided with the NAHC response (Appendix B).

INTERESTED PARTIES

The Los Angeles Conservancy, as a locally interested party, submitted a letter conveying their opinion on the eligibility of the school and assessment of impacts.

ARCHAEOLOGICAL SURVEY

An archaeological pedestrian survey of the entire Project area was undertaken on December 12, 2017, by ASM Senior Archaeologist Sherri Andrews. The survey was limited to the direct API and concentrated on areas of ground surface visibility, as the entirety of the project area has been built over or extensively landscaped. Additionally, it appears that the original landform upon which the project area lies has been extensively modified with some areas exhibiting extensive build up above original grade, such as the parking lots at the southern end of the campus. Lacking any substantial open areas within the project area, any exposed ground surfaces were observed on an opportunistic basis. No previously undocumented cultural resources were identified as a result of the survey.

The records search did not indicate the presence of any previously documented archaeological resources within the Project API; however, a portion of the historic water conveyance system known as the Zanja Madre has been documented as existing in the northwestern portion of the Project area. While no surface manifestation of this resource is extant, it is currently unknown whether any remains of this water system exist in subsurface contexts within the Project area.

CEQA HISTORICAL RESOURCES

Two CEQA historical resources have been identified within the direct Project API: the Roosevelt Senior High School Historic District and Building 1, a primary contributor to the historic district.

In addition, within the one-parcel indirect API, five eligible or potentially eligible historic properties have been identified:

- 2700 Eagle Street
- Hollenbeck Middle School
- 429 South Mathews Street

- 445-455 South Mathews Street Bungalow Court
- 514 South Mott Street

All of these resources have been previously identified and evaluated. ASM concurs with our prior findings of eligibility for the Roosevelt Senior High School Historic District, but additionally recommends Building 1 as an individually eligible historical resource.

Construction History of Roosevelt High School [2]

Although Roosevelt High did not enter operation until 1923, it appears that plans for the school existed as early as October 1921. At that time, the plan was for the school comprised one main building, fronting Fickett Street, with two detached secondary buildings behind the primary structure.[3] Designed by architects Hunt and Burns and built by the K.R. Bradley Construction Company, construction of the school began in June 1922. By 1924, shops and a cafeteria had been added, and three new additions were planned for 1925. A gymnasium was to be built to the northeast of the main building at the corner of Fickett Street and 4th Street, with two tennis courts filling the space between. A garage would be added east of the shops and a classroom addition attached to the southwest end of the main building. Several residences within the block also appear to have been repurposed as classrooms by the mid-1920s.[4]

The plans from early 1925 show the addition of a playground and athletic field southeast of the tennis courts. It appears that the creation of the athletic field required the demolition of the residences and other buildings previously located at the corner of Mott Street and 4th Street. By 1925, the address of the school had changed to 450 South Fickett Street. By April of 1926, the expansion of the school required the demolition or relocation of all remaining residential structures on the property. By this time a second shop building was extant just southeast of the first shop, and the garage, which was ultimately placed south of the cafeteria, was slated for demolition, to be replaced by a new building. A domestic science building, outdoor fireplace, and new tennis courts fronted Mott Street on the southern end of the property.

Roosevelt High was directly affected by the 1933 Long Beach earthquake. Some reforms related to earthquake-ready buildings had been put in place in the late 1920s, but Roosevelt High predates these. Following the earthquake, Roosevelt High was remodeled and retrofitted to better withstand any future major quakes. In 1936, the architecture firm of Hibbard, Gerity & Kerton was hired to reconstruct and strengthen Building 1. Many of the changes that took place at this time were structural, but a number of alterations also were made to the various elevations of the main building, altering its stylistic features and creating a much more modern and streamlined look for the building. The gabled parapets and third-floor were removed, creating a flat roofline and eliminating the danger that any above-roof protrusions could topple over. The diaper-pattern brick frieze with its cast stone band border was also removed or covered with stucco. It appears that the arches to the right of the main entry were also filled in during this time. These changes were consistent with the prevailing aesthetic sensibilities of the 1930s and also conformed to new safety regulations mandated by the Field Act.

Following the rehabilitation and renovation of the main building in 1936, a new classroom building (Building 7) was added at the corner of Mott and Lanfranco Streets. This two-story building was designed by architect Sumner Spaulding and matches the simplicity and clean lines of the new exterior of the

[2] This construction chronology is excerpted from PCR (2015), which was primarily drawn from analysis of LAUSD architectural drawings.
[3] 8829.00.000 Map of Roosevelt High School Site Los Angeles Board of Education October 1921, K.Y. Morin, LAUSD Drawing Archive – Vault, Historic Plans.
[4] 8829.00.002 Plot Plan Roosevelt High School, J.F. Nelson Surveyor, August 1924, LAUSD Drawing Archive – Vault, Historic Plans.

Building 1, with virtually no exterior decoration. Two years later, the west entrance was altered with the replacement of the existing doors, sidelights, frames, and trim. In 1949, fire ravaged part of Building 1, requiring repairs to the north wing and central portion. In 1950, the two existing shop buildings and the tennis courts along Mott Street were demolished to construct a new industrial arts building designed by Sumner Spaulding and John Rex.

Between 1964 and 1969, the school expanded to the northwest to incorporate an entire city block into the school site. As a result, the main building no longer served as the face of the school, Fickett Street was closed off and integrated with the campus, and a new administration building (Building 5) was constructed to the northwest of Building 1. At that time, the address became 356 South Mathews Street. Also during the 1960s, a number of new buildings went up on the larger campus. These included new physical education (Building 19), industrial arts (Building 6), and utility buildings in 1966, followed by a new garage in 1969. In 1970, fire again damaged Building 1.

During the 1970s, more new buildings were added, including a childhood education building, an additional second classroom building, a new cafeteria, a music building, and a gazebo. That same year the site of the old gymnasium became an outdoor swimming pool, and the old cafeteria, domestic science building, and agriculture building were demolished. Five years later the lunch shelter and arcades were also demolished.

Roosevelt Senior High School Historic District

In addition to guidelines for the evaluation of Post-1933 Long Beach Earthquake districts, the LAUSD HCS includes evaluation standards for individual buildings/structures (LAUSD 2014:137-138). The determination of contributors to the Roosevelt High School Historic District was based on those evaluation standards in the LAUSD HCS, as well as identifying which buildings, structures, and objects were present at the time of the Blowouts (ASM 2017).

The Roosevelt SH campus meets all of the eligibility criteria listed in the LAUSD HCS under the theme of *LAUSD and the Civil Rights Movement, 1954–1980* (LAUSD 2014). Specifically, the recommended historic district and its contributors were constructed or extant during the period of significance; the campus was the site of significant integration initiatives, challenges, or activities related to the Chicano Civil Rights Movement and school integration; the campus directly reflects the movement for equal access to schools in LAUSD schools; the campus has a well-established, long-term association with Sal Castro, who was significant in the Chicano Civil Rights Movement and school integration (eligibility under B/2); and it is directly associated with events and institutions that were pivotal in the history of the Latino civil rights movement (from the SurveyLA Latino context). The campus retains most of the associative and character-defining features from the period of significance. Following the LAUSD guidelines, the multiple buildings extant during the period of significance are evaluated in this report as comprising a potential historic district (ASM 2017).

ASM considered whether any of the current buildings or landscaped areas were built in response to the protests, and whether Fickett Street, which at one time cut through the campus in front of/west of Building 1, was vacated in response to the protests. A master plan for the campus had already been submitted by 1966, when plans for $1,730,725 in new facilities for Roosevelt SH were approved by the Board. Projects included a new physical education building, renovation of an industrial arts building, and a new industrial arts building (Los Angeles Times 1966). A 1966 street profile plan and as-built civil drawings from the same year show Fickett Street passing through the school in plan (LAUSD dwg. 8829.00.023 and 8829.00.024). Further indication that the master plan had been initiated previous to 1968 is the early filing of a redrawn tract map that shows Fickett Street vacated and incorporated into the campus. An historic aerial dated January 3, 1968 (University of California Regents 1968), shows that these projects were complete by the time of the 1968 protests, rather than in response to them. A cafeteria and domestic science

building and a shop building, shown southeast of Building 1 in 1966 LAUSD drawings (LAUSD Vault dwg. 8829.00.027) and in a 1968 aerial view, have since been demolished. As such, ASM concluded that there were no buildings or modifications to the school that were the direct result of the Blowouts.

The Historic District contains 14 contributing resources to the proposed Roosevelt Senior High School Historic District, all of which were present on the campus in March 1968 at the time of the Blowouts. Of these, two are primary contributors, five are secondary contributors, and seven are tertiary contributors, as shown in Table 4 below. All of the recommended contributors retain integrity to the period of significance of location, design, setting, materials, workmanship, feeling, and association (ASM 2017).

Table 4. Roosevelt Senior High School Historic District Contributors

Bldg. No.	Building Name	Year Built	Priority
1	Auditorium and Classroom Building	1922	Primary
7	Classroom Building	1937	Primary
6	Industrial Arts Building	1968	Secondary
8	Instrumental Music Building	1959	Secondary
17	Classroom Building	1964	Secondary
18	Classroom Building	1964	Secondary
19	Physical Education Building	1968	Secondary
10	Flammable Storage Building	1953	Tertiary
11	Field Sanitary Building	1958	Tertiary
12	Equipment Field Storage	1941	Tertiary
16	Field Light Controls	1949	Tertiary
20	Utility Building	1968	Tertiary
	Track		Tertiary
	Landscaping		Tertiary

For this CRTR, ASM considered individual eligibility of the district contributors and recommends only Building 1. None of the other contributors were considered individually eligible because they were not as closely associated with the 1968 Blowouts as was Building 1.

Below are the characteristics that apply to individual buildings under the theme of *LAUSD and the Civil Rights Movement, 1954-1980* (LAUSD 2014:144), as the campus was evaluated previously (ASM 2017):

Eligibility Standards

- Was constructed during the theme of significance
- Was the site of significant integration initiatives, challenges, or activities related to the Civil Rights Movement and school integration
- Directly reflects the movement for equal access to schools and/or to employment opportunities in LAUSD schools
- Has a well-established, long-term association with a figure who was significant in the Civil Rights Movement and school integration (eligibility under B/2)

Character-Defining Features

- Retains most of the associative and character-defining features from the period of significance

Integrity Considerations

- Retains integrity of Location, Design, Setting, Feeling, Association
- Some materials may have been removed or altered
- If there are multiple buildings on campus constructed during the period of significance, these should be evaluated as a potential historic district

Criteria A/1 and B/2

For the purposes of this CRTR, ASM further considered whether any of the district contributors are eligible individually under Criteria A/1 and B/2 for their association with the 1968 Blowouts. The only building that appears to sufficiently represent this theme on its own is Building 1, as it is was the predominant location of the protest activities. Therefore, Building 1 is recommended individually eligible under Criteria A/1 and B/2 with a period of significance of 1968.

A number of remaining significant features were present at the time of the Blowouts, especially the main entrance, the lobby, and the auditorium, where most of the protest activities took place. Building 1 also retains integrity of Location, Design, Setting, Materials, Workmanship, Feeling, and Association from the period of significance (1968). Character-defining features of Building 1 include:

- Horizontally oriented (Figure 8)
- Two-stories in height in addition to partially below-grade lower level
- Flat roof
- Stucco exterior wall surface
- Three-over-three windows with transoms (Figure 9)
- Entrance Steps: "Traditionally, formal school class and club photographs were taken on the front steps, especially for early yearbooks. In addition, images of the front entrance and steps appear in yearbooks as front and back matter throughout the history of the school. Often in these yearbook cover photographs students are absent from the images thereby showing this entrance symbolized the identity of the RHS" (ESA 2017:2).
- Two double entrance doors with fluted column between and high multi-light clerestories above (Figure 10)
- Bull-nosed surround at primary entrance
- PWA Moderne style metal lettering on exterior façade above primary entrance
- Glass blocks at interior office viewable from lobby
- Lobby with coffered ceilings, concrete floor, and ticket booth and display case (Figure 11)
- Auditorium: remains Italian Renaissance Revival architectural details from date of original construction: curved wood steps to stage, coffered ceiling with relief fascia design, folding bent-plywood seating, raked floor, balcony, elaborate chandeliers, high multi-light clerestory windows on northwest façade (painted over)
- Wide concrete steps from lobby to first floor
- Interior circulation: central double-loaded hallway on each level
- Windows at ends of hallways to admit light (Figure 12)
- Landscaping on southeast side of building (Figure 13)



Figure 8. Viewing looking south at the auditorium and the southwest wing of Building 1.



Figure 9. View looking northwest at the southeast façade of Building 1.



Figure 10. View looking south at the primary entrance.



Figure 11. Interior view of the lobby outside of the auditorium.



Figure 12. Interior view of the hallway of the main level, with glass bricks on the right.



Figure 13. View of the landscaping to the southeast of Building 1.

Criteria C/3

In its HCS (LAUSD 2014) and Design Guidelines (LAUSD 2015), LAUSD established character-defining features and evaluation guidelines for Post-1933 Long Beach Earthquake schools. Although the principal area of significance under the theme of Post-1933 Long Beach Earthquake schools is A/1, for association with events in history, the HCS comments that a building might also qualify under Criteria C/3, as "the embodiment of the distinctive characteristics of a type/period or method of construction, as an example of the work of a master architect, or for high artistic values" (LAUSD 2014:138). Thus, the potential of the Roosevelt High School Historic District contributors for eligibility under Criteria C/3 for architecture was carefully considered.



Figure 14. Detail view of the northwest façade of Building 7, showing smooth stucco and rounded canopy.



Figure 15. Interior view of hallway in Building 7.

All of the district contributors were previously evaluated as part of the Roosevelt SH campus under Criteria C/3 and recommended not eligible for listing in the NRHP/CRHR (PCR 2014). ASM concurs with that finding. The only aspect of that evaluation which ASM felt required further consideration was the evaluation of individual eligibility for Building 1.

Building 1 was previously evaluated under Criteria C/3 and recommended not eligible for listing in the NRHP/CRHR (PCR 2014). However, the building was assessed based on its original 1922 configuration as an example of Italian Renaissance Revival and was deemed lacking in integrity because of extensive alterations after the 1933 earthquake. According to LAUSD documentation, it is common to find 1920s-era schools that were remodeled following the earthquake; such schools might exhibit the building plans and configurations typical of the 1920s but with 1930s PWA Moderne and Streamline Moderne architectural detailing (LAUSD 2015:39). As such, ASM considered whether Building 1 was eligible for one of these later styles, after its renovation. However, ASM recommends that Building 1 is not eligible under Criteria C/3 because it is not a good example of a style or building type. It does not exemplify the work of a master architect, it does not display high artistic values, and it does not embody the distinctive characteristics of a Post-1933 Long Beach Earthquake school building, as defined by the LAUSD HCS (LAUSD 2014:138).

SUMMARY OF IDENTIFICATION EFFORTS

Two CEQA historical resources have been identified within the direct Project API: the Roosevelt Senior High School Historic District and Building 1, an individually eligible historical resource.

In addition, within the one-parcel indirect API, five eligible or potentially eligible historic properties have been identified:

- 2700 Eagle Street
- Hollenbeck Middle School
- 429 South Mathews Street
- 445-455 South Mathews Street Bungalow Court
- 514 South Mott Street

ANALYSIS OF IMPACTS

As the Project includes two CEQA historical resources, the Project poses the potential to cause significant direct and/or indirect impacts. CEQA defines adverse impacts as a substantial adverse change to a historic resource, encompassing "demolition, destruction, relocation, or alteration such that the significance of an historical resource would be impaired" Section 15064.5(b)(1)). This discussion is guided by CEQA Guidelines stating that the discussion of alternatives should focus on alternatives to the Project or that are capable of avoiding or substantially lessening any significant effects of the Project, "even if these alternatives would impede to some degree the attainment of the project objectives, or would be more costly" (Section 15126.6(b)).

As proposed, the Project calls for demolition of all of the primary and secondary contributing resources to the historic district, and some tertiary contributors and would have substantial adverse effects on the historic district that would result in the loss of eligibility of the district as well as the individually eligible of Building 1.

For the five buildings in the indirect API, it is anticipated only that views from and toward the Project will change for those properties immediately adjacent to the API (i.e., those properties previously identified as potential historic resources within a one-parcel buffer of the direct API). Adverse atmospheric or auditory impacts are not anticipated. The scope of work items with the most potential to affect the historical resources include use of heavy equipment during construction (temporary vibration impacts) and design of the Project (potential for adverse visual effects). No details were provided on machinery planned for demolition or construction, nor was a vibration assessment provided.

INDIRECT IMPACTS

Indirect impacts to the historic district are limited to visual impacts. Given the type of construction planned and the relative distance of the identified historic resources to the Project under any of the alternatives, it is not anticipated that the any historical resources within the indirect API will be damaged due to vibration impacts. As such, the Project will not result in adverse indirect effects from vibration under 36 CFR 800.5 (a)(2)(i). Atmospheric and auditory impacts are not anticipated.

In this section, impacts on views toward the Project from several previously designated or potentially eligible historic resources within the one-parcel buffer of the indirect API, as well as views toward the historic resources from the Project, are analyzed. Historical resources evaluated for indirect visual impacts are limited to NRHP-eligible properties, City of Los Angeles Historic Cultural Monuments, and properties identified during SurveyLA's survey of the Boyle Heights Community (ARG 2014). The following section analyzes the impacts on the identified historic properties.

2700 Eagle Street

This early residential property, built in 1890, is a City of Los Angeles Historical Cultural Monument (#262). It is located across South Mott Street from the campus on the southeast side at the corner of South Mott Street and Eagle Street. Because it is directly across from the campus athletic track, which will be retained under the Project, and at a distance from any campus buildings, either as they currently stand or as proposed in the Project, the viewshed and obstructive visual impacts toward and from the historic property will be only minimally impacted. As viewshed, including scenic views, is not a character-defining feature of either 2700 Eagle Street or the Project, the indirect visual impacts would be minimal under the Project (Figures 16 and 17).

Hollenbeck Middle School

Hollenbeck Middle School, at 2510 East 6th Street, was built in 1936 and is an NRHP-listed historic district. Hollenbeck runs the entire length of Roosevelt SH across East 6th Street from the southwest boundary of Roosevelt SH. Despite the extent of the exposure of Hollenbeck to potential impacts of the Project, proposed construction is focused toward the center and north of campus, away from Hollenbeck. The views from Hollenbeck toward the Project would be altered. Views toward the Hollenbeck historic district from the Project would vary throughout the Project. However, as viewshed, including scenic views, is not a character-defining feature of Hollenbeck Middle School, its contributors, or the Project, there would be no significant indirect impact to the Hollenbeck Middle School Historic District under the Project |(Figures 18-21).



Figure 16. Historic resource at 2700 Eagle Street, looking south at the northwest and southeast façades from the Project area.



Figure 17. View toward the Project area from 2700 Eagle Street.



Figure 18. View looking southwest at the northeast façade of the main building at Hollenbeck Middle School from Project area.



Figure 19. View looking southwest at the northeast façade of the arcade at Hollenbeck Middle School from Project area.



Figure 20. View looking west at the northeast and southeast façades of Hollenbeck Middle School from Project area



Figure 21. View looking northeast at the Project area from the primary façade of Hollenbeck Middle School.

429 South Mathews Street

This early single-family residence, constructed in 1900, was identified by SurveyLA in 2014 as a potentially eligible historic resource. The house is located across South Mathews Street from the Roosevelt SH campus, but existing campus buildings, structures, and trees are likely to obscure views of the Project from the historic property. Likewise, views from the Project of 429 South Mathews Street will be only minimally affected, if at all. However, as viewshed is not a character-defining feature of either the residence or the Project, there would be no significant indirect impact to 429 South Mathews Street under the Project (Figures 22 and 23).

445-455 South Mathews Street Bungalow Court

This multi-family residence, constructed in 1905 through 1915, was identified by SurveyLA in 2014 as a potentially eligible historic resource. The property is located across South Mathews Street from the Roosevelt SH campus, but existing campus buildings and structures are likely to obscure views of the Project. Likewise, views from the Project of 445-455 South Mathews Street will be only minimally affected, if at all. However, as viewshed, including scenic views, is not a character-defining feature of either the residence or the Project, there would be no significant indirect impact to 445-455 South Mathews Street under the Project (Figures 24 and 25).

514 South Mott Street

This single-family residence, constructed in 1895, was identified by SurveyLA in 2014 as a potentially eligible historic resource. It is located across South Mott Street from the campus, and the viewshed currently encompasses a fenced-in playing field and Building 7, a primary contributor to the Roosevelt Senior High School Historic District. The property is fully within the viewshed from the playing field and from Building 7, which is adjacent to the sidewalk on the campus and therefore quite near the residence. Under the Project, Building 7 will be demolished and the land on the southeast side of campus will be devoted to playing fields, thus changing the viewshed from the residence. However, as viewshed, including scenic views, is

not a character-defining feature of either the residence or the Project, there would be no significant indirect visual impact to 514 South Mott Street (Figures 26 and 27).



Figure 22. View looking northwest at the primary façade of 429 South Mathews Street.

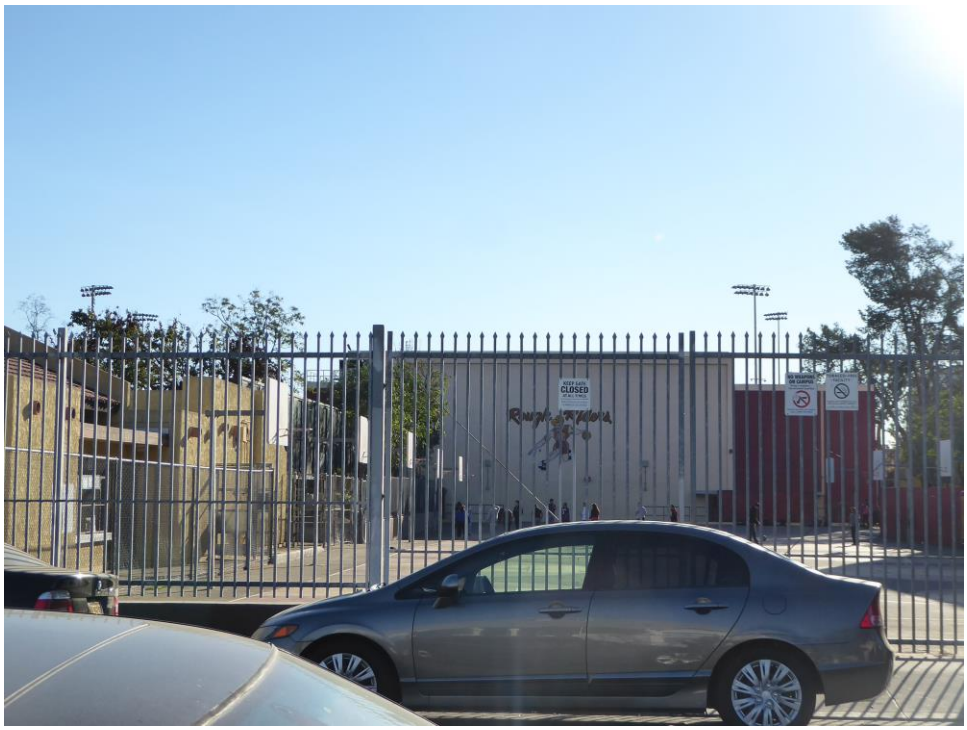


Figure 23. View looking southeast at the Project area from 429 South Mathews Street.



Figure 24. View looking northwest at 445-455 South Mathews Street from Project area.



Figure 25. View looking southeast at the Project area from 445-455 South Mathews Street.



Figure 26. View looking southwest at 514 South Mott Street from the Project area.



Figure 27. View looking north at the Project area from 514 South Mott Street.

FINDINGS

This report has determined that there are two eligible historical resources within the direct API that have the potential to be affected by the proposed Project (the Roosevelt Senior High School Historic District and individually eligible Building 1). The Project, as proposed, would result in significant adverse impacts to both the historical resources within the direct API and loss of their eligibility. The Project will not result in any significant adverse indirect visual impacts to the five eligible and potentially eligible historic resources identified within the indirect API. No significant indirect auditory, vibration, or atmospheric impacts have been identified.

There is also a possibility that buried archaeological deposits may exist within the area of subsurface disturbance, although no previously undocumented cultural resources were identified as a result of the survey. The entirety of the Project area has been built over or extensively landscaped, and it appears that the original landform on which the Project area lies has been extensively modified with some areas exhibiting extensive build up above original grade, such as the parking lots at the southern end of the campus. Additionally, the presence in the past of a portion of the historic Zanja Madre water conveyance system within the Project area opens the possibility that previously undocumented physical remains may be found subsurface.

RECOMMENDED MITIGATION

Construction of the Project, as proposed, poses the potential to cause significant direct impacts to contributing resources of the Roosevelt Senior High School Historic District and individually eligible Building 1. CEQA generally considers historical resource impacts to be fully mitigated if the Project conforms to *SOI Standards*. If Project redesign is not feasible to conform to the *SOI Standards*, mitigation measures to reduce the impact to less than significant have been identified and can be implemented in accordance with CEQA. The following mitigation measures are recommended:

- **On-site archaeological monitoring during excavation and construction.** Archaeological monitoring of construction-related ground disturbance and excavation is recommended in the northern portion of the Project area. This is due to the potential for the presence of remnants of the historic Zanja Madre water conveyance system, which has been documented as passing through this portion of the Project area. As the depth or type of potential remains is unknown, monitoring by a qualified archaeologist is recommended during all ground disturbance and excavation in this area.

- **Historical resource documentation, Roosevelt High School Comprehensive Modernization Project.** A qualified historian or architectural historian who meets the Secretary of the Interior's Professional Qualifications Standards shall prepare HABS-like historic documentation for the historical resources slated for demolition. The HABS-like package will document in photographs as well as descriptive and historic narrative the historical resources slated for demolition. Documentation prepared for the package will draw upon available primary- and secondary-source research as well as available studies previously prepared for the project.

  The HABS documentation package will incorporate available architectural drawings on file with the Los Angeles Unified School District. New measured drawings shall not be required for the project.

  The specifications for the HABS-like documentation package follow:

  Photographs: Photographic documentation will focus on the historical resources/features slated for demolition, with overview and context photographs for the campus and adjacent setting. Photographs will be taken of interior and exterior features of the buildings using a professional-quality single lens reflex (SLR) digital camera with a minimum resolution of 10 megapixels. Photographs will include context views, elevations/exteriors, architectural details, overall interiors, and interior details (if warranted). Digital photographs will be printed in black and white on archival film paper and also provided in electronic format.

  Descriptive and Historic Narrative: The historian or architectural historian will prepare descriptive and historic narrative of the historical resources/features slated for demolition. Physical descriptions will detail each resource, elevation by elevation, with accompanying photographs, and information on how the resource fits within the broader campus during its period of significance. The historic narrative will include available information on the campus design, history, architect/contractor/designer as appropriate, area history, and historic context. In addition, the narrative will include a methodology section specifying the name of researcher, date of research, and sources/archives visited, as well as a bibliography. Within the written history, statements shall be footnoted as to their sources, where appropriate.

  Historic Documentation Package Submittal: The draft package will be assembled by the historian or architectural historian and submitted to LAUSD for review and comment. After final approval, one hard-copy set of the package will be prepared as follows: Photographs will be individually labeled and stored in individual acid-free sleeves. The remaining components of the historic

documentation package (site map, photo index, historic narrative, and additional data) will be printed on archival bond, acid-free paper.

Upon completion of the descriptive and historic narrative, all materials will be compiled in an electronic format and presented to LAUSD for review and approval. Upon approval, one hard-copy version of the historic documentation package will be prepared and submitted to LAUSD. The historian or architectural historian shall offer a hardcopy package and compiled, electronic version of the final package to the following repositories, in order to make the documentation available to researchers:

- Roosevelt High School, for filing with the school library/archive
- Los Angeles Public Library (Central Library)
- Los Angeles Historical Society
- South Central Coastal Information Center
- Other repositories as recommended by the historian or architectural historian

- **Interpretative Program to be developed in collaboration with the Boyle Heights community.** An interpretative program shall be developed that could include a suite of projects such as:

  a. *Intensive surveys and evaluations of similar resources*. The other East L.A. schools directly associated with the significant events of the 1968 Blowouts, specifically Garfield, Wilson, Lincoln, Belmont, and Jefferson, as well as Hazard Park, could be evaluated at the level of evaluation of Roosevelt SH. This evaluation would focus on each school's associations with the Blowouts under Criteria A/1 and with any significant individuals, such as Sal Castro or other members of the East L.A. 13, under Criteria B/2. The evaluation reports should be done following the guidelines provided by the *LAUSD Historic Context Statement, 1870–1969* under the theme *of LAUSD and the Civil Rights Movement, 1954-1980*, and the *SurveyLA Latino Los Angeles Historic Context Statement* under the themes of *Education 1930–1980* and *The Civil Rights Movement, 1920–1980* and comply with CEQA. The *Supplemental Historic Resource Evaluation Report* (ASM 2017) could serve as a model and provide background for these evaluations.

  b. *Development of features for the Roosevelt SH website.* This mitigation effort would include developing content, including narrative and graphics, for a section of the Roosevelt SH website (*rooseveltlausd.org*). A full narrative history of the events including historic photographs, to fully interpret this significant event, as well as student leaders and other activists' involvement with the Blowout Committee at Roosevelt, could be provided. As part of this activity, efforts should be made to gather additional historic photographs, including those by photographer Oscar Castillo, housed at UCLA Chicano Studies Research Center, and *LA Times* historic photos, held in the Los Angeles Times Photographic Archives in the Library Special Collections at UCLA.

  c. *Oral histories with teachers.* A series of oral histories could be conducted with teachers and students who can be identified as present at Roosevelt in 1968, or who have extensive knowledge of the events. Interviews should be conducted following the *Principles* and *Best Practices* established by the Oral History Association,[5] including the recommended methods for digital recordation and translation. Oral histories should be conducted by historians who meet the *Secretary of the Interior's Professional Qualification Standards* or individual who have participated in training to conduct oral

[5] Available at: http://www.oralhistory.org/about/principles-and-practices/

histories. Release forms should be signed by each narrator through which he or she transfers his or her rights to the interview to the repository or designated body. Oral histories should be recorded using at least two separate audio recorders, utilizing at least one external microphone, as well as one video recorder. Oral histories should be archived at UCLA through the Oral History Program, and also in consultation with the UCLA Chicano Studies Research Center.

d. *Commemorative events for the 50th anniversary of the Blowouts.* Organize commemorative events to recognize the importance of the Blowout events and this period of Roosevelt SH's history. Activities in March 2018 could include screenings of the PBS documentary "Chicano!" and the film "Blowout!" to be held on the Roosevelt SH campus. Activities in the fall of 2018 could include first-hand recounting of the events by any teachers or students before an audience. Teachers who were not present at the Blowouts but who taught the events over the years would also be likely participants. Coordination with the organizers of the Roosevelt SH Class of 1968 reunion could be accomplished to arrange a medium to collect stories from the students attending the reunion.

e. *Presence at class of 1968 50th Roosevelt High School Reunion.* Coordinate with the organizers of the Roosevelt SH Class of 1968 reunion to arrange a medium to collect stories from the students attending the reunion. For example, a recording booth/area could be arranged during the reunion events in which students could be free to stop by and provide on-camera a less than five-minute account of their recollections and feelings about the events. The recording booth would be organized and monitored by professional historians who would then contact those students with the most direct involvement in the Blowouts after the reunion and ask them to be part of an oral history Project (see below).

f. *Oral histories with students.* Conduct a series of oral histories with students who can be identified as present at Roosevelt in 1968. Interviews should be conducted following the Principles and Best Practices established by the Oral History Association, including recommended methods for digital recordation and translation. Oral histories should be conducted by historians who meet the Secretary of the Interior's Professional Qualification Standards or individual who have participated in training to conduct oral histories. Release forms should be signed by each narrator through which he or she transfers his or her rights to the interview to the repository or designated body. Oral histories should be recorded using at least two separate audio recorders, utilizing at least one external microphone, as well as one video recorder. Oral histories should be archived at UCLA through the Center for Oral History Research and also in consultation with the Chicano Studies Research Center.

g. *Interpretive panels.* Develop content for interpretive panels to be placed on campus at Roosevelt SH, as well as the other East L.A. schools that participated in the Blowouts. Panels should include approximately 200 words of narrative text, as well as maps, photographs, and images that tell the story of the Blowouts.

Adoption of the above mitigation measures should be undertaken to lessen the adverse impact; however, the Project will still result in a substantial adverse change in the significance of the Roosevelt Senior High School Historic District and Building 1 pursuant to CEQA Section 21084.1. As such, the Project will result in a significant unavoidable impact pursuant to CEQA Guidelines Section 15064.5 (*Determining the Significance of Impacts to Archeological and Historical Resources*).

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n.d. Zanja Madre - LA's Original Aqueduct. Webpage, http://waterandpower.org/museum/Zanja%20Madre%20(Original%20LA%20Aqueduct).html

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APPENDICES

APPENDIX A

DPR Forms

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
DISTRICT RECORD

Primary #
HRI #
Trinomial

 ***Resource Name or #:** Roosevelt Senior High School Historic District
D1. Historic Name: Theodore Roosevelt High School
D2. Common Name: Roosevelt High

***D3. Detailed Description:** (Describe overall coherence of the district, its setting, visual characteristics, and minor features. List all elements of district.)

The Roosevelt Senior High School Historic District consists of 14 contributing resources. The district includes all components of the campus that were directly associated with the 1968 East Los Angeles student protests known as the Blowouts. Hollenbeck Middle School occupies the parcel across East 6th Street. The remainder of the surrounding neighborhood is primarily a mix of single- and multiple-family residential properties, with a scattering of small commercial properties on East 6th Street. The parcel (APN 5185-004-929) is located within the Boyle Heights Community Plan Area (CPA) of the City of Los Angeles.

(continued on page 4)

***D4. Boundary Description**: (Describe limits of district and attach map showing boundary and district elements.)

The Roosevelt Senior High School Historic District is located within the approximately 22.7-acre Roosevelt Senior High School campus, which is bounded by East 4th Street on the northeast, South Mott Street on the southeast, East 6th Street on the southwest, and South Mathews Street on the northwest. The historic district follows the northeast and southeast boundaries of the campus. To the southwest, the boundary runs immediately southwest of buildings 1 and 7. To the northwest, the boundary runs immediately northwest of buildings 1 and 19 (page 3).

***D5. Boundary Justification**:

Recommended boundaries for the Roosevelt Senior High School Historic District encompass all of the historic resources that were extant at the time of the 1968 student protests. Those resources consist of 12 buildings, the track, and landscaping southeast of Building 1.

D6. Significance: Theme Education, Chicano Civil Rights Movement **Area:**
Period of Significance 1968 **Applicable Criteria** A/1, B/2

(Discuss district's importance in terms of its historical context as defined by theme, period of significance, and geographic scope. Also address the integrity of the district as a whole.)

ASM carefully considered whether the Roosevelt SH campus or any part of it is eligible as a historic district for the NRHP or CRHR under Criteria A/1 for its association with events that have made a significant contribution to the broad patterns of local or regional history, and/or under Criteria B/2 for an association with the lives of persons important to local, California, or national history. Particular attention was paid to applicable themes related to the Chicano Civil Rights movement as defined in SurveyLA *Latino Los Angeles Historic Context Statement* and the LAUSD Historic Context Statement.

(continued on page 6)

D7. References (Give full citations including the names and addresses of any informants, where possible.):

Berta-Ávila, Margarita, Anita Tijerina Revilla, and Julie López Figueroa (editors). 2011. *Marching Students: Chicana and Chicano Activism in Education, 1968 to the Present.* Reno: University of Nevada.

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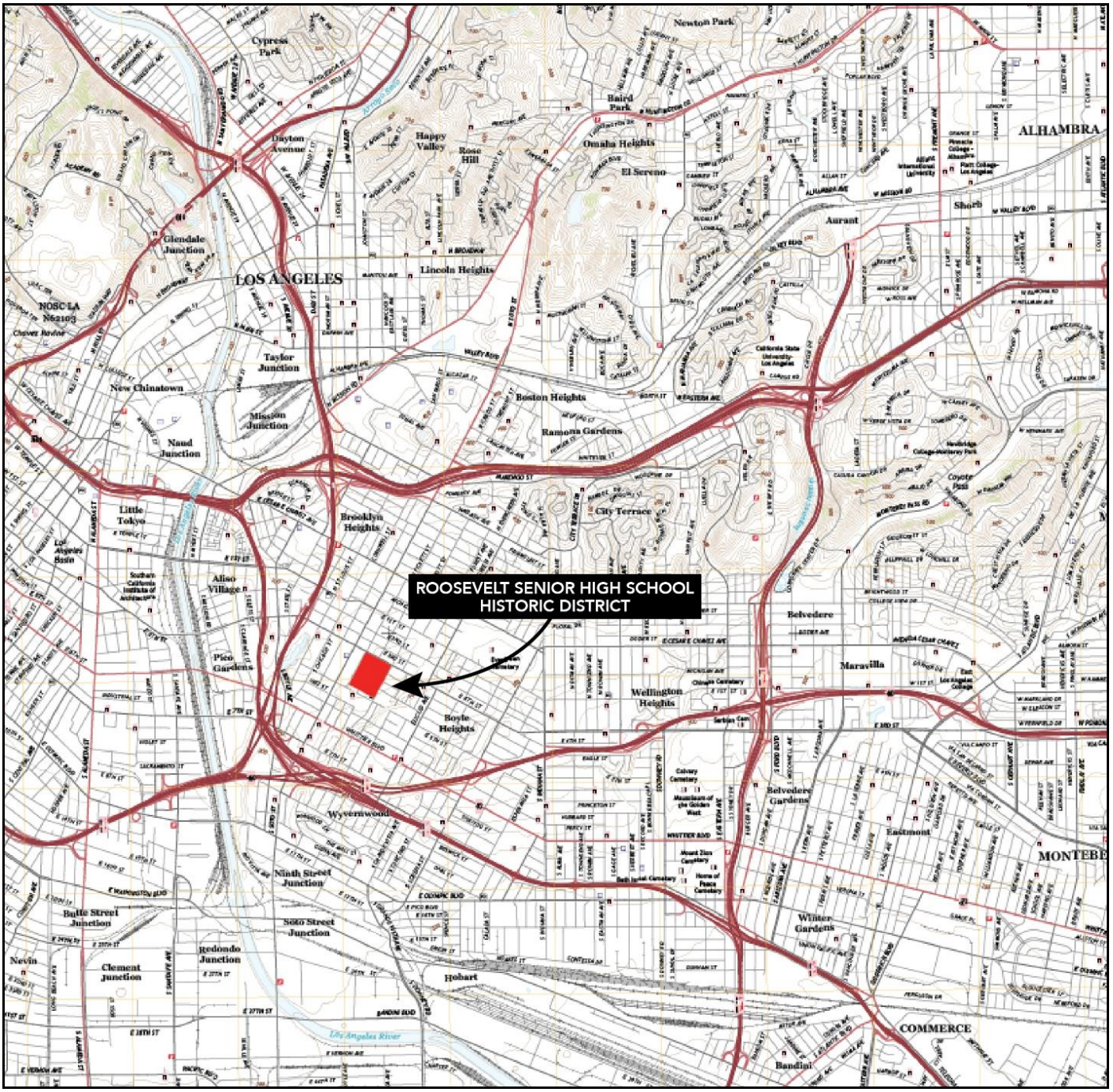
(continued on page 8)

***D8. Evaluator:** Shannon Davis and Marilyn Novell **Date:** February 2018
Affiliation and Address: ASM Affiliates, Inc., 20 N. Raymond Ave, Suite 220, Pasadena, California 91103

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
LOCATION MAP

Primary # _____
HRI # _____
Trinomial _____

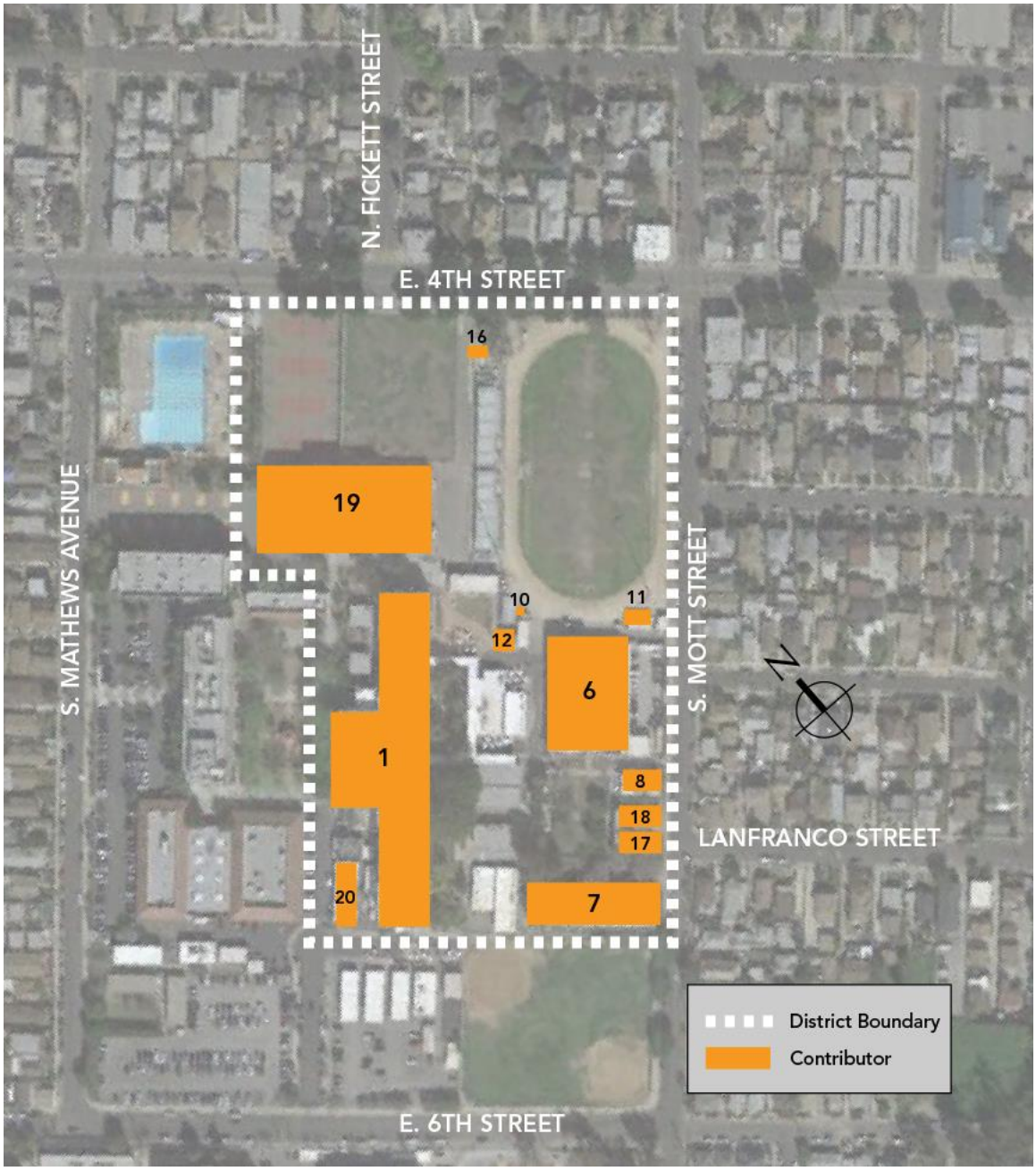
 ***Resource Name or # (Assigned by recorder)** Roosevelt Senior High School Historic District
***Map Name:** Los Angeles, CA 7.5-minute ***Scale:** 1:24,000 ***Date of Map:** May 2017



State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
LOCATION MAP

Primary # _____
HRI # _____
Trinomial _____

 ***Resource Name or # (Assigned by recorder)** Roosevelt Senior High School Historic District
***Map Name:** Roosevelt Senior High School Historic District ***Scale:** ***Date of Map:** May 2017



***D3. Detailed Description** (continued from page 1)

Contributing Resources

ASM considered whether any of the current buildings or landscaped areas were built in response to the protests, and whether Fickett Street, which at one time cut through the campus in front of/west of Building 1, was vacated in response to the protests. A master plan for the campus had already been submitted by 1966, when plans for $1,730,725 in new facilities for Roosevelt SH were approved by the Board. Projects included a new physical education building, renovation of an industrial arts building, and a new industrial arts building (Los Angeles Times 1966). A 1966 street profile plan and as-built civil drawings from the same year show Fickett Street passing through the school in plan (LAUSD dwg. 8829.00.023 and 8829.00.024). Further indication that the master plan had been initiated previous to 1968 is the early filing of a redrawn tract map that shows Fickett Street vacated and incorporated into the campus. An historic aerial dated January 3, 1968 (University of California Regents 1968), shows that these projects were complete by the time of the 1968 protests, rather than in response to them. A cafeteria and domestic science building and a shop building, shown southeast of Building 1 in 1966 LAUSD drawings (LAUSD Vault dwg. 8829.00.027) and in a 1968 aerial view, have since been demolished. As such, ASM concluded that there were no buildings or modifications to the school that were the direct result of the Blowouts.

Primary Contributors
Auditorium and Classroom Building (Building 1). Building 1 appears to have been a primary location of activities related to the 1968 walkouts. Built in 1922 and redesigned after the 1933 Long Beach earthquake, the former administration building remains an iconic representation of the campus. The Deco features of the main entrance, in particular, are recognizable as the entrance to the school, with a focus on the Bauhaus-style raised metal lettering spelling out the name of the school. Leading to the entrance are two flights of a wide concrete stairway set between sets of simple beveled-edge stucco stoops. Four sets of single-light double doors are recessed into a two-story plain stucco wall with a fluted column at the center and two sets of high multi-light transoms above.

The interior of Building 1 was closely associated with the walkouts. Immediately inside the primary entrance is a lobby with a ticket booth and entrances to the auditorium to the right and a flight of concrete stairs beneath a concrete arch leading to the main hallway straight ahead. This area was associated with an assembly called by the school administration two days after the original walkouts, in which the principal urged the students to avoid violence in further protests (Reich 1968). Brian Gibbs, a teacher at Roosevelt for 15 years (1995-2010), included the Blowouts in his curriculum at the school. Gibbs based his lessons on research and personal conversations with other teachers and individuals with first-hand knowledge of the events, and continued the curriculum that had been taught for years before his tenure at Roosevelt. According to Gibbs, after the assembly, the students staged a sit-in on the lobby stairs. Police entered and began trying to disperse the students, using violent means. To escape, the students ran up the stairs, down the central hall, and out the other side of Building 1. At that point they ran to the right, through one of the classroom buildings, and onto Mott Street (Gibbs 2017). Later, Gibbs used the lobby and stairs leading to the main hallway to teach how the built environment can be seen as a "text" that tells a story (Gibbs 2010). After showing his students an episode of the PBS series *Chicano!* (Part 3: "Taking Back the Schools"), which includes scenes from Roosevelt, he gathered them on the stairs and told the story of the Blowouts. After the students had observed first-hand the place where the conflict took place, Gibbs (2010:6) reports "[t]heir school's stairwell [became] a monument to be recognized and honored."

Classroom Building 7. On the day of the sit-ins at Roosevelt, students were said to have run out of the back of Building 1 toward Mott Street and toward the right, where Building 7 is located. Oral histories say the students ran through Building C, which has been demolished but was located "where the current ball field is," and into Mott Street. Photo evidence showing Building 7 at the time of the walkouts and the location of the building, with an entrance toward the interior of the campus and a second entrance immediately on Mott Street, suggest it is more likely the students ran through Building 7 into the street (Gibbs 2017).

Secondary Contributors

Major buildings extant in early 1968 are considered secondary contributors. These include the Instrumental Music Building (Building 8), which was built in 1959. Buildings constructed in the 1960s—the Industrial Arts Building (Building 6), Classroom Building 17, Classroom Building 18, and the Physical Education Building (Building 19)—were all completed by the time of the walkouts.

Tertiary Contributors
Tertiary contributors are utilitarian buildings that were extant at the time of the walkouts and that are some of the earliest on campus. These include the Equipment Field Storage (Building 12), which dates from 1941, and the Field Light Controls (Building 16), with a built year of 1949. Buildings from the 1950s that were extant are the Flammable Storage Building (Building 10; 1953) and the Field Sanitary Building (Building 11; 1958). The Utility Building (Building 20), built in 1968, is also a tertiary contributor to the historic district.

Because of the changing nature of landscaping, fields and landscaped areas around the primary contributing buildings are considered tertiary contributors. Although the bleachers have been replaced, the track configuration remains the same as it was in 1968; although the track at Roosevelt has not been confirmed as directly related to the protests, the track was a gathering place for protesters during the walkouts at some of the other participating schools, and it is likely that the track at Roosevelt served the same purpose. The playing field to the northeast of the physical education building remains an open space, as it was in 1968. The mature trees and other landscaping, especially the shady areas southeast of Building 1 toward Building 7 and Mott Street, are included in this category.[1]

Table 1. Roosevelt Senior High School Historic District Contributors

Bldg. No.	Building Name	Year Built	Priority
1	Auditorium and Classroom Building	1922	Primary
7	Classroom Building	1937	Primary
6	Industrial Arts Building	1968	Secondary
8	Instrumental Music Building	1959	Secondary
17	Classroom Building	1964	Secondary
18	Classroom Building	1964	Secondary
19	Physical Education Building	1968	Secondary
10	Flammable Storage Building	1953	Tertiary
11	Field Sanitary Building	1958	Tertiary
12	Equipment Field Storage	1941	Tertiary
16	Field Light Controls	1949	Tertiary
20	Utility Building	1968	Tertiary
	Track		Tertiary
	Landscaping		Tertiary

[1] The story of the Japanese garden at the southeast corner of Building 1, as told by former Roosevelt teacher Brian Gibbs (Gibbs 2017), provides anecdotal evidence of the continuing role of Boyle Heights as home to new immigrants of various ethnicities. In the 1930s and 1940s, Japanese-American students at Roosevelt established a Japanese garden on campus. When Executive Order 9066 ordering the internment of all people of Japanese ancestry was authorized by President Roosevelt in 1942, those students were abruptly removed from campus and the garden was eventually demolished. In 1992, on the fiftieth anniversary of the internment, the former students returned to campus and established the current Japanese garden adjacent to Building 1.

D6. Significance (continued from page 1)

The Roosevelt SH campus meets all of the eligibility criteria listed in the LAUSD HCS under the theme of *LAUSD and the Civil Rights Movement, 1954–1980.* Specifically, the recommended historic district and its contributors were constructed or extant during the period of significance; the campus was the site of significant integration initiatives, challenges, or activities related to the Chicano Civil Rights Movement and school integration; the campus directly reflects the movement for equal access to schools in LAUSD schools; the campus has a well-established, long-term association with Sal Castro, who was significant in the Chicano Civil Rights Movement and school integration (eligibility under B/2); and it is directly associated with events and institutions that were pivotal in the history of the Latino civil rights movement (from the SurveyLA Latino context). The campus retains most of the associative and character-defining features from the period of significance. Following the LAUSD guidelines, the multiple buildings extant during the period of significance are evaluated in this report as comprising a potential historic district.

Criteria A/1
ASM carefully considered whether the Roosevelt SH campus is eligible as a historic district under Criteria A/1 for its association with the 1968 Blowouts, in which Mexican-American students and their parents and sympathizers staged nearly simultaneous walkouts at five East L.A. high schools. Roosevelt SH students walked out of class repeatedly in the first weeks of March 1968. Roosevelt students conducted a second protest two days later, when they attended an assembly in the auditorium and staged a sit-in on the steps in the lobby of Building 1.

Building on the legacy of Mexican-Americans who had been protesting school segregation as early as the 1930s and 1940s, the Blowouts were widely considered the first major protest against racism and educational inequality staged by Mexican-Americans in the United States. The East Los Angeles students were said to have ignited the Mexican-American civil rights movement. Considered in context with the black Civil Rights movement, the historical significance of the Blowouts had similarities with the 1960 student sit-ins in Greensboro, North Carolina (Berta-Ávila et al. 2011:xi). As an indication that the Blowouts were a significant contributor to the broader Chicano civil rights movement, one of the Blowout participants, Carlos Munoz, describes a National Chicano Youth Conference held in Denver the following year, bringing together for the first time activists who were in involved in both campus and community Chicano politics.

The Blowouts were an important event in the Chicano Civil Rights movement that focused national attention, for the first time, on Chicanos, and served as a catalyst for the movement in Los Angeles that spread throughout the U.S. Therefore, Roosevelt SH is recommended eligible as a historic district under Criteria A/1 for its association with an event important in our history, and because of the concentration of Blowout-related activities in 1968, Building 1 is also recommended individually eligible under Criteria A/1

Criteria B/2
The Roosevelt SH campus was found to be associated with the lives of significant persons in the LAUSD Civil Rights movement. Sal Castro, who took the lead in organizing students at the East L.A. high schools who initiated the Blowouts, was a charismatic Mexican-American teacher at Lincoln High at the time of the protests, and at Lincoln High earlier in his career, where he began to observe the lack of opportunity for Mexican-American students compared to Anglos. At Belmont, he encouraged students to speak Spanish, not realizing that it was not allowed (Ochoa 2010). Castro encouraged students to make their grievances public after they failed to get the attention of school administrators and the Board. Castro was instrumental in the coordinated walkouts at Roosevelt, as well as Garfield, Lincoln, Wilson, and Belmont high schools. Castro was one of the "East L.A. 13" who were arrested and indicted for conspiring to plan the demonstrations. After firing Castro, the Board received numerous letters from students, parents, and other teachers both in support and objecting to his reinstatement when the charges were dropped two years later. Castro is highlighted in the SurveyLA Latino context for the active role he played in the struggle for educational equality associated with the Blowouts (GPA and Nicolaides 2015:23-24). Castro was so well-regarded by the District that on June 5, 2010, a school was dedicated in his honor (Sal Castro Middle School, adjacent to Belmont SH) (Sosa 2013:110).

Because of the importance of Sal Castro in encouraging Chicano students to assert their rights to an equal education and his role in helping organize the Blowouts, Roosevelt SH is recommended eligible as a historic district under Criteria B/2 for its association with a person important in our past, and because of the concentration of Blowout-related activities in 1968, Building 1 is also recommended individually eligible under Criteria B/2.

Criteria C/3
In its HCS (LAUSD 2014) and Design Guidelines (LAUSD 2015), LAUSD established character-defining features and evaluation guidelines for Post-1933 Long Beach Earthquake schools. Although the principal area of significance under the theme of Post-1933 Long Beach Earthquake schools is A/1, for association with events in history, the HCS comments that a building might also qualify under Criteria C/3, as "the embodiment of the distinctive characteristics of a type/period or method of construction, as an example of the work of a master architect, or for high artistic values" (LAUSD 2014:138). Thus, the potential of the Roosevelt High School Historic District contributors for eligibility under Criteria C/3 for architecture was carefully considered.

All of the district contributors were previously evaluated as part of the Roosevelt SH campus under Criteria C/3 and recommended not eligible for listing in the NRHP/CRHR (PCR 2014). ASM concurs with that finding. The only aspect of that evaluation which ASM felt required further consideration was the evaluation of individual eligibility for Building 1.

Building 1 was previously evaluated under Criteria C/3 and recommended not eligible for listing in the NRHP/CRHR (PCR 2015). However, the building was assessed based on its original 1922 configuration as an example of Italian Renaissance Revival and was deemed lacking in integrity because of extensive alterations after the 1933 earthquake. According to LAUSD documentation, it is common to find 1920s-era schools that were remodeled following the earthquake; such schools might exhibit the building plans and configurations typical of the 1920s but with 1930s PWA Moderne and Streamline Moderne architectural detailing (LAUSD 2015:39). As such, ASM considered whether Building 1 was eligible for one of these later styles, after its renovation. ASM recommends that Building 1 is not eligible under Criteria C/3 because it is not a good example of a style or building type. It does not exemplify the work of a master architect, it does not display high artistic values, and it does not embody the distinctive characteristics of a Post-1933 Long Beach Earthquake school building, as defined by the LAUSD HCS (LAUSD 2014:138). Thus, ASM concurs with the previous evaluation recommending Building 1 not eligible for NRHP/CRHR listing under Criteria C/3.

Criteria D/4
No extant archaeological resources were identified in an intensive pedestrian survey of the campus. A branch of the historic water conveyance system, the Zanja Madre, passed through the northern portion of the campus area in the late nineteenth century. There is a possibility that buried archaeological deposits may exist within the area of subsurface disturbance, although no previously undocumented cultural resources were identified as a result of the survey. The entirety of the campus has been built over or extensively landscaped, and it appears that the original landform upon which it lies has been extensively modified with some areas exhibiting extensive build up above original grade, such as the parking lots at the northern end of the campus. Additionally, the presence in the past of a portion of the historic Zanja Madre water conveyance system within the Project area opens the possibility that previously undocumented physical remains may be found subsurface. However, it is unknown whether that segment of the historic resource that passes through Roosevelt Senior High School is extant. Therefore, The Roosevelt Senior High School Historic District is recommended not eligible for NRHP/CRHR listing under Criteria D/4 for potential of yielding information important in history or prehistory.

Summary of Significance
The Roosevelt Senior High School Historic District is recommended eligible for NRHP/CRHR listing under Criteria A/1 and B/2 for association with events in history and the lives of important people in history. Likewise, Building 1 is recommended individually eligible under Criteria A/1 and B/2. No eligibility was recommended for significance under Criteria C/3 for architecture and engineering or under Criteria D/4 for the potential of yielding information important in history or prehistory.

Integrity

All of the recommended contributors, as well as the historic district itself, retain integrity to the period of significance of location, design, setting, materials, workmanship, feeling, and association.

- **Location**: The historic district is in its original location, as are all of the contributing elements of the historic district. Therefore, the historic district retains integrity of location.
- **Design**: The design of the site plan, buildings, structures, and landscape is intact or minimally altered, and the historic district and its contributors retain their original form, plan, space, structure, and style. Therefore, the historic district retains integrity of design.
- **Setting:** The setting of the Roosevelt Senior High School Historic District has not changed appreciably since its period of significance. Therefore, the historic district and its contributors retain integrity of setting.
- **Materials**: The contributing resources to the historic district are largely unmodified, especially on the exterior. There are a few examples of replacement windows and doors, but the district retains the majority of original fenestration. Therefore, the historic district retains integrity of materials.
- **Workmanship**: The contributors to the historic district were constructed over time, from 1922 through early 1968, and therefore display a range of workmanship suited to contemporary practice. Overall, the historic district retains integrity of workmanship.
- **Feeling:** The historic district clearly conveys its history and original function in the campus-like integration of buildings, landscape, roads, and footpaths. Although the buildings were constructed at different times before the period of significance, there is a coherence of design, materials, and setting that unites all of the elements. Therefore, the historic district retains integrity of feeling.
- **Association**: Similar to integrity of feeling, at the Roosevelt Senior High School Historic District, the presence of the majority of the original physical features is sufficient to convey its historic character and association with the themes it represents. It is sufficiently intact to convey its history to an observer, as a public school that was an important part of the 1968 East Los Angeles student protests. Therefore, the historic district retains integrity of association.

References (continued from page 1)

Draft Supplemental Historic Resource Evaluation Report for Roosevelt Senior High School, Los Angeles, Los Angeles County, California. Prepared by ASM Affiliates, Inc., for Los Angeles Unified School District, June 2017.

GPA and Becky Nicolaides. 2015. *Latino Los Angeles Historic Context Statement.* Prepared for City of Los Angeles Department of City Planning. September 15, 2015.

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Gibbs, Brian C. 2017. Personal interview, March 6.

Los Angeles Times. 1966. "Metropolitan." November 8.

Los Angeles Unified School District (LAUSD). 2015. Los Angeles Unified School District Design Guidelines and Treatment Approaches for Historic Schools. Prepared for LAUSD by SWCA Environmental Consultants.

Los Angeles Unified School District (LAUSD). 2014. *Los Angeles Unified School District Historic Context Statement, 1870-1969.* Prepared for LAUSD by Sapphos Environmental, Inc.

PCR. 2015. *Memorandum: Preliminary Historic Evaluation Report (HRE) for Theodore Roosevelt Senior High School.* Prepared by Margarita Jerabek et al. for LAUSD.

Reich, Ken. 1968. "Dyer's Test by Fire: Principal Walks Narrow Path in School Walkout." *Los Angeles Times*, March 14.

Sosa, Herbert R. 2013. "Fragmented Diversity: School Desegregation, Student Activism, and Busing in Los Angeles, 1963–1982." PhD dissertation, University of Michigan.

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary #
HRI #
Trinomial
NRHP Status Code
Other Listings
Review Code Reviewer Date

Page 1 of 9 ***Resource Name or #:** Building 1
P1. Other Identifier: Classroom and Auditorium Building, Roosevelt Senior High School
***P2. Location:** ☐ **Not for Publication** ☒ **Unrestricted**
***a. County:** Los Angeles and (P2c, P2e, and P2b or P2d. Attach a Location Map as necessary.)
***b. USGS 7.5' Quad** Los Angeles **Date** 2015 **T** 1S **R** 13W **¼ of** ¼ **of Sec** S.B. **B.M.**
c. Address 456 S. Mathews Street City Los Angeles Zip 90033
d. UTM: (give more than one for large and/or linear resources) Zone mE/ mN;
e. Other Locational Data: (e.g. parcel#, directions to resource, elevation, etc.)
Located on the campus of Roosevelt Senior High School, APN 5185-004-929

***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

Building 1 is a two-story building with a third level partially below grade. It has a T-shaped plan, formed by two long wings housing offices and classrooms and a central extension toward the northwest housing the auditorium. The building has a flat roof and a smooth stucco finish with sparse decorative ornamentation, except for a thin molding extending around the building at the roofline and above and below the second-story windows.

The primary entrance is located on the northwest façade and consists of four sets of single-pane Kalamein double doors and steel multi-pane fixed transom windows divided by a fluted column. Concrete stairs with two landings lead to the entrance. The name of the school, "Theodore Roosevelt High School," is posted in a sans-serif PWA Moderne font above the entrance. Fenestration generally consists of three-over-three windows with transom windows that have been painted over or replaced with outtake vents. There are a number of secondary entrances on the rear (southeast) and side façades. On the side (northeast) elevation are two secondary

(continued on page 9)

***P3b. Resource Attributes:** (List attributes and codes) HP15. Educational building
***P4. Resources Present:** ☒ Building ☐ Structure ☐ Object ☐ Site ☐ District ☒ Element of District ☐ Other (Isolates, etc.)
P5a. Photograph or Drawing (Photograph required for buildings, structures, and objects.)



P5b. Description of Photo: (view, date, accession#)
View looking southeast at the northwest façade
December 12, 2017

***P6. Date Constructed/Age and Source:**
☒ Historic ☐ Prehistoric ☐ Both
1922-1924
Los Angeles Unified School District records

***P7. Owner and Address:**
Los Angeles Unified School District
333 S. Beaudry Avenue
Los Angeles, CA 90017

***P8. Recorded by:** (Name, affiliation, and address)
Shannon Davis and Marilyn Novell
ASM Affiliates, Inc.
2034 Corte Del Nogal
Carlsbad, CA 92011

***P9. Date Recorded:** December 12, 2017

***P10. Survey Type:** (Describe) Pedestrian Intensive

***P11. Report Citation:** (cite survey report and sources, or enter "none.")
Cultural Resources Technical Report for Roosevelt High School, Los Angeles, California. Prepared by ASM Affiliates, Inc., for Los Angeles Unified School District, January 2018.

***Attachments:** ☐ NONE ☒ Location Map ☐ Sketch Map ☒ Continuation Sheet
☒ Building, Structure, and Object Record ☐ Archaeological Record ☐ District Record
☐ Linear Feature Record ☐ Milling Station Record ☐ Rock Art Record
☐ Artifact Record ☒ Photograph Record ☐ Other (List):



Image 1. View looking southeast at the northwest façade.



Image 2. Detail view of the primary entrance on the northwest façade.



Image 3. Detail view looking southeast at the southwest wing.



Image 4. Detail view of class ceramic tiles on the northwest façade.



Image 5. Detail view of the primary entrance on the northwest façade.



Image 6. Detail view of clerestory windows on northwest façade of auditorium.



Image 7. View looking southeast at the northwest façade.



Image 8. View looking east at the southeast façade.



Image 9. View looking south at the southwest façade.



Image 10. View looking east at the northwest and southwest façades.



Image 11. View looking north at the southeast façade.



Image 12. View looking northwest at the southeast façade.



Image 13. Detail view of doors to basement level.



Image 14. View looking northeast at the southwest façade.

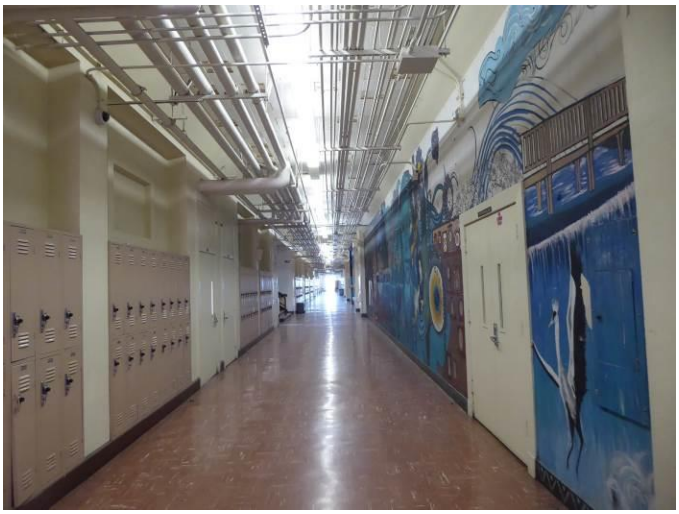


Image 15. Interior view of the first-floor hall looking northeast.



Image 16. Interior view of the auditorium lobby looking southeast.



Image 17. Interior view of the display case in the lobby.



Image 18. Detail view of lobby ceiling.



Image 21. Interior view of the auditorium looking toward the stage.

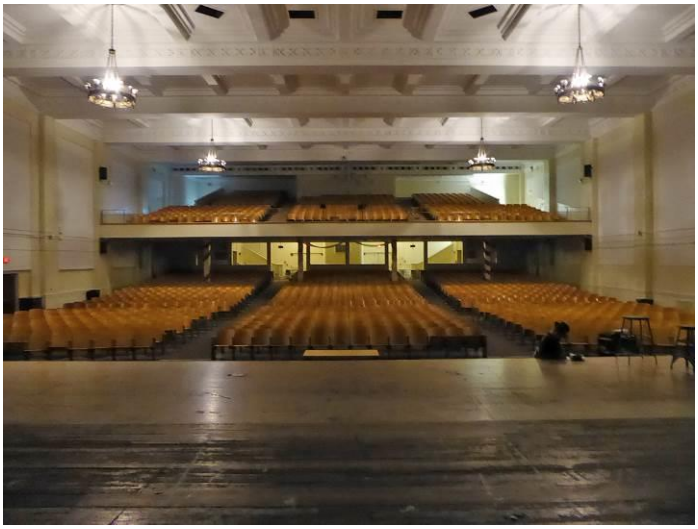


Image 22. Interior view of the auditorium looking toward the balcony.

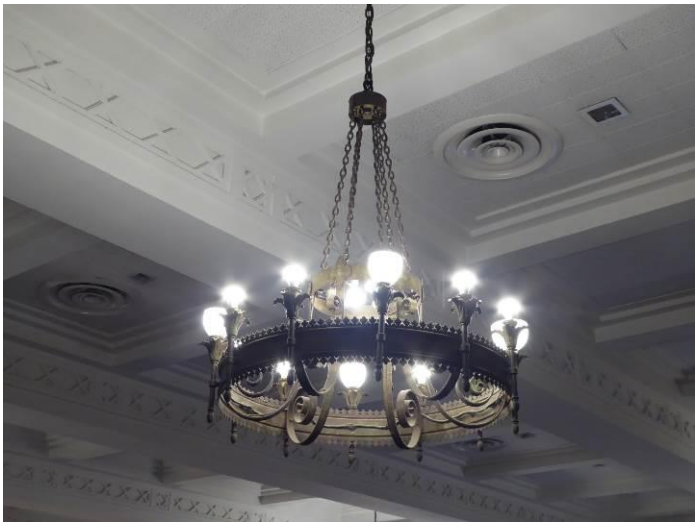


Image 23. Detail view of chandelier in auditorium.



Image 24. Detail view of seating in auditorium.

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
BUILDING, STRUCTURE, AND OBJECT RECORD

Primary # _____
HRI # _____

***NRHP Status Code** _____
***Resource Name or #** (Assigned by recorder) Building 1

B1. Historic Name: --
B2. Common Name: --
B3. Original Use: Educational property
B4. Present Use: Educational property
***B5. Architectural Style:** PWA Moderne
***B6. Construction History:** **(Construction date, alterations, and date of alterations)** 1922, 1924, 1936, 1970

The northeast and central portions of Building 1 were constructed in 1922, with the addition of the southwest wing in 1924. Roosevelt High was directly affected by the 1933 Long Beach earthquake. Some reforms related to earthquake-ready buildings had been put in place in the late 1920s, but Building 1 predates these. Following the earthquake, Building 1 was remodeled and retrofitted to better withstand any future major quakes. In 1936, the architecture firm of Hibbard, Gerity & Kerton was hired to reconstruct and strengthen Building 1. Many of the changes that took place at this time were structural, but a number of alterations also were made to the various elevations of the main building, altering its stylistic features and creating a much more modern and streamlined look for the building. The gabled parapets and the third floor were removed, creating a flat roofline and eliminating the danger that any above-roof protrusions could topple over. The diaper-pattern brick frieze with its cast stone band border was also removed or covered with stucco. It appears that the arches to the right of the main entry were also filled in during this time. These changes were consistent with the prevailing aesthetic sensibilities of the 1930s and also conformed to new safety regulations mandated by the Field Act.

***B7. Moved?** ☒ **No** ☐ **Yes** ☐ **Unknown** **Date:** N/A **Original Location:** N/A
***B8. Related Features:**
B9a. Architect: Los Angeles School District; reconstructed by Hibbard, Gerity & Kerton, 1936 b. Builder: Unknown
***B10. Significance: Theme** LAUSD and the Civil Rights Movement, 1954–1980 **Area:** Education
Period of Significance: 1968 **Property Type:** School **Applicable Criteria:** A/1, B/2

Criteria A/1: ASM considered whether Building 1 is individually eligible under Criteria A/1 for its association important events in history. Building 1 was directly associated with activities of the 1968 Blowouts, in which Mexican-American students staged nearly simultaneous walkouts at five East Los Angeles high schools. The Blowouts were an important event in the Chicano Civil Rights movement that focused national attention, for the first time, on Chicanos, and served as a catalyst for the movement in Los Angeles that spread throughout the U.S. Therefore, Building 1 is recommended individually eligible for listing in the NRHP and CRHR.

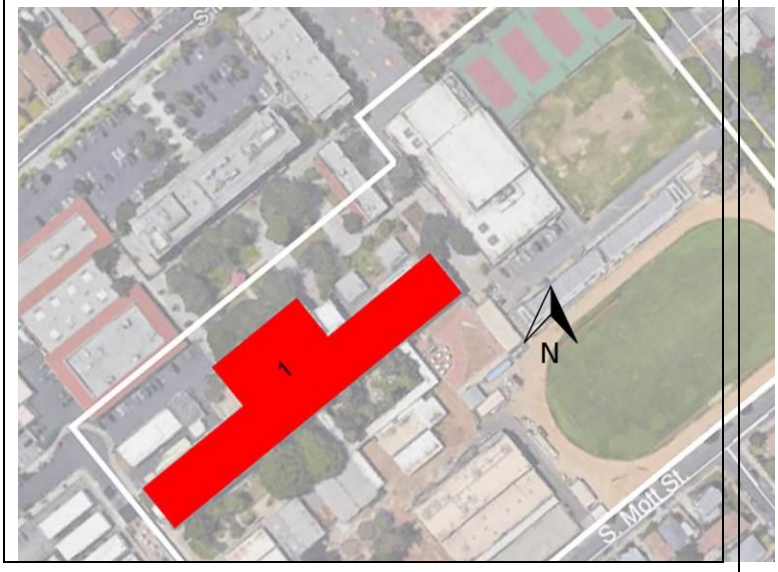
B11. Additional Resource Attributes: (List attributes and codes) (continued on p. 9)

***B12. References:**

National Park Service. 1997. *How to Apply the National Register Criteria for Evaluation.* National Register Bulletin No. 15. Washington, D.C.
PCR. 2015. *Memorandum: Preliminary Historic Evaluation Report (HRE) for Theodore Roosevelt Senior High School.* Prepared by Margarita Jerabek et al. for LAUSD.

B13. Remarks:
***B14. Evaluator:** ASM Affiliates, Inc. (Shannon Davis and Marilyn Novell)
***Date of Evaluation:** December 12, 2017

Sketch Map with north arrow required.



(This space is reserved for official comments)

***P3a. Description** (continued from p. 1):

entrances; the first floor has a three-way concrete stairway leading to two pairs of Kalamein doors with transom windows, and the second story has a metal stair leading to a pair of Kalamein doors with transoms. On the rear (southeast) façade are four entrances; two consist of pairs of flat panel double doors sheltered by canopies, and two are single flat-panel doors. On the northwest façade of the auditorium wing is a series of five double-height multi-pane clerestory windows that have been painted over.

At the interior, the lobby has a poured-concrete floor scored in squares and a deep coffered ceiling. An arch leads to a set of concrete steps that provide access from the lobby to the first-floor classroom level. The bases of the ticket booth on the southeast wall and a trophy case on the northwest wall are faced in red brick. The auditorium has a coffered ceiling with ornamented cross beams. The walls are clad in plaster and wood paneling, and the floors are concrete and wood floors. The main floor and a balcony are fitted with folding bent-wood seating with iron frames. The auditorium has a rectangular proscenium-style stage and chandelier lighting.

***B10. Significance** (continued from p. 8):

Criteria B/2: Building 1 was found to be associated with the lives of significant persons in the Los Angeles Unified School District Civil Rights movement. Salvatore “Sal” Castro, a charismatic teacher who took the lead in organizing students at the East L.A. high schools that participated in the 1968 Blowouts, was instrumental in the walkouts at Roosevelt, where assemblies and protests were concentrated in the hallways, steps, and auditorium in Building 1. Building 1 is recommended individually eligible for listing in the NRHP and CRHR under Criterion B/2.

Criteria C/3: ASM reviewed a previous evaluation of the Roosevelt HS campus, which recommended the Roosevelt HS campus not eligible under Criteria C/3 for architecture and specifically discussed Building 1. Reasons cited were that it had been extensively altered since its construction in 1922-1924, including the post-1933 earthquake reconstruction, and that it is not an exceptional, distinctive, or outstanding example of the PWA Moderne style it currently exhibits (PCR 2015). ASM concurs with this evaluation and recommends Building 1 not individually eligible for listing in the NRHP and CRHR under Criterion C/3.

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary #
HRI #
Trinomial
NRHP Status Code
Other Listings
Review Code Reviewer Date

Page 1 of 3 ***Resource Name or #:** Building 6
P1. Other Identifier: Industrial Arts Building
***P2. Location:** ☐ **Not for Publication** ☒ **Unrestricted**
***a. County:** Los Angeles and (P2c, P2e, and P2b or P2d. Attach a Location Map as necessary.)
***b. USGS 7.5' Quad** Los Angeles **Date** 2015 **T** 1S **R** 13W **¼ of** **NE ¼** **of Sec** S.B. **B.M.**
c. Address 456 S. Mathews Street City Los Angeles Zip
d. UTM: (give more than one for large and/or linear resources) Zone mE/ mN;
e. Other Locational Data: (e.g. parcel#, directions to resource, elevation, etc.) APN 5185-004-929

***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

Located to the north of Classroom Buildings 17 and 18 is Industrial Arts Building 6, constructed in 1966. The one-and-two story building has a rectangular plan and massing, flat-roof, concrete construction, brick and stucco sheathing, and flat-panel doors. The building's primary decorative feature is the second-story concrete balcony sheltered by a wide overhang on the west elevation where access to the classrooms is provided by two concrete stairways, supported by cast-concrete T-shaped supports. A wide canopy runs along the rear one-story elevation on South Mott Street to provide shelter for automotive classes.

***P3b. Resource Attributes:** (List attributes and codes) HP15. Educational Building
***P4. Resources Present:** ☒ Building ☐ Structure ☐ Object ☐ Site ☐ District ☒ Element of District ☐ Other (Isolates, etc.)
P5a. Photograph or Drawing (Photograph required for buildings, structures, and objects.)



P5b. Description of Photo: (view, date, accession#)
View looking northeast at the southwest façade of Building 6.
Source: ASM, December 12, 2017

***P6. Date Constructed/Age and Source:**
☒ Historic ☐ Prehistoric ☐ Both
1966
Los Angeles Unified School District records

***P7. Owner and Address:**
Los Angeles Unified School District
333 S Beaudry Ave, Los Angeles, CA 90017

***P8. Recorded by:** (Name, affiliation, and address)
Shannon Davis and Marilyn Novell
ASM Affiliates, Inc.
20 N. Raymond Ave., Suite 220
Pasadena, CA 91103

***P9. Date Recorded:** December 12, 2017

***P10. Survey Type:** (Describe) Pedestrian Intensive

***P11. Report Citation:** (cite survey report and sources, or enter "none.") *Cultural Resources Technical Report for Roosevelt High School, Los Angeles, California.* Prepared by ASM Affiliates, Inc., for Los Angeles Unified School District, January 2018.

***Attachments:** ☐ NONE ☐ Location Map ☐ Sketch Map ☐ Continuation Sheet ☐ Building, Structure, and Object Record ☐ Archaeological Record ☒ District Record ☐ Linear Feature Record ☐ Milling Station Record ☐ Rock Art Record ☐ Artifact Record ☒ Photograph Record ☐ Other (List):



Image 1. View looking east at the northwest and southwest façades.



Image 2. View looking south at the northeast and northwest façades.



Image 3. View looking west at the southwest and northeast façades.



Image 4. View looking south at the northeast façade.



Image 5. View looking east at the northwest façade.



Image 6. Detail view looking southwest at the first-floor corridor.



Image 7. View looking northwest at the southeast façade.

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary #
HRI #
Trinomial
NRHP Status Code
Other Listings
Review Code Reviewer Date

Page 1 of 3 ***Resource Name or #:** Classroom Building 7
P1. Other Identifier: Building C
***P2. Location:** ☐ **Not for Publication** ☒ **Unrestricted**
***a. County:** Los Angeles and (P2c, P2e, and P2b or P2d. Attach a Location Map as necessary.)
***b. USGS 7.5' Quad** Los Angeles **Date** 2015 **T** 1S **R** 13W **¼ of** **NE ¼** **of Sec** S.B. **B.M.**
c. Address 456 S. Mathews Street City Los Angeles Zip
d. UTM: (give more than one for large and/or linear resources) Zone mE/ mN;
e. Other Locational Data: (e.g. parcel#, directions to resource, elevation, etc.) APN 5185-004-929

***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

Constructed in 1937, the PWA Moderne-style Classroom Building 7 is the second oldest building on campus. Located on South Mott Street in the southeast side of campus, it has two main entrances: one opens to the interior of campus, and the second opens onto the street. The minimal ornamentation is compatible with the design of Building 1. The two-story Classroom Building 7 has a rectangular plan and massing, flat roof, and painted board-form concrete construction. Fenestration consists of six-over-six windows with three-light transoms and four-light hopper windows. Simple molding encircles the building at the roofline and above and under the second-story windows. The building displays minimal alterations to year built, consisting of a few filled-in windows and stucco patching.

***P3b. Resource Attributes:** (List attributes and codes) HP15. Educational Building
***P4. Resources Present:** ☒ Building ☐ Structure ☐ Object ☐ Site ☐ District ☒ Element of District ☐ Other (Isolates, etc.)
P5a. Photograph or Drawing (Photograph required for buildings, structures, and objects.)



P5b. Description of Photo: (view, date, accession#)
View looking west at the southwest and southeast façades of Building 7
Source: ASM, December 12, 2017

***P6. Date Constructed/Age and Source:**
☒ Historic ☐ Prehistoric ☐ Both
1937
Los Angeles Unified School District records

***P7. Owner and Address:**
Los Angeles Unified School District
333 S Beaudry Ave, Los Angeles, CA 90017

***P8. Recorded by:** (Name, affiliation, and address)
Shannon Davis and Marilyn Novell
ASM Affiliates, Inc.
20 N. Raymond Ave., Suite 220
Pasadena, CA 91103

***P9. Date Recorded:** December 12, 2017

***P10. Survey Type:** (Describe) Pedestrian Intensive

***P11. Report Citation:** (cite survey report and sources, or enter "none.") *Cultural Resources Technical Report for Roosevelt High School, Los Angeles, California.* Prepared by ASM Affiliates, Inc., for Los Angeles Unified School District, January 2018.

***Attachments:** ☐ NONE ☐ Location Map ☐ Sketch Map ☐ Continuation Sheet ☐ Building, Structure, and Object Record ☐ Archaeological Record ☒ District Record ☐ Linear Feature Record ☐ Milling Station Record ☐ Rock Art Record ☐ Artifact Record ☒ Photograph Record ☐ Other (List):



Image 1. View looking north at the southwest and southwest façades.



Image 2. Detail view of the entrance on Mott Street.



Image 3. View looking east at the southwest and southeast façades.



Image 4. Interior view of first-floor hall.



Image 5. Detail view of typical interior transom.

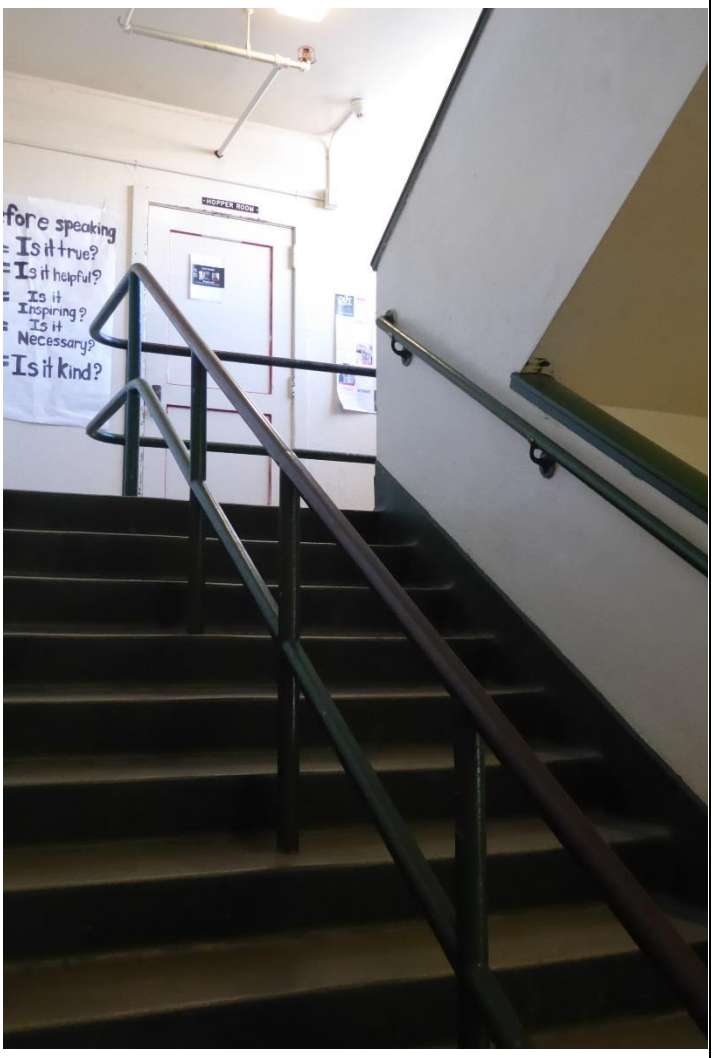


Image 6. Detail view of interior staircase connecting first and second floors to a half floor.

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary #
HRI #
Trinomial
NRHP Status Code
Other Listings
Review Code Reviewer Date

Page 1 of 1 ***Resource Name or #:** Building 8
P1. Other Identifier: Instrumental Music Building
***P2. Location:** ☐ **Not for Publication** ☒ **Unrestricted**
***a. County:** Los Angeles and (P2c, P2e, and P2b or P2d. Attach a Location Map as necessary.)
***b. USGS 7.5' Quad** Los Angeles **Date** 2015 **T** 1S **R** 13W **¼ of** **NE ¼** **of Sec** S.B. **B.M.**
c. Address 456 S. Mathews Street City Los Angeles Zip
d. UTM: (give more than one for large and/or linear resources) Zone mE/ mN;
e. Other Locational Data: (e.g. parcel#, directions to resource, elevation, etc.) APN 5185-004-929

***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

Classroom Building 8 is located immediately northwest of Classroom Buildings 17 and 18 on the Mott Street side of campus. Constructed in 1959, it is a story-and-a-half wood-frame building with stucco cladding. The building sits on a poured-concrete foundation and has a flat roof with a slightly projecting wing wall at the northwest and southeast façades. A flat canopy on the northeast façade shelters the open corridor below. The building lacks windows with the exception of two small windows and several vents on the northeast façade. A series of flat doors open off of the corridor. A small patio area is located adjacent to the building on the southwest.

***P3b. Resource Attributes:** (List attributes and codes) HP15. Educational Building
***P4. Resources Present:** ☒ Building ☐ Structure ☐ Object ☐ Site ☐ District ☒ Element of District ☐ Other (Isolates, etc.)
P5a. Photograph or Drawing (Photograph required for buildings, structures, and objects.)



P5b. Description of Photo: (view, date, accession#)
View looking south at the northeast and northwest façades.
Source: ASM, December 12, 2017

***P6. Date Constructed/Age and Source:**
☒ Historic ☐ Prehistoric ☐ Both
1959
Los Angeles Unified School District records

***P7. Owner and Address:**
Los Angeles Unified School District
333 S Beaudry Ave, Los Angeles, CA 90017

***P8. Recorded by:** (Name, affiliation, and address)
Shannon Davis and Marilyn Novell
ASM Affiliates, Inc.
20 N. Raymond Ave., Suite 220
Pasadena, CA 91103

***P9. Date Recorded:** December 12, 2017

***P10. Survey Type:** (Describe) Pedestrian Intensive

***P11. Report Citation:** (cite survey report and sources, or enter "none.") *Cultural Resources Technical Report for Roosevelt High School, Los Angeles, California.* Prepared by ASM Affiliates, Inc., for Los Angeles Unified School District, January 2018.

***Attachments:** ☐ NONE ☐ Location Map ☐ Sketch Map ☐ Continuation Sheet ☐ Building, Structure, and Object Record ☐ Archaeological Record ☒ District Record ☐ Linear Feature Record ☐ Milling Station Record ☐ Rock Art Record ☐ Artifact Record ☐ Photograph Record ☐ Other (List):

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

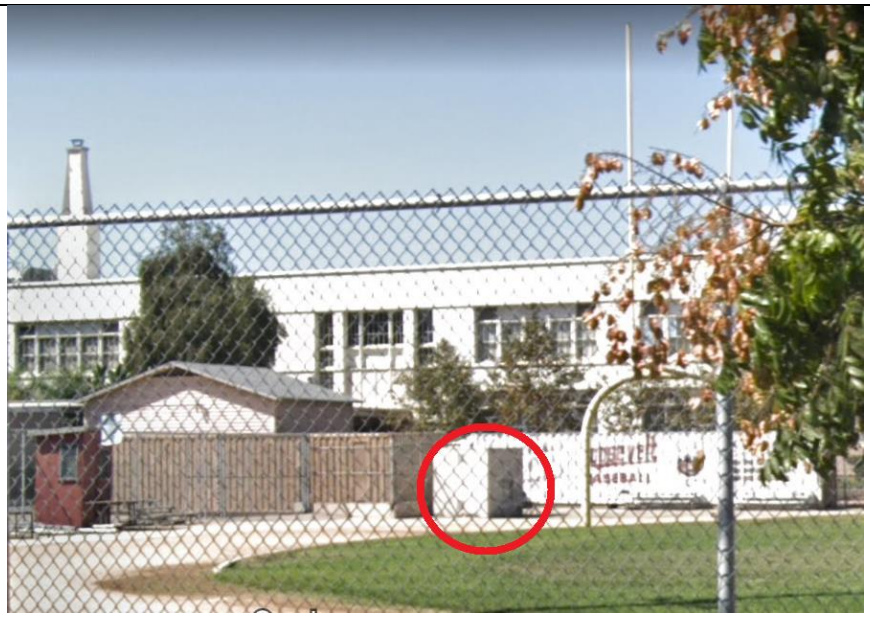
Primary #
HRI #
Trinomial
NRHP Status Code
Other Listings
Review Code Reviewer Date

Page 1 of 3 ***Resource Name or #:** Flammable Storage Building
P1. Other Identifier: Building 10
***P2. Location:** ☐ **Not for Publication** ☒ **Unrestricted**
***a. County:** Los Angeles and (P2c, P2e, and P2b or P2d. Attach a Location Map as necessary.)
***b. USGS 7.5' Quad** Los Angeles **Date** 2015 **T** 1S **R** 13W **¼ of** **NE ¼** **of Sec** S.B. **B.M.**
c. Address 456 S. Mathews Street City Los Angeles Zip
d. UTM: (give more than one for large and/or linear resources) Zone mE/ mN;
e. Other Locational Data: (e.g. parcel#, directions to resource, elevation, etc.) APN 5185-004-929

***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

Building 10, constructed in 1953, is a 60-square-foot reinforced concrete building located north of the track. It has a low, flat roof and serves as a storage facility.

***P3b. Resource Attributes:** (List attributes and codes) HP15. Educational Building
***P4. Resources Present:** ☒ Building ☐ Structure ☐ Object ☐ Site ☐ District ☒ Element of District ☐ Other (Isolates, etc.)
P5a. Photograph or Drawing (Photograph required for buildings, structures, and objects.)



P5b. Description of Photo: (view, date, accession#)
View looking west at the southwest and southeast façades of Building 7
Source: ASM, December 12, 2017

***P6. Date Constructed/Age and Source:**
☒ Historic ☐ Prehistoric ☐ Both
1953
Los Angeles Unified School District records

***P7. Owner and Address:**
Los Angeles Unified School District
333 S Beaudry Ave, Los Angeles, CA 90017

***P8. Recorded by:** (Name, affiliation, and address)
Shannon Davis and Marilyn Novell
ASM Affiliates, Inc.
20 N. Raymond Ave., Suite 220
Pasadena, CA 91103

***P9. Date Recorded:** December 12, 2017

***P10. Survey Type:** (Describe) Pedestrian Intensive

***P11. Report Citation:** (cite survey report and sources, or enter "none.") *Cultural Resources Technical Report for Roosevelt High School, Los Angeles, California.* Prepared by ASM Affiliates, Inc., for Los Angeles Unified School District, January 2018.

***Attachments:** ☐ NONE ☐ Location Map ☐ Sketch Map ☐ Continuation Sheet ☐ Building, Structure, and Object Record ☐ Archaeological Record ☒ District Record ☐ Linear Feature Record ☐ Milling Station Record ☐ Rock Art Record ☐ Artifact Record ☒ Photograph Record ☐ Other (List):

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary #
HRI #
Trinomial
NRHP Status Code
Other Listings
Review Code Reviewer Date

Page 1 of 3 ***Resource Name or #:** Building 11
P1. Other Identifier: Field Sanitary Building
***P2. Location:** ☐ **Not for Publication** ☒ **Unrestricted**
***a. County:** Los Angeles and (P2c, P2e, and P2b or P2d. Attach a Location Map as necessary.)
***b. USGS 7.5' Quad** Los Angeles **Date** 2015 **T** 1S **R** 13W **¼ of** **NE ¼** **of Sec** S.B. **B.M.**
c. Address 456 S. Mathews Street City Los Angeles Zip
d. UTM: (give more than one for large and/or linear resources) Zone mE/ mN;
e. Other Locational Data: (e.g. parcel#, directions to resource, elevation, etc.) APN 5185-004-929

***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

Building 11, constructed in 1958, is located adjacent to the track and houses sanitary facilities. It is rectangular in plan, has a slightly sloping shed roof with a moderate overhang, and sits on a poured-concrete foundation. It is a wood-frame building with stucco cladding. Two flat doors, one on the southeast façade and the other on the northwest façade, provide access from the track. Fenestration consists of two pairs and a single horizontally oriented metal set high on the southeast façade and two horizontally oriented metal sliders on the southwest façade.

***P3b. Resource Attributes:** (List attributes and codes) HP15. Educational Building
***P4. Resources Present:** ☒ Building ☐ Structure ☐ Object ☐ Site ☐ District ☒ Element of District ☐ Other (Isolates, etc.)
P5a. Photograph or Drawing (Photograph required for buildings, structures, and objects.)



P5b. Description of Photo: (view, date, accession#)
View looking west at the southeast and northeast façades of Building 11.
Source: ASM, December 12, 2017

***P6. Date Constructed/Age and Source:**
☒ Historic ☐ Prehistoric ☐ Both
1958
Los Angeles Unified School District records

***P7. Owner and Address:**
Los Angeles Unified School District
333 S Beaudry Ave, Los Angeles, CA 90017

***P8. Recorded by:** (Name, affiliation, and address)
Shannon Davis and Marilyn Novell
ASM Affiliates, Inc.
20 N. Raymond Ave., Suite 220
Pasadena, CA 91103

***P9. Date Recorded:** December 12, 2017

***P10. Survey Type:** (Describe) Pedestrian Intensive

***P11. Report Citation:** (cite survey report and sources, or enter "none.") *Cultural Resources Technical Report for Roosevelt High School, Los Angeles, California.* Prepared by ASM Affiliates, Inc., for Los Angeles Unified School District, January 2018.

***Attachments:** ☐ NONE ☐ Location Map ☐ Sketch Map ☐ Continuation Sheet ☐ Building, Structure, and Object Record ☐ Archaeological Record ☒ District Record ☐ Linear Feature Record ☐ Milling Station Record ☐ Rock Art Record ☐ Artifact Record ☒ Photograph Record ☐ Other (List):



Image 1. View looking east at the northwest and southwest façades.

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary #
HRI #
Trinomial
NRHP Status Code
Other Listings
Review Code Reviewer Date

Page 1 of 2 ***Resource Name or #:** Building 12
P1. Other Identifier: Equipment Field Storage
***P2. Location:** ☐ **Not for Publication** ☒ **Unrestricted**
***a. County:** Los Angeles and (P2c, P2e, and P2b or P2d. Attach a Location Map as necessary.)
***b. USGS 7.5' Quad** Los Angeles **Date** 2015 **T** 1S **R** 13W **¼ of** **NE ¼** **of Sec** S.B. **B.M.**
c. Address 456 S. Mathews Street City Los Angeles Zip
d. UTM: (give more than one for large and/or linear resources) Zone mE/ mN;
e. Other Locational Data: (e.g. parcel#, directions to resource, elevation, etc.) APN 5185-004-929

***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

Building 12, constructed in 1941, is a 528-square foot wood-frame building with a rectangular plan. It is clad in wood clapboard and sits on a raised concrete foundation. On the southeast façade are two small windows with simple wood surrounds that have been filled in with plywood. The entrance is a double bay door with a tilt-up door at the northeast façade. It has a side-gabled roof with vents at the top of the gable.

***P3b. Resource Attributes:** (List attributes and codes) HP15. Educational Building
***P4. Resources Present:** ☒ Building ☐ Structure ☐ Object ☐ Site ☐ District ☒ Element of District ☐ Other (Isolates, etc.)
P5a. Photograph or Drawing (Photograph required for buildings, structures, and objects.)



P5b. Description of Photo: (view, date, accession#)
View looking east at the southwest and southeast façades of Building 12.
Source: ASM, December 12, 2017

***P6. Date Constructed/Age and Source:**
☒ Historic ☐ Prehistoric ☐ Both
1941
Los Angeles Unified School District records

***P7. Owner and Address:**
Los Angeles Unified School District
333 S Beaudry Ave, Los Angeles, CA 90017

***P8. Recorded by:** (Name, affiliation, and address)
Shannon Davis and Marilyn Novell
ASM Affiliates, Inc.
20 N. Raymond Ave., Suite 220
Pasadena, CA 91103

***P9. Date Recorded:** December 12, 2017

***P10. Survey Type:** (Describe) Pedestrian Intensive

***P11. Report Citation:** (cite survey report and sources, or enter "none.") *Cultural Resources Technical Report for Roosevelt High School, Los Angeles, California.* Prepared by ASM Affiliates, Inc., for Los Angeles Unified School District, January 2018.

***Attachments:** ☐ NONE ☐ Location Map ☐ Sketch Map ☐ Continuation Sheet ☐ Building, Structure, and Object Record ☐ Archaeological Record ☒ District Record ☐ Linear Feature Record ☐ Milling Station Record ☐ Rock Art Record ☐ Artifact Record ☒ Photograph Record ☐ Other (List):



Image 1. View looking south at the northeast and northwest façades.



Image 2. Looking north at the southwest and southeast façades.



Image 3. View looking northwest at the southeast façade.

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary #
HRI #
Trinomial
NRHP Status Code
Other Listings
Review Code Reviewer Date

Page 1 of 2 ***Resource Name or #:** Field Light Controls
P1. Other Identifier: Building C
***P2. Location:** ☐ **Not for Publication** ☒ **Unrestricted**
***a. County:** Los Angeles and (P2c, P2e, and P2b or P2d. Attach a Location Map as necessary.)
***b. USGS 7.5' Quad** Los Angeles **Date** 2015 **T** 1S **R** 13W **¼ of** **NE ¼** **of Sec** S.B. **B.M.**
c. Address 456 S. Mathews Street City Los Angeles Zip
d. UTM: (give more than one for large and/or linear resources) Zone mE/ mN;
e. Other Locational Data: (e.g. parcel#, directions to resource, elevation, etc.) APN 5185-004-929

***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

Constructed in 1949, the 72-square-foot Field Light Controls building is a wood-frame building siting on a poured-concrete foundation located at the northwest end of a set of bleachers.. It has a flat roof and a single flat door at the northwest façade.

***P3b. Resource Attributes:** (List attributes and codes) HP15. Educational Building
***P4. Resources Present:** ☒ Building ☐ Structure ☐ Object ☐ Site ☐ District ☒ Element of District ☐ Other (Isolates, etc.)
P5a. Photograph or Drawing (Photograph required for buildings, structures, and objects.)



P5b. Description of Photo: (view, date, accession#)
View looking west at the southwest and southeast façades of Building 7
Source: ASM, December 12, 2017

***P6. Date Constructed/Age and Source:**
☒ Historic ☐ Prehistoric ☐ Both
1949
Los Angeles Unified School District records

***P7. Owner and Address:**
Los Angeles Unified School District
333 S Beaudry Ave, Los Angeles, CA 90017

***P8. Recorded by:** (Name, affiliation, and address)
Shannon Davis and Marilyn Novell
ASM Affiliates, Inc.
20 N. Raymond Ave., Suite 220
Pasadena, CA 91103

***P9. Date Recorded:** December 12, 2017

***P10. Survey Type:** (Describe) Pedestrian Intensive

***P11. Report Citation:** (cite survey report and sources, or enter "none.") *Cultural Resources Technical Report for Roosevelt High School, Los Angeles, California.* Prepared by ASM Affiliates, Inc., for Los Angeles Unified School District, January 2018.

***Attachments:** ☐ NONE ☐ Location Map ☐ Sketch Map ☐ Continuation Sheet ☐ Building, Structure, and Object Record ☐ Archaeological Record ☒ District Record ☐ Linear Feature Record ☐ Milling Station Record ☐ Rock Art Record ☐ Artifact Record ☒ Photograph Record ☐ Other (List):



Image 1. View looking north at the southwest and southeast façades.



Image 2. View looking northwest at the southeast façade.

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

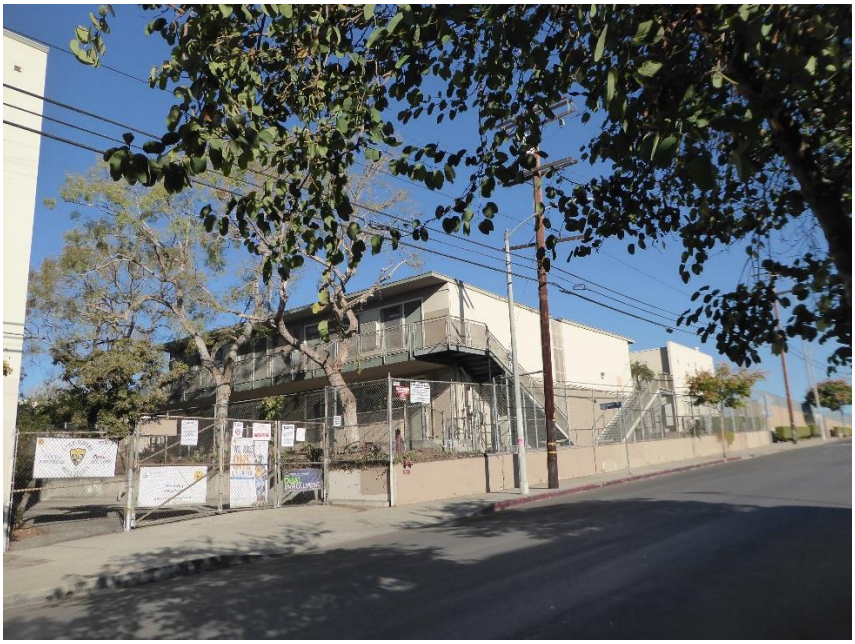
Primary #
HRI #
Trinomial
NRHP Status Code
Other Listings
Review Code Reviewer Date

Page 1 of 2 ***Resource Name or #:** Classroom Buildings 17 and 18
P1. Other Identifier:
***P2. Location:** ☐ **Not for Publication** ☒ **Unrestricted**
***a. County:** Los Angeles and (P2c, P2e, and P2b or P2d. Attach a Location Map as necessary.)
***b. USGS 7.5' Quad** Los Angeles **Date** 2015 **T** 1S **R** 13W **¼ of** **NE ¼** **of Sec** S.B. **B.M.**
c. Address 456 S. Mathews Street City Los Angeles Zip
d. UTM: (give more than one for large and/or linear resources) Zone mE/ mN;
e. Other Locational Data: (e.g. parcel#, directions to resource, elevation, etc.) APN 5185-004-929

***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

Two-story classroom Buildings 17 and 18, constructed in 1964, share an identical, but flipped, design, with the open corridors of Building 17 facing southwest and the corridors of Building 18 facing northeast. The buildings are arranged back to back with a space of approximately six feet between and crossbars at the tops of the buildings anchoring them together. Both buildings have rectangular plans, flat roofs, and are clad in stucco. A cantilevered wide overhanging roof shelters the second-story corridor, and the first-floor corridor is sheltered by the cantilevered corridor floor above. The buildings display minimal detailing and are further united by balcony railings that connect to stairways at both ends of each building that meet on the ground level. Fenestration is limited to groups of four two-light windows with a flat door and filled-in transom at each end.

***P3b. Resource Attributes:** (List attributes and codes) HP15. Educational Building
***P4. Resources Present:** ☒ Building ☐ Structure ☐ Object ☐ Site ☐ District ☒ Element of District ☐ Other (Isolates, etc.)
P5a. Photograph or Drawing (Photograph required for buildings, structures, and objects.)



P5b. Description of Photo: (view, date, accession#)
View looking north at the southeast and northeast façades of Buildings 17 and 18. Source: ASM, December 12, 2017

***P6. Date Constructed/Age and Source:**
☒ Historic ☐ Prehistoric ☐ Both
1964
Los Angeles Unified School District records

***P7. Owner and Address:**
Los Angeles Unified School District
333 S Beaudry Ave, Los Angeles, CA 90017

***P8. Recorded by:** (Name, affiliation, and address)
Shannon Davis and Marilyn Novell
ASM Affiliates, Inc.
20 N. Raymond Ave., Suite 220
Pasadena, CA 91103

***P9. Date Recorded:** December 12, 2017

***P10. Survey Type:** (Describe) Pedestrian Intensive

***P11. Report Citation:** (cite survey report and sources, or enter "none.") *Cultural Resources Technical Report for Roosevelt High School, Los Angeles, California.* Prepared by ASM Affiliates, Inc., for Los Angeles Unified School District, January 2018.

***Attachments:** ☐ NONE ☐ Location Map ☐ Sketch Map ☐ Continuation Sheet ☐ Building, Structure, and Object Record ☐ Archaeological Record ☐ District Record ☐ Linear Feature Record ☐ Milling Station Record ☐ Rock Art Record ☐ Artifact Record ☒ Photograph Record ☐ Other (List):

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PHOTOGRAPHIC RECORD

Primary # _____
HRI # _____
Trinomial _____

Page 2 of 2 ***Resource Name or # (Assigned by recorder)** Classroom Buildings 17 and 18
Recorded by: Shannon Davis and Marilyn Novell **Date:** December 12, 2017



Image 1. View looking east at the northwest and southwest façades.



Image 2. Detail view of the connecting space between the two buildings.



Image 3. View looking north at the southwest and southeast façades.



Image 4. Detail view of corridor of Building 18

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary #
HRI #
Trinomial
NRHP Status Code
Other Listings
Review Code Reviewer Date

Page 1 of 3 ***Resource Name or #:** Building 19
P1. Other Identifier: Physical Education Building
***P2. Location:** ☐ **Not for Publication** ☒ **Unrestricted**
***a. County:** Los Angeles and (P2c, P2e, and P2b or P2d. Attach a Location Map as necessary.)
***b. USGS 7.5' Quad** Los Angeles **Date** 2015 **T** 1S **R** 13W **¼ of** **NE ¼** **of Sec** S.B. **B.M.**
c. Address 456 S. Mathews Street City Los Angeles Zip
d. UTM: (give more than one for large and/or linear resources) Zone mE/ mN;
e. Other Locational Data: (e.g. parcel#, directions to resource, elevation, etc.) APN 5185-004-929

***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

The 38,799-square-foot Physical Education building was constructed in 1968. It is of masonry and concrete construction with a flat roof and a rectangular plan sitting on a poured-concrete foundation. The primary entrance on the southwest façade is approached by a stairway and a curving side ramp. A flat canopy shelters two double flat doors, and a secondary entrance is located to the southeast. The massing varies, with a center section of double height, housing the gymnasium, and a lower wing on each side. The central section is clad in stucco, and the side wings are clad in red brick. A vertical simple pilaster motif is repeated throughout the exterior.

***P3b. Resource Attributes:** (List attributes and codes) HP15. Educational Building
***P4. Resources Present:** ☒ Building ☐ Structure ☐ Object ☐ Site ☐ District ☒ Element of District ☐ Other (Isolates, etc.)
P5a. Photograph or Drawing (Photograph required for buildings, structures, and objects.)



P5b. Description of Photo: (view, date, accession#)
View looking north at the southwest (primary) façade.
Source: ASM, December 12, 2017

***P6. Date Constructed/Age and Source:**
☒ Historic ☐ Prehistoric ☐ Both
1968
Los Angeles Unified School District records

***P7. Owner and Address:**
Los Angeles Unified School District
333 S Beaudry Ave, Los Angeles, CA 90017

***P8. Recorded by:** (Name, affiliation, and address)
Shannon Davis and Marilyn Novell
ASM Affiliates, Inc.
20 N. Raymond Ave., Suite 220
Pasadena, CA 91103

***P9. Date Recorded:** December 12, 2017

***P10. Survey Type:** (Describe) Pedestrian Intensive

***P11. Report Citation:** (cite survey report and sources, or enter "none.") *Cultural Resources Technical Report for Roosevelt High School, Los Angeles, California.* Prepared by ASM Affiliates, Inc., for Los Angeles Unified School District, January 2018.

***Attachments:** ☐ NONE ☐ Location Map ☐ Sketch Map ☐ Continuation Sheet ☐ Building, Structure, and Object Record ☐ Archaeological Record ☒ District Record ☐ Linear Feature Record ☐ Milling Station Record ☐ Rock Art Record ☐ Artifact Record ☒ Photograph Record ☐ Other (List):



Image 1. Looking northeast at the southwest façade.



Image 2. Detail view of the primary entrance.



Image 3. Detail view of the secondary entrance on the southwest façade.



Image 4. View looking north at the southwest and southeast façades.



Image 5. Looking east at the northwest and southwest façades.

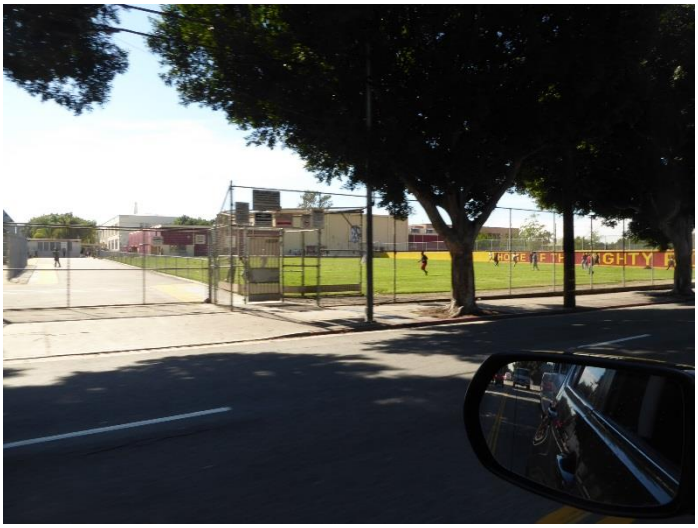


Image 6. Distant view of Building 19 looking southwest.



Image 7. View looking southwest at the northeast façade.

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary #
HRI #
Trinomial
NRHP Status Code
Other Listings
Review Code Reviewer Date

Page 1 of 2 ***Resource Name or #:** Building 20
P1. Other Identifier: Utility Building
***P2. Location:** ☐ **Not for Publication** ☒ **Unrestricted**
***a. County:** Los Angeles and (P2c, P2e, and P2b or P2d. Attach a Location Map as necessary.)
***b. USGS 7.5' Quad** Los Angeles **Date** 2015 **T** 1S **R** 13W **¼ of** **NE ¼** **of Sec** S.B. **B.M.**
c. Address 456 S. Mathews Street City Los Angeles Zip
d. UTM: (give more than one for large and/or linear resources) Zone mE/ mN;
e. Other Locational Data: (e.g. parcel#, directions to resource, elevation, etc.) APN 5185-004-929

***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

Building 20, constructed in 1968, is a rectangular building located southwest of Building 1. It is a wood-frame building clad in stucco with a rectangular plan and a flat roof. A wing wall is at each end of the building, supporting a wide cantilevered roof at the primary (northwest) façade sheltering the corridor below, which is raised approximately three feet above ground level and also serves as a dock. At the northwest façade are five flat doors and one flat double door, in addition to a row of metal windows located high on the façade under the roof. At the back (southeast) façade there is at least one flat door and no visible fenestration.

***P3b. Resource Attributes:** (List attributes and codes) HP15. Educational Building
***P4. Resources Present:** ☒ Building ☐ Structure ☐ Object ☐ Site ☐ District ☒ Element of District ☐ Other (Isolates, etc.)
P5a. Photograph or Drawing (Photograph required for buildings, structures, and objects.)



P5b. Description of Photo: (view, date, accession#)
View looking southeast at the northwest façade of Building 20.
Source: ASM, December 12, 2017

***P6. Date Constructed/Age and Source:**
☒ Historic ☐ Prehistoric ☐ Both
1968
Los Angeles Unified School District records

***P7. Owner and Address:**
Los Angeles Unified School District
333 S Beaudry Ave, Los Angeles, CA 90017

***P8. Recorded by:** (Name, affiliation, and address)
Shannon Davis and Marilyn Novell
ASM Affiliates, Inc.
20 N. Raymond Ave., Suite 220
Pasadena, CA 91103

***P9. Date Recorded:** December 12, 2017

***P10. Survey Type:** (Describe) Pedestrian Intensive

***P11. Report Citation:** (cite survey report and sources, or enter "none.") *Cultural Resources Technical Report for Roosevelt High School, Los Angeles, California.* Prepared by ASM Affiliates, Inc., for Los Angeles Unified School District, January 2018.

***Attachments:** ☐ NONE ☐ Location Map ☐ Sketch Map ☐ Continuation Sheet ☐ Building, Structure, and Object Record ☐ Archaeological Record ☒ District Record ☐ Linear Feature Record ☐ Milling Station Record ☐ Rock Art Record ☐ Artifact Record ☒ Photograph Record ☐ Other (List):



Image 1. View looking east at the northwest and southwest façades.



Image 2. Looking north at the southwest and southeast façades.

APPENDIX B

NAHC Outreach

Intentionally blank

NATIVE AMERICAN HERITAGE COMMISSION
Environmental and Cultural Department
1550 Harbor Blvd., Suite 100
West Sacramento, CA 95691
(916) 373-3710

January 10, 2018

Sherri Andrews
ASM Affiliates

Sent by E-mail: sandrews@asmaffiliates.com

RE: Proposed Roosevelt High School Cultural Resources Technical Report Project, City of Los Angeles; Los Angeles USGS Quadrangle, Los Angeles County, California

Dear Ms. Andrews:

A record search of the Native American Heritage Commission (NAHC) *Sacred Lands File* was completed for the area of potential project effect (APE) referenced above with negative results however the area is sensitive for cultural resources. Please note that the absence of specific site information in the *Sacred Lands File* does not indicate the absence of Native American cultural resources in any APE.

Attached is a list of tribes culturally affiliated to the project area. I suggest you contact all of the listed Tribes. If they cannot supply information, they might recommend others with specific knowledge. The list should provide a starting place to locate areas of potential adverse impact within the APE. By contacting all those on the list, your organization will be better able to respond to claims of failure to consult. If a response has not been received within two weeks of notification, the NAHC requests that you follow-up with a telephone call to ensure that the project information has been received.

If you receive notification of change of addresses and phone numbers from any of these individuals or groups, please notify me. With your assistance we are able to assure that our lists contain current information. If you have any questions or need additional information, please contact via email: gayle.totton@nahc.ca.gov.

Sincerely,

Gayle Totton, M.A., PhD.
Associate Governmental Program Analyst
(916) 373-3714

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Native American Heritage Commission
Native American Contact List
Los Angeles County
1/10/2018

Gabrieleno Band of Mission Indians - Kizh Nation
Andrew Salas, Chariperson
P.O. Box 393 Gabrieleno
Covina, CA, 91723
Phone: (626) 926 - 4131
gabrielenoindians@yahoo.com

Gabrieleno/Tongva San Gabriel Band of Mission Indians
Anthony Morales, Chairperson
P.O. Box 693 Gabrieleno
San Gabriel, CA, 91778
Phone: (626) 483 - 3564
Fax: (626) 286-1262
GTTribalcouncil@aol.com

Gabrielino /Tongva Nation
Sandonne Goad, Chairperson
106 1/2 Judge John Aiso St., Gabrielino
#231
Los Angeles, CA, 90012
Phone: (951) 807 - 0479
sgoad@gabrielino-tongva.com

Gabrielino Tongva Indians of California Tribal Council
Robert Dorame, Chairperson
P.O. Box 490 Gabrielino
Bellflower, CA, 90707
Phone: (562) 761 - 6417
Fax: (562) 761-6417
gtongva@gmail.com

Gabrielino-Tongva Tribe
Charles Alvarez,
23454 Vanowen Street Gabrielino
West Hills, CA, 91307
Phone: (310) 403 - 6048
roadkingcharles@aol.com

This list is current only as of the date of this document. Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resource Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regard to cultural resources assessment for the proposed Roosevelt High School Comprehensive Modernization Project, Los Angeles County.

APPENDIX 3.3

Removal Action Workplan (RAW)

TRC
Results you can rely on

REMOVAL ACTION WORKPLAN

NOVEMBER 2017

THEODORE ROOSEVELT SENIOR HIGH SCHOOL
456 South Mathews Street
Los Angeles, California 90033

TRC Project Number: 265642

Prepared For:
Los Angeles Unified School District
Office of Environmental Health and Safety
333 S. Beaudry Avenue, 21st Floor
Los Angeles, California 90017

Prepared By:

TRC
17911 Von Karman Avenue, Suite 400
Irvine, California 92614
(949) 727-9336

November 30, 2017

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(949) 727-9336

November 30, 2017

PROFESSIONAL GEOLOGIST
JOHN ERIC NORDENSTAM
No. 7160
STATE OF CALIFORNIA

John Nordenstam, PG
Senior Project Geologist

Jeffrey R. Maxwell, PG
Principal Geologist

TRC
Results you can rely on

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ACRONYMS

ANSI	American National Standards Institute
APN	Assessor's Parcel Number
ARARs	Applicable or Relevant and Appropriate Requirements
ASTM	American Society for Testing and Materials
BACM	Best Available Control Measures
bgs	below ground surface
BMP	Best Management Practice
°C	degrees Celsius
CalEPA	California Environmental Protection Agency
CCR	chain of custody record
CDWR	California Department of Water Resources
COC	contaminant of concern
COPC	constituent of potential concern
CRWQCB	California Regional Water Quality Control Board
dBA	decibels average
DOGGR	Division of Oil, Gas and Geothermal Resources
DOT	Department of Transportation
DTSC	Department of Toxic Substances Control
EDR	Environmental Data Resources, Inc.
EPA	Environmental Protection Agency
ESA	environmental site assessment
HAZWOPER	Hazardous Waste Operations and Emergency Response
HSP	Health and Safety Plan
IIPP	Injury and Illness Prevention Program
JSA	job safety analysis
LADBS	Los Angeles Department of Building and Safety
LADPW	Los Angeles Department of Public Works
LARWQCB	Los Angeles Regional Water Quality Control Board
LAUSD	Los Angeles Unified School District
LBP	lead-based paint
mg/kg	milligrams per kilogram
mg/L	milligrams per liter
msl	mean sea level
OCPs	organochlorine pesticides
OSHA	Occupational Safety and Health Administration
PCBs	polychlorinated biphenyls
PEA	Preliminary Environmental Assessment
ppmv	parts per million by volume
PRP	Potentially Responsible Party
QA/QC	quality assurance / quality control
QAPP	Quality Assurance Project Plan
RACT	Remedial Action Completion Report
RAW	Removal Action Workplan
RCRA	Resource Conservation and Recovery Act
RECs	Recognized Environmental Conditions
RSLs	regional screening levels

ACRONYMS
(Continued)

SCAQMD	South Coast Air Quality Management District
SLs	screening levels
STLC	Soluble Threshold Limit Concentration
SVOCs	semi-volatile organic compounds
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TAT	turnaround time
TCLP	Toxicity Characteristic Leaching Procedure
TPH	total petroleum hydrocarbons
TPH-D	total petroleum hydrocarbons as diesel
TPH-G	total petroleum hydrocarbons as gasoline
TPH-O	total petroleum hydrocarbons as oil
TWA	time weighted average
ug/L	micrograms per liter
ug/m^3	micrograms per cubic meter
USA	Underground Service Alert
USGS	United States Geological Survey
VOCs	volatile organic compounds
ZIMAS	Zoning Information and Map Access System (City of Los Angeles)

1.0 INTRODUCTION

1.1 OVERVIEW

This document presents a Removal Action Work Plan (RAW) for the removal of impacted soil at Roosevelt High School, located at 456 South Mathews Street, Los Angeles, California (Site). See Figures 1 and 2 for the Site location. This document was prepared by TRC Solutions, Inc. (TRC) on behalf of the Los Angeles Unified School District (LAUSD). The main objective of the proposed removal action is the mitigation of arsenic, lead, and total petroleum hydrocarbons (TPH) in subsurface soil to levels necessary to protect human health and the environment. These soil impacts were identified during a Preliminary Environmental Assessment (PEA) Equivalent investigation conducted by TRC between October 3, 2016, and June 14, 2017 (TRC, 2017).

Information provided herein includes a summary of previous investigation work at the Site, a description of the nature and extent of soil impacts, removal action goals to be achieved by the removal action, an overview of the selected remediation approach for the Site, and a detailed plan for conducting the removal action. This RAW also includes a Quality Assurance Project Plan (QAPP; see Appendix A), a site-specific Health and Safety Plan (HSP; see Appendix B), and a Transportation Plan (see Appendix C).

1.2 REMOVAL ACTION OBJECTIVES

Roosevelt High School is currently an operational LAUSD school scheduled for a comprehensive modernization project involving removal and/or renovation of multiple Site structures. The principal objective of this removal action is the mitigation of impacted soil from the Site to a level necessary to protect human health and the environment. This involves the removal or reduction of contaminants to prevent human exposure to chemicals of concern above applicable removal action goals. Based on an analysis of the nature and extent of impact, and on the removal action goals for the Site, the RAW evaluated multiple alternatives appropriate for addressing the removal action objectives. The selected removal action alternative includes the excavation, transportation, and disposal of soil impacted with arsenic, lead, and/or petroleum hydrocarbons at concentrations above removal action goals. The estimated volume of soil to be remediated is approximately 7,019 cubic yards (10,528 tons; estimate includes 3,966 cubic yards of non-hazardous soil and up to 3,053 cubic yards of California hazardous lead-impacted soil). Following removal of the impacted soil and completion of confirmation sampling, the excavations at the Site will be backfilled with clean fill, compacted, and graded.

2.0 SITE DESCRIPTION

2.1 SITE NAME AND ADDRESS

Roosevelt High School is located at 456 South Mathews Street in Los Angeles, California (see Figure 1). The property is bounded by South Mathews Street on the northwest, East 4th Street on the northeast, South Mott Street on the southeast, and East 6th Street on the southwest. The school property is a rectangular-shaped parcel containing approximately 23.70 acres of land.

2.2 DESIGNATED CONTACT

The designated contact person for this project is Mr. Dane Robinson, Site Assessment Project Manager, LAUSD (contract professional).

Los Angeles Unified School District
Office of Environmental Health and Safety
333 South Beaudry Avenue, 21st Floor
Los Angeles, CA 90017
(213) 241-4122
dane.robinson@lausd.net

2.3 MAILING ADDRESS

Theodore Roosevelt Senior High School
456 South Mathews Street
Los Angeles, CA 90033

2.4 TELEPHONE NUMBER

Phone: (323) 780-6500
FAX: (323) 269-5473

2.5 OTHER SITE NAMES

Theodore Roosevelt Senior High School
Roosevelt High School

2.6 REGULATORY IDENTIFICATION NUMBERS

The Site is not listed in the DTSC Envirostor database or the State Water Resources Control Board (SWRCB) Geotracker database.

2.7 EPA IDENTIFICATION NUMBER

The United States Environmental Protection Agency (EPA) Identification Number assigned to the Site is CAD981625163. This number will be used for transportation and off-Site disposal of waste materials generated during implementation of the RAW.

2.8 ASSESSOR'S PARCEL NUMBER

The property has the following Assessor's Parcel Number (APN), as designated by the Los Angeles County Office of the Assessor:

- APN# 5185-004-929

2.9 GEOGRAPHIC COORDINATES

The geographic coordinates for the center of Roosevelt High School are 34.0379 North latitude and 118.2104 West longitude.

2.10 SITE LAND USE AND ZONING

According to the City of Los Angeles Zoning Information and Map Access System (ZIMAS; website ZIMAS.lacity.org), the Site is zoned as follows:

- ZI-2129 – East Los Angeles State Enterprise Zone
- ZI-2452 – Transit Priority Area

2.11 SITE MAPS

The location of Roosevelt High School and surrounding area is presented in Figure 1, and the current layout of the school buildings and outdoor areas is presented on Figure 2. The PEA sampling locations are shown on Figures 2 through 9.

3.0 BACKGROUND INFORMATION

3.1 CURRENT SITE USE

The Site is currently owned by the LAUSD and operated as Roosevelt High School. The Site is a rectangular-shaped property consisting of approximately 23.70 acres. The current campus facilities consist of 16 structures, including an administration/classroom building, a lunch pavilion, a cafeteria, a library/classroom, a music building, a gymnasium, an auditorium/classroom building, an industrial arts building, a former auto shop building, and seven classroom buildings. The property also includes multiple portable classroom buildings. Athletic fields and facilities are located along the northeast portion of the property, as well as in the southeast corner of the property.

3.2 HISTORICAL SITE USE

Aerial Photographs, Sanborn maps, and other historical documentation indicate that the Site was historically developed with multiple residential dwellings and historical streets (South Fickett Street, Eagle Street, and Lanfranco Street) from as early as 1894. Roosevelt High School was constructed in the central portion of the Site in 1922. Subsequent expansions of the school occurred from the 1940s to the 1970s to include the present-day footprint (Converse, 2016).

3.3 SURROUNDING LAND USES

Properties immediately surrounding the Site to the north across East 4th Street, west across South Mathews Street, and east across South Mott Street consist primarily of residential neighborhoods. The property south of the Site across East 6th Street is developed with the Hollenbeck Middle School. The overall area surrounding the school consists primarily of residential development with some commercial development (Converse, 2016).

3.4 PRIOR SITE INVESTIGATION

3.4.1 Geotechnical Investigation

In 2015, a geotechnical investigation was conducted to support proposed campus modifications (Converse, 2016). The investigation consisted of five exploratory geotechnical borings to depths between 30 and 50.5 feet below ground surface (bgs), and determined that undocumented fill soils are present to depths ranging from 5 to 14 feet bgs in the borings. No environmental sampling was conducted as part of this investigation.

3.4.2 Phase I ESA

In August 2016, a Phase I Environmental Site Assessment (Phase I ESA) was conducted to identify any recognized environmental conditions (RECs) or environmental issues associated with the Site (Converse, 2016). The Phase I ESA states that it was completed in accordance with the American Society for Testing and Materials (ASTM) *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process* (ASTM Standard E 1527-13). The Phase 1 ESA included research of available Site background information, including regulatory agency database lists and agency file searches, and did not reveal documentation of any known release(s) of hazardous materials at the Site. Based upon the information derived from the Phase 1 ESA, the Site is not identified as a known hazardous waste disposal site, hazardous substance release site, or landfill, and no hazardous materials pipelines are located beneath or adjacent to the Site. The Phase I ESA identified several on-Site RECs.

Based on the findings of the Phase 1 ESA, Converse provided the following recommendations as related to the RECs:

- Based on the age of the Site buildings, collect shallow soil samples around the drip lines of the existing and former buildings and analyze them for the potential presence of lead-based paint (LBP) residue, and from around the foundations of the existing and former buildings and analyze them for organochlorine pesticides (OCPs).
- Based on the potential presence of arsenic and polychlorinated biphenyls (PCBs) in shallow soils, collect shallow soil samples across the Site and analyze them for arsenic and PCBs.
- Based on the presence and historical use of the hydraulic hoists and 3-stage clarifier associated with the former auto shop operations (Industrial Arts Building) at the mid-eastern portion of the Site, collect soil samples in these locations to determine whether the subsurface has been impacted from these features.
- Considering that the Site is located within the Boyle Heights Oil Field and is within a designated methane zone within the City of Los Angeles, conduct a methane survey in accordance with Los Angeles Department of Building and Safety (LADBS) Site Testing Standards.

3.4.3 PEA Equivalent Investigation

Based on the recommendations outlined above, TRC completed a PEA field investigation consisting of an extensive soil and soil gas sampling program to investigate the RECs identified in the Phase I ESA and to prepare the Site for the modernization and construction activities. The Site was divided into six separate investigation areas (Areas 2, 3, 5, 6, 8, and 9; see Figure 2) based on the planned renovation phases.

The PEA sampling program consisted of shallow soil sampling in the areas of existing buildings, common areas, athletic fields, and parking lots planned for removal/replacement and construction, and

soil gas sampling was conducted across the entire Site to evaluate for the potential presence of subsurface methane. The PEA soil sampling program and protocol varied by boring type and considered the analyte(s) of interest at each respective boring location and Site area. Depending on the analytical results of the shallowest soil sample relative to either accepted background concentrations or selected human health-based screening levels, deeper soil samples were subsequently collected and analyzed to define the vertical extent of impact, and step-out borings were sampled to further define the lateral extent of apparent impact. For the purpose of this evaluation, human health-based screening levels were established based on a combination of the EPA Region IX RSLs and California EPA (CalEPA) Department of Toxic Substances Control (DTSC)-modified Screening Levels (DTSC-SLs; DTSC, 2015). The decision criteria for determining whether analysis of deeper soil samples from a specific boring or collection of step-out samples lateral to an initial boring location was warranted is outlined below:

- Arsenic soil samples were screened utilizing the accepted background concentration of 12 milligrams per kilogram (mg/kg);
- Lead soil samples were screened utilizing the DTSC Residential Screening Level of 80 mg/kg;
- Petroleum hydrocarbons were screened using 100 mg/kg for gasoline-range hydrocarbons (TPH-G), 1,000 mg/kg for diesel-range hydrocarbons (TPH-D), and 1,000 mg/kg for oil-range hydrocarbons (TPH-O);
- Volatile organic compounds (VOCs) were screened utilizing a combination of RSLs and human health-based screening criteria based on the individual chemical or compound;
- PCBs were screened utilizing the RSLs for Residential Land Use (value varies by PCB constituent); and
- OCPs were screened utilizing the RSLs for Residential Land Use (value varies by OCP constituent).

Initial PEA investigation activities were conducted on October 3, and the weekends of October 8-9, 15-16, 22-23, and 29-30, 2016, and field sampling activities included the following:

- collection of shallow soil samples at a total of 283 locations across the Site, including 47 locations in Area 2 (physical education building and courts), 48 locations in Area 3 (athletic field and bleachers), 47 locations in Area 5 (auditorium and lunch pavilion), 80 locations in Area 6 (east-central portion of campus), 38 locations in Area 8 (south-central portion of campus), and 23 locations in Area 9 (southeast portion of campus);
- collection of soil samples at two (2) locations to evaluate undocumented fill beneath the Site;
- collection of soil samples at eight (8) locations near the hydraulic hoists and two (2) locations near the clarifier to evaluate subsurface conditions; and
- installation of nested, multi-depth soil gas probes at 20 locations to evaluate subsurface methane and hydrogen sulfide concentrations.

Based on results of the initial investigation activities, additional investigation was conducted on November 21-23 and December 21, 2016, and March 25-26 and June 14, 2017. These field sampling activities consisted of the following:

- collection of shallow soil samples from an additional 190 borings to further assess the vertical extent (42 borings in previously sampled locations) and lateral extent (148 borings in new locations) of soil impacts identified in the initial 283 locations sampled in October 2016; and
- collection of additional soil gas samples from the nested, multi-depth soil gas probes installed in October 2016.

The soil and soil gas sampling programs are summarized in Tables 1 through 3, and the boring and sampling locations are presented on Figures 2 through 9.

Results of the PEA investigation indicated the following:

- Arsenic was detected in soil at concentrations exceeding the screening level of 12 mg/kg in 48 boring locations across the Site (maximum 66 mg/kg).
- Lead was detected in soil at concentrations exceeding the screening level of 80 mg/kg in 66 boring locations across the Site (maximum 6,300 mg/kg).
- OCPs were detected in multiple composite samples across the Site; however, all OCP concentrations were below their respective health-based screening levels.
- No PCBs, VOCs, semi-volatile organic compounds (SVOCs), or TPH-G were detected in soil above laboratory reporting limits during this investigation.
- TPH-D and TPH-O were detected in soil at concentrations exceeding the screening level of 1,000 mg/kg in one sample collected at one of the four hydraulic hoists (maximum 1,900 mg/kg TPH-D and 4,700 mg/kg TPH-O).
- Additional metals concentrations detected beneath the Site are consistent with background concentrations for California soils (Kearney Foundation, 1996).
- The maximum concentrations of methane and hydrogen sulfide in soil gas measured in the field included 24,500 parts per million by volume (ppmv) and 34.5 ppmv, respectively. The maximum concentrations of methane and hydrogen sulfide in soil gas detected in the laboratory samples included 11,000 ppmv methane and no detectable hydrogen sulfide. Detectable VOCs were also reported at low concentrations in the soil gas samples collected for analysis.

The volume of soil impacted with arsenic, lead, and/or petroleum hydrocarbons above screening levels was calculated to be approximately 7,019 cubic yards (10,528 tons). Refer to Section 5.2 for additional details.

Based on the methane concentrations detected beneath the Site, mitigation will be required as part of future redevelopment of the Site. The methane mitigation system or techniques to be implemented will be sufficient to mitigate the low concentrations of VOC concentrations detected.

4.0 PHYSICAL AND ENVIRONMENTAL CHARACTERISTICS

4.1 SITE LOCATION AND TOPOGRAPHY

The Site is located on the eastern portion of the Montebello Plain at an elevation of approximately 313 feet above mean sea level (msl). The topography in the area of the Site slopes to the south and southeast. The Elysian Hills are located approximately 2.5 miles north-northwest of the Site (California Department of Water Resources [CDWR], 1961, and United States Geological Survey [USGS], 1966).

There are two surface water bodies within a 1-mile radius of the Site. The nearest surface water body is the man-made lake at Hollenbeck Park, located approximately 1,850 feet northwest of the Site. The Los Angeles River, a concrete-lined river channel, is located approximately 4,450 feet to the west (USGS, 1966).

4.2 GEOLOGY

4.2.1 Site Geology and Soil Types

The Site is located within the Los Angeles Coastal Plain. The Los Angeles Coastal Plain is an alluviated lowland surrounded by the mountains and hills of the Transverse and Peninsular Ranges. Recent alluvium composed of gravel, sand, silt, and clay is present beneath the area of the Site to a depth of approximately 60 feet bgs, and the Lakewood Formation underlies the alluvium. The Lakewood Formation is composed of marine and continental gravel, sand, sandy silt, silt, and clay with shale pebbles (CDWR, 1961).

4.2.2 Oil and Gas Review

A review of the California Division of Oil, Gas and Geothermal Resources (DOGGR) online well-finder database (http://www.conservation.ca.gov/dog/Pages/Wellfinder.aspx) indicates that the Site is located within the Boyle Heights Oil Field (abandoned). No active or abandoned oil wells are located at the Site. There are a total of five abandoned oil wells located within a 0.5-mile radius of the Site (TRC, 2017).

In addition, per Figure IV.F-2, LADBS Methane and Methane Buffer Zone Map, the Site is located within the City of Los Angeles Methane Zone.

4.3 HYDROGEOLOGY

4.3.1 Site Hydrogeologic Setting

The Site is located within the Los Angeles Forebay area of the Central Groundwater Basin of the Los Angeles-San Gabriel Hydrologic Unit. The Central Groundwater Basin is one of four basins designated in the Los Angeles Coastal Plain (Santa Monica Basin, the West Coast Basin, the Hollywood Basin, and the Central Basin). The Central Basin is bounded on the north by the Hollywood Basin and a series of low hills extending from the Elysian Hills on the northwest to the Puente Hills on the southeast, on the west and south by the Newport-Inglewood fault zone, and on the southeast by the Los Angeles-Orange County line (CDWR, 1961).

The first groundwater production zones in the area of the Site are the Gasper and Exposition Aquifers (CDWR, 1961). Groundwater in the area of the Site has been designated as having beneficial use for municipal, industrial process, and agricultural applications (California Regional Water Quality Control Board [CRWQCB], 1994).

4.3.2 Nearby Groundwater Wells

According to the Los Angeles County Department of Public Works Hydrologic Records Division website (http://dpw.lacounty.gov/general/wells), there are no active wells located within a 1-mile radius of the Site (LADPW). The nearest well is located over 1 mile to the southwest of the Site (State Well ID 2S13W10A01), near the intersection of East 12th Street and South Soto Street. The depth to water measured in this well in May 2017 was 244.60 feet bgs. Only limited information was available for this well.

The nearest groundwater monitoring wells to the Site as found on the SWRCB Geotracker website are approximately 450 feet northwest of the Site. The wells were installed as part of an open Leaking

Underground Storage Tank case (Los Angeles Regional Water Quality Control Board [LARWQCB] Case #900330416) at the Winall Oil Co. service station located at 401 S. Soto Street, which is located at the southwest corner of Soto Street and 4th Street. The depth to groundwater was most recently measured in the seven wells on that property in November 2016, and the depths ranged from approximately 42 to 54 feet bgs. In addition, liquid-phase hydrocarbons were measured in 6 of the 7 wells at a maximum thickness of 0.12 foot. The groundwater flow direction beneath the Winall site is reportedly toward the north (Economy Environmental, Inc., 2017).

According to the Phase I ESA report, the Environmental Data Resources (EDR) Radius Report, there are no public water supply wells within a 1-mile radius of the Site (Converse, 2016).

4.4 PROXIMITY TO NEARBY RECEPTORS

TRC assessed other potential receptors within a 1-mile radius of the Site including hospitals, schools, child day care centers, and senior day care centers. In consideration of the available information in the public domain for the Site (Google Earth, 2017), below are the summarized results.

- There are three hospitals and/or medical facilities located within 1 mile of the Site. The closest facility is the Los Angeles Christian Health Center (1625 East 4th Street), which is located approximately 4,000 feet northwest of the Site.
- There are 10 schools located within 1 mile of the Site. The closest school is Hollenbeck Middle School (2510 East 6th Street), which is due south/southwest of the Site across East 6th Street.
- There are three daycare facilities within 1 mile of the Site. The closest facility is the Salesian Family Youth Center (2228 East 4th Street), which is located 1,470 feet northwest of the Site.
- There are three senior care facilities within 1 mile of the Site. The closest facility is the Boyle Heights Senior Center (2839 East 3rd Street), which is located 1,560 feet east of the Site.

5.0 NATURE, SOURCE, AND EXTENT OF CONTAMINATION

5.1 TYPE, SOURCE, AND EXTENT OF CONTAMINANTS

PEA investigation activities conducted between October 3, 2016, and June 14, 2017, have identified the presence of arsenic, lead, and petroleum hydrocarbons in soil at concentrations in excess of applicable screening levels at multiple locations across the Site. Additional information regarding these contaminants of concern (COCs) is presented below and in Tables 1 and 2.

5.1.1 Arsenic

Arsenic was detected at concentrations exceeding the soil screening level of 12 mg/kg in 48 boring locations across the Site. This includes 11 boring locations in Area 3 (maximum 41 mg/kg in Boring B-13 at 0.5 foot bgs), 25 boring locations in Area 6 (maximum 66 mg/kg in Boring IM-3c at 0.5 foot bgs), and 12 boring locations in Area 9 (maximum 16 mg/kg in Boring Y-17 at 0.5 foot bgs). See Figures 4A, 6A, and 8A for the distribution of arsenic impacts in Areas 3, 6, and 9, respectively.

Based on results of the investigation, one soil sample with the highest arsenic concentration was analyzed for arsenic Soluble Threshold Limit Concentration (STLC; 66 mg/kg in Boring IM-3c at 0.5 foot bgs). The arsenic STLC concentration for this sample was 4.1 milligrams per kilogram (mg/L). This result

indicates that arsenic-impacted soil identified during this investigation would be considered as non-hazardous upon removal.

5.1.2 Lead

Lead was detected at concentrations exceeding the soil screening level of 80 mg/kg in 66 boring locations across the Site. This includes 10 boring locations in Area 2 (maximum 280 mg/kg in Boring B-6b at 2.5 feet bgs), 9 boring locations in Area 3 (maximum 180 mg/kg in Boring B-15b at 0.5 foot bgs), 15 boring locations in Area 5 (maximum 4,300 mg/kg in Boring AUD-3a at 0.5 foot bgs), 27 boring locations in Area 6 (maximum 4,200 mg/kg in Boring Q15a at 2.5 feet bgs), and 5 boring locations in Area 9 (maximum 6,300 mg/kg in Boring W-14a at 0.5 foot bgs). See Figures 3A, 4A, 5A, 6A, and 8A for the distribution of lead impacts in Areas 2, 3, 5, 6, and 9, respectively.

Based on results of the investigation, three soil samples collected during the investigation contained a lead concentration exceeding 1,000 mg/kg (identified above as the maximum concentrations in Areas 5, 6, and 9). In addition, 84 samples (and 6 duplicates) were analyzed for lead STLC. The lead STLC concentrations ranged from 1.3 mg/L to 190 mg/L (Boring Q15a at 2.5 feet bgs). A total of 52 of the 84 lead STLC analyses exceeded the 5.0 mg/L threshold. Therefore, these samples were further analyzed for lead using the Toxicity Characteristic Leaching Procedure (TCLP). Lead TCLP concentrations in these samples ranged from 0.25 mg/L to 1.7 mg/L, below the TCLP threshold of 5.0 mg/L. These results indicated that a portion of the lead-impacted soil identified during this investigation would be considered representative of California (non-Resource Conservation and Recovery Act [RCRA]) hazardous waste upon removal.

5.1.3 Petroleum Hydrocarbons

Petroleum hydrocarbons were detected in soil samples collected to evaluate the hydraulic hoists, clarifier, and fill materials as follows:

- TPH-G: no detectable concentrations were reported above laboratory reporting limits.
- TPH-D: detectable concentrations were reported in samples collected near the hydraulic hoists (maximum 1,900 mg/kg in Boring HL2-2 at 5.0-5.5 feet bgs), clarifier (maximum 4.2 mg/kg in Boring CL1-2 at 2.0-2.5 feet bgs), and in fill materials (maximum 1.7 mg/kg in the composite sample from Boring FILL-1).
- TPH-O: detectable concentrations were reported in samples collected near the hydraulic hoists (maximum 4,700 mg/kg in Boring HL2-2 at 5.0-5.5 feet bgs), clarifier (maximum 7.3 mg/kg in Boring CL1-2 at 0.5-1.0 foot bgs), and in fill materials (maximum 3.4 mg/kg in the composite sample from Boring FILL-1).

Based on these investigation findings, only the soil sample collected from Boring HL2-2 at 5.0-5.5 feet bgs contains detectable TPH-D and TPH-O concentrations exceeding the soil screening criteria of 1,000 mg/kg. See Figure 9A for the distribution of petroleum hydrocarbon-impacted soil at the Industrial Arts Building.

5.2 EXTENT AND VOLUME OF CONTAMINATION

Based on investigation findings, the volumes of soil exceeding acceptable screening levels that will need to be removed prior to or concurrent with renovation activities were calculated for each area (see Figures 3A, 4A, 5A, 6A, 8A, and 9A). A summary of each area is presented below with the proposed

excavation volume, type of soil impact (i.e., lead, arsenic, and/or petroleum hydrocarbons), and the portion of lead-impacted soil that qualifies as California Hazardous (Cal-Haz) lead-affected soil.

- Area 2 – 541.20 cubic yards (811.81 tons) of lead-affected soil, including 123.89 cubic yards (185.83 tons) of Cal-Haz lead-affected soil.
- Area 3 – 708.33 cubic yards (1,062.50 tons) of lead- and arsenic-affected soil, including 168.98 cubic yards (253.47 tons) of Cal-Haz lead-affected soil.
- Area 5 – 1,640.19 cubic yards (2,460.28 tons) of lead-affected soil, including 1,444.44 cubic yards (2,166.67 tons) of Cal-Haz lead-affected soil.
- Area 6 – 2,945.00 cubic yards (4,417.50 tons) of lead- and arsenic-affected soil, including 1,176.57 cubic yards (1764.86 tons) of Cal-Haz lead-affected soil.
- Area 9 – 1,137.19 cubic yards (1,705.78 tons) of lead- and arsenic-affected soil, including 138.89 cubic yards (208.33 tons) of Cal-Haz lead-affected soil.
- Hydraulic Hoists and Clarifier – 46.67 cubic yards (70 tons) of hydrocarbon-affected soil.

The total volume of impacted soil exceeding acceptable screening levels is approximately 7,019 cubic yards (10,528 tons). Complete details regarding the proposed excavations (locations, areas, and depths) are included in Tables 4A and 4B.

5.3 HEALTH EFFECT OF CONTAMINANTS

5.3.1 Arsenic

Arsenic can affect receptors when airborne dust is inhaled, ingested, or by passing through the skin. Arsenic is absorbed rapidly after ingestion, but dermal exposure causes smaller quantities of arsenic in the bloodstream. Acute oral intake of arsenic levels at approximately 300 micrograms per liter (µg/L) or more will cause intestinal discomfort, vomiting, and diarrhea. At high levels of exposure, arsenic can ultimately cause death. White and red blood cell production, abnormal heart rhythm, blood-vessel damage, and impaired nerve function are also a result of arsenic ingestion. The human body has the ability to turn some of the arsenic it ingests into an organic form that is excreted through the body's urine, but some will remain for months or more. Chronic exposure through ingestion may increase the risk of kidney, skin, lung, and bladder cancers as well as skin changes, including dark skin tone patterns (hyperpigmentation) and small warts.

5.3.2 Lead

Lead can affect receptors when airborne dust is inhaled, ingested, or by passing through the skin, although the primary routes of exposure are inhalation and ingestion. The main target for lead toxicity in both adults and children is the nervous system. Lead exposure can cause weakness in fingers, wrists, or ankles; increases in blood pressure; and anemia. At high levels of exposure, lead can severely damage the brain and kidneys and ultimately cause death. Children are more sensitive to the health effects of lead than adults. In children, large amounts of lead ingestion may result in anemia, kidney damage, severe stomach pain, muscle weakness, and brain damage, which can ultimately lead to death. At smaller amounts of lead ingestion, less severe impacts to blood, physical development, and behavior may occur. The human body does not change lead into any other form. Following entry to the body, lead travels in the blood to soft tissues and organs, and then moves into the bones. Lead that is not stored in the bones leaves the body through urine and feces.

5.3.3 Petroleum Hydrocarbons (Hydraulic Oil)

Petroleum hydrocarbons, specifically hydraulic oil, are considered to have a low order of acute and chronic oral and dermal toxicity. Short-term effects from overexposure include respiratory irritation, dizziness, and nausea when inhaled; dermatitis, folliculitis or oil acne when in contact with the skin; and irritation of the mouth, throat, and gastrointestinal tract when ingested. Repeated or prolonger skin contact may cause drying, reddening, itching, and cracking of the skin.

5.4 RECEPTORS POTENTIALLY AFFECTED BY THE SITE

The DTSC PEA Guidance Manual (DTSC, 2015) specifies an exposure scenario for the screening evaluation assuming a hypothetical residential setting, as this is the most conservative approach. In this approach, the receptors would be exposed for 24 hours per day, 350 days per year, for 30 years for the reasonable maximum exposure scenario. Since the Site is an active school facility, actual exposures to known receptors (faculty, students, visitors to the Site, and construction workers) would be much less. The main route of exposure would be via inhalation of airborne particulates during soil disturbance.

5.5 EXPOSURE PATHWAYS AND MEDIA OF CONCERN

Based on the current Site development (e.g., asphalt/concrete paving, school buildings, grass-covered athletic fields, and limited planter areas), potential emissions from soil are considered to be insignificant under current conditions. There is no documentation of a release of hazardous substances to the atmosphere. Future Site development and construction activities would result in the removal of asphalt and concrete paving and certain buildings and structures that could increase the potential for dermal contact, dust generation and fugitive dust inhalation, and incidental ingestion. Potential sources of a hazardous substances release to the atmosphere are limited to fugitive dust from surface soils. Therefore, the potential for releases of hazardous substances from the Site to the atmosphere is considered to be *de minimis* provided that appropriate dust control measures are implemented during soil disturbance. Sensitive receptors in the vicinity of the Site (within 1 mile) are discussed above in Section 4.4.

6.0 ENGINEERING EVALUATION / COST ANALYSIS (EE/CA)

6.1 IDENTIFICATION AND SCREENING OF REMEDIAL ACTION TECHNOLOGIES

Various potentially feasible remedial technologies for remediation of the impacted soil beneath the Site are available and were reviewed. The following criteria were considered while selecting a remedy:

- Technical analysis for effectiveness, practicality, and reliability;
- Ability to remove COCs from soil;
- Economic considerations, including anticipated time to reach the desired cleanup levels; and
- Site-specific conditions such as depth and types of contamination present beneath the Site, soil properties, and soil stratigraphy.

The following general remediation alternatives or process options were considered for the Site: no further action, containment, and source removal (excavation) with off-Site disposal. Details for each general category are presented below.

6.1.1 No Action

Although the No Action alternative is not considered a technology, it is considered as part of this evaluation to provide a reference point for comparison to other remedial response measures. Remedial technologies would not be implemented under a No Action alternative (impacted soil would remain in place undisturbed).

6.1.2 Containment

Containment technologies do not aggressively treat or alter chemicals, but prevent migration and eliminate exposure pathways. Containment measures usually refer to physical barriers that cover, seal, or otherwise isolate impacted areas, and are usually used for contaminants that have limited migration potential. A typical Containment approach for soil would include capping the impacted area(s) with a low-permeability material (engineered fill soil, geomembrane, concrete, or asphalt).

6.1.3 Source Removal

Source removal technologies eliminate ongoing exposure pathways and threats to the environment by removing the COCs above the removal action goals from the subsurface. Once removed, the impacted material is hauled from the Site and disposed in an appropriate manner. Source removal prevents the migration of the COCs and limits the remaining treatment efforts by eliminating the source of impact. Clean imported materials will be backfilled into the excavation areas upon completion.

6.2 EVALUATION OF REMOVAL ACTION ALTERNATIVES

Based on the analysis of the nature and extent of contamination, and on the removal action goals established for the Site, the following alternatives appropriate for addressing the remedial action objectives were selected for analysis:

- Alternative 1 - No Action
- Alternative 2 - Containment
- Alternative 3 - Excavation and Off-Site Disposal

A brief summary of each remedial action alternative, along with a detailed analysis of the excavation approach, is provided in the following section. The Applicable or Relevant and Appropriate Requirements (ARARs) associated with this project and the excavation alternative are presented in Table 5.

6.2.1 No Action

The No Action alternative provides a baseline for other proposed alternatives to be compared to. Remedial technologies would not be implemented under a No Action alternative. Impacted soil would remain in place undisturbed. Since the Site is an active school facility scheduled for a comprehensive modernization effort, which will include disturbance of subsurface materials during construction, the No Action alternative is not a feasible option and is not evaluated further.

6.2.2 Containment

Containment technologies do not aggressively treat or alter chemicals, but prevent migration and eliminate exposure pathways. Since the Site is an active school facility scheduled for a comprehensive modernization effort, which will include disturbance of subsurface materials during construction, and considering that some impacted soil areas are located in planters or athletic fields with the potential for future exposure, the Containment alternative is not a feasible option and is not evaluated further.

6.2.3 Excavation and Off-Site Disposal

The soil excavation with off-Site disposal alternative would involve excavation of impacted soil exceeding the removal action goals with subsequent disposal at a landfill off Site. Current projections are that up to 7,019 cubic yards of soil exceeding the removal action goals would require removal from the Site (see Section 5.2).

The excavated soil would be segregated in stockpiles and, based on the waste profiles, the impacted soil would be loaded and transported to appropriately permitted landfills for disposal.

The option presented under this alternative assumes that the majority of the soil will be classified as a California regulated, Class 2, non-hazardous waste (approximately 3,966 cubic yards), with some lead-impacted classified as a California regulated, Class 1 hazardous waste (up to 3,053 cubic yards). This is based on previous PEA analytical results, in which lead was detected in multiple locations at elevated concentrations; however, this will be confirmed by additional analyses following soil removal.

After excavation of the impacted soil at the designated locations across the Site, confirmation samples would be collected from the bottom and sides of the individual excavations and analyzed. Once the removal of soils exceeding the cleanup goals was completed and confirmed, clean soil would be imported and the excavations would be graded and compacted. The graded and compacted surface would be completed to facilitate future development activities.

After completion of backfilling activities, the Site would be suitable for completion of the comprehensive school modernization and construction activities. A Remedial Action Completion Report documenting soil removal activities would be prepared upon completion of all field activities.

6.2.3.1 *Effectiveness*

Both short-term and long-term effectiveness is achieved as this removal action alternative involves physical removal from the Site of contaminants above removal action goals in the Site soils.

The excavation and off-Site disposal of impacted soil would have an immediate short-term beneficial effect by dramatically reducing the extent of contaminants at the Site. The excavation process would increase the potential exposure risks in the short term for workers and the surrounding community to increased noise levels, dust, and air emissions containing the primary constituents of concern (arsenic, lead, and petroleum hydrocarbons). However, the use of appropriate personal protective equipment by on-Site workers and the implementation of appropriate noise control measures, dust control measures, and an air quality monitoring plan would mitigate these problems.

With respect to the long-term effectiveness, excavation and off-Site disposal of impacted soil will permanently and significantly reduce the extent of soil contaminants at the Site by removing soil that

exceeds the established cleanup goals. Since the excavated areas will also be backfilled with clean imported soil, all hazards otherwise associated with direct exposure, inhalation, and ingestion would be eliminated by the remediation process.

6.2.3.2 *Reduction of Toxicity, Mobility, or Volume*

By excavating, transporting, and disposing of contaminated soil from the Site to an off-Site location, contaminant volume and toxicity at the Site would be reduced. Materials above the cleanup goals would be removed, which would lower the overall toxicity of the Site. Additionally, the excavations would be backfilled and compacted with clean imported soil that would provide further protection to the environment by limiting infiltration of surface water and mobility of contaminants remaining. This layer of backfill would also eliminate human contact with any impacted soil remaining.

This removal alternative, however, does not result in a net reduction of toxicity or volume as the impacted soil is moved to another location (off-Site disposal) and not treated.

6.2.3.3 *Implementability*

The excavation and off-Site disposal alternative can be implemented with minimal difficulties. Numerous removal actions of similar nature, performed in the past without incident, have demonstrated that the potential for exposure to the soil and airborne contaminants can be mitigated if appropriate best management practices are used. Additionally, there are no land-banned disposal restrictions for the waste, based on the contaminant concentrations reported in the investigative reports. Special permitting is not required for the excavation and removal activities required under this alternative.

6.2.3.4 *Cost*

For this alternative, the estimated cost for off-Site landfill disposal if 3,966 cubic yards (5,949 tons) of non-hazardous soil and up to 3,053 cubic yards (4,579 tons) of California regulated hazardous soil is $1,762,465 and is shown in Table 6.

The excavation field work scope is estimated for completion in approximately 30 days. The actual work schedule will be determined by the LAUSD construction schedule and the sequencing of work across the Site.

Future liabilities and costs could arise should the chosen disposal site become the subject of a future cleanup action. Current environmental regulations contain provisions that name past users of a hazardous waste disposal site as Potentially Responsible Parties (PRPs), if a fiscally responsible party (i.e., landfill operator) is not able to respond to a cleanup action.

6.2.3.5 *Compliance with ARARs*

This removal alternative would comply with the ARARs outlined in Table 5. The impacted soil would also comply with off-Site disposal facility operating permits.

6.2.3.6 *Overall Protection of Human Health and the Environment*

Removing impacted soil from the Site will limit exposure and protect human health and the environment.

6.2.3.7 *State Acceptance*

This alternative has been implemented with success on previous projects many times in the past and would be acceptable to the state regulatory offices with jurisdiction (i.e., DTSC).

6.2.3.8 *Community Acceptance*

It is not likely that the surrounding community or citizen activist groups will be opposed to this alternative, which has been implemented with success on previous projects in other communities in California.

6.3 DESCRIPTION OF SELECTED REMEDY

Based on review of environmental Site conditions, evaluation of the removal action alternatives provided herein, and the removal action objectives for the Site, the proposed removal action approach is soil excavation with off-Site disposal of non-hazardous and California hazardous soils. The scope of the proposed removal action is to excavate approximately 7,019 cubic yards of soil impacted with arsenic, lead, and/or petroleum hydrocarbons that is above the removal action goals (12 mg/kg for arsenic, 80 mg.kg for lead, and 1,000 mg/kg for TPH-D/TPH-O). The proposed areas of soil excavation are shown in Figures 3A, 4A, 5A, 6A, 8A, and 9A. Soil impacted by arsenic, lead, and petroleum hydrocarbons will be excavated to the extent necessary to remove impacted soils with detectable concentrations above the applicable removal action goals (maximum depth of 5.5 feet bgs; see Tables 4A and 4B), which will be protective of human health and the environment. Details of the recommended removal action approach are presented below.

7.0 REMOVAL ACTION IMPLEMENTATION

7.1 SITE PREPARATION AND SECURITY MEASURES

7.1.1 Delineation of Excavation Areas

The proposed excavation areas are shown in Figures 3A, 4A, 5A, 6A, 8A, and 9A for soil impacts identified in Areas 2, 3, 5, 6, 9, and the Industrial Arts Building in Area 6, respectively. Refer to Tables 4A and 4B for the limits of proposed excavation in each area (lateral extent and depth). Prior to initiating soil excavation activities, the excavation areas will be marked in the field with stakes, flags, or paint. In addition, prior to beginning work, fencing (6-foot tall, chain-link with wind screen) will be installed around individual excavation areas to prevent unauthorized entry to the work areas and to minimize fugitive dust emissions during work activities.

7.1.2 Utility Clearance

Clearance of utilities and other underground obstacles will be conducted prior to initiating any on-Site soil excavation activities. Underground Service Alert (USA) will be notified at least two business days prior to commencing work at the Site, and the excavation locations will be marked with white paint according to USA requirements. The USA ticket will be maintained as long as work continues at the Site, and will be updated as necessary for excavation location adjustments.

7.1.3 Security Measures

Site security will be controlled in accordance with the requirements of this security plan. During removal activities, security and facilities to protect work areas from unauthorized entry, vandalism, or theft shall be maintained. Wrought iron and chain-link fencing is already in place along the perimeter of the Site to prevent unauthorized entry to the school. Additional 6-foot tall, chain-link fencing with wind screen will be installed around individual excavation areas to prevent unauthorized entry to the work areas during working and non-working hours, and to minimize fugitive dust emissions during work activities. Gates will be locked at all times when construction and Site personnel are not in attendance.

Construction access to the Site will be from the existing gates on South Mathews Street, East 4th Street, East 6th Street, and South Mott Street. Construction traffic must utilize these points of access throughout the duration of the work. In general, the proposed removal action incorporates the following Site access controls:

- Site and work areas will be enclosed by fencing at all times. In addition, active work areas will be enclosed by 6-foot tall, chain-link fencing with wind screen (per SCAQMD Rule 1466 requirements).
- Access to the Site will be limited to the gates along South Mathews Street, East 4th Street, East 6th Street, and South Mott Street. The gates will be locked after work hours.
- Site and work area access will be limited to authorized personnel.
- All personnel entering the work areas will be required to have appropriate health and safety training and will sign the Site-specific HSP each morning.
- All visitors will be registered and must sign in upon entering the work areas.
- Access to the excavation and stockpile areas with exposed impacted soils will be restricted in accordance with the HSP.

7.1.4 Contaminant Control

During all soil excavation and handling operations, appropriate steps will be implemented to minimize impacts from dust to other areas of the Site, the adjacent properties, and the surrounding community. Air monitoring and dust mitigation procedures will be implemented as outlined in Sections 7.4 and 7.5 of this RAW, and dust control during loading and soil transportation operations will be addressed as outlined in the Transportation Plan in Appendix C. Vehicles and equipment used in the handling of impacted soil will be decontaminated before leaving the Site. Due to the small size of the proposed excavation areas, a Storm Water Pollution Prevention Plan (SWPPP) will not be prepared specifically for this removal action; however, Best Management Practices (BMPs) will be implemented to minimize issues associated with storm water runoff.

7.1.5 Permits and Plans

It is anticipated that no grading permit will be required from the LADPW for work associated with the proposed removal action. However, given the number of trucks needed to transport impacted soil off Site for disposal, approval of the waste transportation route may be required from the LADPW.

Work activities will comply with all provisions of South Coast Air Quality Management District (SCAQMD) Rules 401 (Visible Emissions), 402 (Odor and Nuisance), 403 (Fugitive Dust), and 1466 (Control of Particulate Emissions from Soils with Toxic Air Contaminants).

7.1.6 Demolition of Pavements

Prior to excavating impacted soil in areas covered with paving (concrete or asphalt), the paving materials will be carefully removed and stockpiled separately for disposal.

7.2 FIELD DOCUMENTATION

7.2.1 Field Logbooks

Field activity logs will be maintained by field personnel to provide daily records of significant events, observations, and measurements during field activities. All entries will be signed and dated. All members of the field team will use these forms, which will be kept as a permanent record.

Entries into the field logs will be made using indelible ink. Each page of the field logs will be sequentially numbered at the top and dated. Each page will also be signed and dated at the bottom by the person responsible for the entry, and any blank space at the bottom of the page will be marked out to indicate that it has been left blank intentionally. Corrections will be made by striking out the incorrect information with a single horizontal line, such that the incorrect information is still legible, and the correct information will be entered above the strike out. All corrections will be initialed and dated.

It should be noted that field log entries should be factual, detailed, and objective. The following are items which should, if applicable, be recorded in the field logs during field activities:

- Name and location of Site
- Name and affiliation of sampling team members
- Time of arrival on Site
- Weather conditions
- Arrival and departure times of visitors
- Health and safety related issues (Site-specific HSP and job safety analyses [JSAs] will be on Site at all times)
- Summary of equipment preparation procedures
- Summary of day (e.g., excavation progress, down time, etc.)
- Dates and times of sample collection or event
- Numbers and types of samples taken, sample location, and sample identification
- A description of sampling methodology
- Field measurements of samples
- Description of lithology observed in excavations
- Record of telephone calls and/or contact with people at the Site
- Any problems or unusual observations

7.2.2 Chain of Custody Records

The purpose of a chain of custody record (CCR) is to create an accurate written record that can be used to trace the possession and handling of a sample from the moment of its collection through analysis. In addition, other information, such as holding times from the field to the laboratory, can be verified.

A CCR will be initiated and completed using the approved California-certified laboratory's CCR during sample collection. Possession of every sample will be recorded from the time of collection until the

analytical results are fully documented by the laboratory. The following steps shall be followed in completing the CCR:

- Use a blue or black ball point pen and press firmly (the form has three pages).

- Generally, the following should be recorded by the Site Coordinator in the spaces designated on the CCR:
    - Project name and number
    - Site name and address
    - Sampler's name (signature and print), organization, and address
    - Identification/field sample number (distinguish the number zero from the letter 'O' by drawing a slash through the number zero)
    - Date and time of collection
    - Sample type (soil, water, etc.)
    - Number of sample containers
    - Laboratory parameters (use a separate column for each analysis and check, using an 'X', samples corresponding to the specific parameter to be analyzed)
    - Turn-around time (TAT; i.e., 24 hours, 5 working days, etc.)

- Identify and mark how many pages are including in the CCR.

- In the case of more than one cooler per shipment, the cooler number will be included on the CCR.

- All individuals relinquishing and receiving samples will sign, date, and indicate the time in the lower portion of the CCR.

If an error is made on the CCR prior to custody transfer, it will be crossed out and initialed, and the correct information written above the error. If an error is made after custody transfer, the Task Leader will immediately notify the laboratory and any other organization to which the information was submitted of the correction.

The CCR will accompany the samples at all times while the samples are in transit. Upon receipt of the samples at the laboratory, the laboratory sample custodian will sign and date the CCR, indicating acceptance of the samples. The original (white copy) of the completed CCR will be maintained at the laboratory until submittal of analytical results, at which time the original, or a photocopy if other laboratories are involved, is remitted with the analytical results. A copy of the completed CCR will be maintained by the project.

7.2.3 Photographs

Prior to the start of field activities, photographic documentation shall be obtained for the Site, each individual excavation area, and areas surrounding the excavation area. The photographs will document the condition of the Site and adjoining areas prior to commencing soil excavation activities. Photographs will be taken with equipment that provides date and time stamping.

7.3 EXCAVATION

7.3.1 Confined Space Entry Requirements

Confined space entry permitting is not required for the soil removal activities at the Site.

7.3.2 Temporary Stockpile Operations

The proposed excavation areas are shown in Figures 3A, 4A, 5A, 6A, 8A, and 9A for soil impacts identified in Areas 2, 3, 5, 6, 9, and the Industrial Arts Building in Area 6, respectively. Refer to Tables 4A and 4B for the limits of proposed excavation in each area (lateral extent and depth). The excavated material will include non-impacted soil, impacted soil, and debris. Where possible, soil may be direct loaded onto trucks for off-site transport and disposal. For waste materials that are not directly loaded onto trucks, specific areas will be identified where temporary stockpiles may be located. Excavated materials will be confined within the designated perimeters. The stockpile locations will vary depending upon the excavation work area(s), but will generally be located in close proximity to the excavation area(s) for staging and loading for off-Site transport. Impacted soil stockpiles will be placed on top of and covered with plastic sheeting, and the stockpiles will remain covered during all periods of inactivity. All soil stockpiles will be visually inspected to ensure integrity of the plastic covered surfaces. See Section 7.3.3 for additional details on soil segregation and stockpile management.

7.3.3 Waste Segregation Operations

For each excavation area, soil will be segregated based on the type of impacts. The excavated soil will initially be segregated according to existing soil analytical data, field observation, and field monitoring results.

Five distinct and separate stockpiles will be created:

- Non-hazardous arsenic- and lead-impacted soil;
- California hazardous (non-RCRA) lead-impacted soil;
- Non-hazardous petroleum hydrocarbon-impacted soil;
- Non-impacted soil; and
- Demolition debris (e.g., steel, concrete, asphalt, etc.).

The soil will be stockpiled and managed as specified in SCAQMD Rule 1466 and according to the following criteria:

- Impacted soil (arsenic, lead, and petroleum hydrocarbons) will be segregated from non-impacted soil in separate stockpiles so that mixing of the stockpiles does not occur. The soil will be segregated based on previous analytical data and field observations (e.g., soil staining or discoloration for petroleum hydrocarbon-impacted soil). Soil suspected of being impacted with arsenic, lead, and petroleum hydrocarbons based on previous investigations will be stockpiled in appropriate staging areas for waste characterization and off-Site disposal. Soil that is suspected of being clean will be stockpiled separately and samples will be collected for analysis. If results of analyses confirm the soil is clean, it will be transferred to clean stockpile areas for future reuse on Site as fill material. If the suspected clean soil is determined to be impacted, it will be transferred to the impacted soil stockpile to await off-Site transport and disposal. Soil with suspected elevated lead impacts in excess of Soluble Threshold Limit Concentration (STLC)

limits, based on previous PEA investigation findings, will be stockpiled separately and samples will be collected for analysis. Based on analytical results, this soil will either remain in a separate stockpile to be handled and transported off Site as a California hazardous waste, or be transferred to the non-hazardous soil stockpile to await off-Site transport and disposal.

- The soil stockpile locations will vary depending upon the excavation work area(s). In general, impacted soil stockpiles will be in close proximity to the excavation area(s) for staging and loading for off-Site transport. Clean soil and demolition debris will be stockpiled separately in each area for reuse and off-Site disposal, respectively.
- Soil stockpiles will be placed on top of and covered with plastic sheeting. The plastic sheeting seams will overlap a minimum of 24 inches and be secured with duct tape.
- Soil stockpiles will be sprayed with water and covered with plastic sheeting for all periods of inactivity.
- Soil stockpiles with arsenic and lead impacts will not exceed 400 cubic yards per stockpile, and will not be stockpiled higher than the surrounding fencing. There is no limitation on the volume of clean soil that can be stockpiled on Site.
- Soil stockpiles with arsenic and lead impacts will be labeled with "SCAQMD Rule 1466 – Control of Particulate Emissions from Soils with Toxic Air Contaminants Applicable Soil".
- All soil stockpiles will be visually inspected daily to ensure integrity of the plastic covered surfaces.
- Soil loading into trucks for off-Site transport will be conducted either directly during soil excavation or from the stockpiles of soil. All transportation and treatment/disposal activities will be performed in accordance with applicable Federal, State, and local laws, regulations, and ordinances.
- Impacted soil will be removed from the Site no greater than 5 days from the time of excavation.
- A record of the identification and business addresses of the generator, transporter, and storage/treatment facilities will be maintained. Such record (manifest) will be signed by each party at the time custody is transferred.

Soil sampling and analysis shall be performed as described in Section 7.7.

7.3.4 Decontamination Area(s)

All equipment used during removal action activities will be decontaminated prior to leaving the Site following use. Vehicles and excavation equipment will be decontaminated in a track-out prevention zone. This will consist of a rumble plate or asphalt pad along construction/work exits. Stray waste material on vehicles, the tires, etc., that cannot be covered or protected, will be cleaned off manually. The dump truck will then be covered with a tarp to prevent soil and/or dust from spilling out of the truck during transport to the treatment/disposal facility. Soil sampling equipment (i.e., hand auger) will be cleaned and decontaminated before and after each use at each individual excavation location by scrubbing in a non-phosphate detergent and tap water wash, followed by a tap water rinse, and an initial and final rinse in deionized water to prevent cross contamination.

Waste materials generated during vehicle/excavation equipment cleaning will be temporarily stored on Site in designated areas pending waste profiling and disposal with excavation waste materials. Decontamination fluids generated during cleaning of hand-held equipment will be placed in labeled, Department of Transportation (DOT)-approved, 55-gallon drums pending waste profiling and disposal at an appropriate facility.

7.3.5 Excavation Plan

The proposed removal action approach is soil excavation with off-Site disposal of non-hazardous and hazardous soils. The scope of the proposed removal action is to excavate approximately 7,019 cubic yards of soil impacted with arsenic, lead, and/or petroleum hydrocarbons that is above the removal action goals (12 mg/kg for arsenic, 80 mg.kg for lead, and 1,000 mg/kg for TPH-D/TPH-O). The proposed areas of soil excavation are shown in Figures 3A, 4A, 5A, 6A, 8A, and 9A. Soil impacted by arsenic, lead, and petroleum hydrocarbons in each area will be excavated to the extent necessary to remove impacted soils with detectable concentrations above the applicable removal action goals (maximum depth of 5.5 feet bgs; see Tables 4A and 4B). The sequencing of removal action activities across the Site will be determined in consultation with LAUSD.

The equipment that will be used during excavation activities may include the following: excavator or backhoe, rubber-tired loader, water truck, end-dump trailers/trucks, and support trucks. Confirmation soil samples will be collected at the excavation limits and from the excavation bottom to confirm removal of impacted soil to the removal action goals.

The exclusion, decontamination, and support zones will be identified and clearly marked on the Site for each excavation area. The exclusion zone will contain the excavation area, the soil stockpiles, and the truck loading area. The decontamination zone will be located immediately adjacent to the exclusion zone for purposes of decontaminating personnel, equipment, and vehicles exiting the exclusion zone.

Due to concern regarding the presence of impacted soil at the Site and the possibility that soil removal activities could be associated with odors, noise, and dust/particulate emissions from the work areas, monitoring for these issues will be conducted within the work areas and at the Site perimeter and procedures will be established to provide mitigation to protect on-Site workers, visitors, and the surrounding community in accordance (i.e., HSP, Dust Control Plan, etc.).

The excavated materials will be segregated as follows: 1) non-hazardous arsenic- and lead-impacted soil; 2) California hazardous lead-impacted soil; 3) non-hazardous petroleum hydrocarbon-impacted soil; 4) non-impacted soil; and 5) demolition debris (e.g., steel, concrete, asphalt, etc.). The stockpile locations will vary depending upon the excavation work area(s), but will generally be located in close proximity to the excavation area(s) for staging and loading for off-Site transport. Impacted soil stockpiles will be placed on top of and covered with plastic sheeting, and the stockpiles will remain covered during all periods of inactivity. All soil stockpiles will be visually inspected to ensure integrity of the plastic covered surfaces.

All waste materials will be loaded into hauling trucks and shipped by a qualified (licensed/registered and insured) waste hauler to facilities permitted to dispose of the materials at a rate determined by the volume the disposal facility is capable of handling and the amount that can be transported without exceeding air quality thresholds. Based on evaluation of available PEA analytical data, the arsenic-impacted and petroleum hydrocarbon-impacted soil has been characterized as non-hazardous. Lead-impacted soil has been identified at concentrations that would characterize some material as non-hazardous and some material as hazardous; therefore, the lead-impacted soil will be stockpiled for appropriate waste profiling prior to off-Site disposal.

Soil for off-Site disposal will be transported in end-dump trailers/trucks to designated facilities. The transportation routes will be selected to minimize the truck travel time on surface streets and to provide

the shortest distance traveled. All removal, transportation, and disposal activities will be performed in accordance with applicable Federal, State, and local laws, regulations, and ordinances.

Upon completion, backfill and compaction of the excavation areas will be conducted to assure that the excavated areas are suitable for future construction activities.

For the soil sampling and analysis plan, including the soil sampling approach, methodology, and analyses, refer to Section 7.7.

7.4 AIR AND METEOROLOGICAL MONITORING

7.4.1 Air Monitoring

Results of the PEA investigation identified soil impacted with arsenic, lead, and petroleum hydrocarbons (diesel and oil range) in multiple locations across the Site. No VOCs above removal action goals were detected in subsurface soil. As a result, no air monitoring for VOCs per SCAQMD Rule 1166 (Excavation of Soil Contaminated with Volatile Organic Compounds) will be necessary. However, air monitoring will be conducted in accordance with SCAQMD Rules 401 (Visible Emissions), 402 (Odor and Nuisance), 403 (Fugitive Dust), and 1466 (Control of Particulate Emissions from Soils with Toxic Air Contaminants). Odor monitoring and mitigation is discussed below, and the Dust Control Plan is presented in Section 7.5.

The primary odor emission source at the Site will be the petroleum hydrocarbon-impacted soil near one of the hydraulic hoists at the Industrial Arts Building in Area 6 that will be exposed and excavated; there are no odors associated with the arsenic and lead impacts. Use of construction equipment may also be considered as an odor source. Potential odor emission receptors include on-Site workers, faculty and students at the school, pedestrians, local residents, and vehicle drivers adjacent to the Site. Due to public perception issues, it will be very important to monitor and control odors at the Site. As noted previously for noise receptors, it is not anticipated that off-Site receptors will be significantly impacted by odors from this project.

Detection of strong odors within the work area or discernible odors above background at the perimeter of the work area will be used as triggers for odor mitigation measures as required by SCAQMD Rule 402. All excavated soil will be sprayed with water for odor and dust suppression, and impacted soil stockpiles will be covered with plastic sheeting while temporarily stored on Site.

The following measures will be used to minimize odors from construction equipment:

- Reduce construction equipment emissions by shutting off all equipment not in use;
- Reduce construction-related traffic;
- Minimize traffic obstructions; and
- Maintain equipment regularly.

7.4.2 Meteorological Monitoring

Ambient weather conditions (wind speed and direction, temperature, relative humidity, etc.) will be monitored using a portable weather station during performance of all Site work activities and recorded on the field log. Information regarding prevailing wind patterns and daily wind direction observations will be used to assist with placement of monitoring stations, and information regarding wind speed will be used to facilitate decision-making regarding Site controls.

If sustained winds are in excess of 15 miles per hour averaged over a 15-minute period, or if instantaneous wind speeds exceed 25 miles per hour, work activities will be stopped until the winds subside.

7.5 DUST CONTROL PLAN

Dust control measures will be implemented to stabilize exposed surfaces and minimize activities that suspend or track dust particles. Soil excavation and handling shall be accomplished in a manner that includes adequate measures to minimize and control dust and spillage of soil within the Site.

All work shall be in compliance with applicable SCAQMD requirements. Specifically, the excavation contractor shall be responsible to meet requirements specified in SCAQMD Rules 401 (Visible Emissions), 403 (Fugitive Dust), and 1466 (Control of Particulate Emissions from Soils with Toxic Air Contaminants) and shall implement reasonable Best Available Control Measures (BACM) in accordance with Rules 403 and 1466 to minimize dust emissions.

7.5.1 Dust Monitoring

Dust and particulate monitoring will be conducted using a combination of three continuous, direct-reading particulate monitors (e.g., E-BAM Particulate Monitor or equivalent) and an MIE Personal DataRam Model PDR 1000 aerosol monitor (or equivalent). The three continuous, direct-reading particulate monitors will be placed around the excavation area(s) as work progresses (meters will be moved as work moves from location to location), with one meter located in the upwind direction and two meters located in the downwind location. The location of the downwind aerosol monitors will be adjusted daily based upon prevailing wind direction as indicated by a weather vane installed at the Site, weather station readings, or a hand-held wind speed meter. The use of three continuous, direct-reading particulate monitors will provide a greater degree of confidence in quantifying potential fugitive dust, provide better coverage for shifting wind patterns, and supply additional data to address potential community concerns. The monitors will provide concentrations of particulate matter in the size of 10 microns or less (PM_{10}). An exceedance will be defined as a PM_{10} level of greater than 25 micrograms per cubic meter ($ug/m^{3)}$ determined by simultaneous sampling, as the difference between the upwind and downwind samples collected by the continuous, direct-reading particulate monitors. Each unit will be set to record PM_{10} readings at minimum 10-minute intervals over the course of the working day. If the PM_{10} concentration averaged over 2 hours exceeds 25 ug/m^3, soil excavation and handling operations will be discontinued and appropriate dust control measures described below will be implemented (i.e., application of water to work areas). When the PM_{10} concentration is equal to or less than 25 ug/m^3 averaged over 30 minutes, work activities can resume. A portable Model PDR 1000 (or equivalent) will be used within and around each work area/hot zone to determine if dust suppression is needed or if worker protection action levels have been exceeded. If practicable, the data stored by each unit will be downloaded to a computer at the end of the day and printed out as a daily record (or at the end of each work week). The Environmental Consultant's personnel will also record the upwind, downwind, and work area PM_{10} concentration values

every hour on a standard Field Parameter Data Sheet. All dust monitoring records will be retained on Site.

7.5.2 Dust Control Measures

Dust control measures will be specified based on the results of dust monitoring described above, on-Site activities, type and location of operations, and the prevailing wind direction. Dust control measures shall include, but not be limited to, the following:

- Provide wet suppression of exposed soil during excavation, loading, and unloading of contaminated soil.
- Haul trucks transporting contaminated soil shall be adequately tarped before leaving the Site.
- Appropriate measures shall be implemented by the contractor to control track out of soil from the Site onto adjacent paved roads.
- Reduce speed on unpaved areas, and limit on-Site traffic speed.
- Cover and secure stockpiles and exposed areas at the end of each workday.
- Provide LAUSD/Remediation Contractor contact information and SCAQMD Rule 1466 warning statement on signs posted at the entrances and along the fence surrounding the property in the event of dust or other Site-related issues during work activities.

7.5.3 Worker Protection Requirements

Site workers will be required to have appropriate respiratory protection at all times within the exclusion zone. It may be appropriate to wear a particulate filter (dust mask) during dust producing activities.

7.6 NOISE MONITORING AND CONTROL PLAN

The objectives of the Noise Control Plan are to identify noise sources and receptors, to identify monitoring methods, to provide worker hearing protection requirements, and to provide mitigation methods.

7.6.1 Noise Sources and Receptors

Any noise above 85 decibels average (dBA) at the Hot Zone perimeter for mobile equipment will be considered a noise source (County of Los Angeles Code, *Title 12 Environmental Protection, Chapter 12.08 Noise Control, Section 440, Construction Noise*, 2001). General construction equipment noise levels at 50 feet have been summarized below (Bolt, Beranek, and Newman, *Noise from Construction Equipment and Operations Building Equipment, and Home Appliances.* Prepared for the U.S. Environmental Protection Agency, Office of Noise Abatement and Control, Washington, D.C., 1971):

- Truck - 91 dBA
- Crane - 83 dBA
- Roller - 89 dBA
- Bulldozer - 80 dBA
- Pickup Truck - 60 dBA
- Backhoe - 85 dBA
- Jack Hammer - 88 dBA
- Rock Drill - 98 dBA
- Pneumatic Tool - 86 dBA

Manufacturer specifications will be reviewed for noise levels produced by any on-Site equipment. If necessary, mufflers or alternative equipment may be selected to minimize noise levels.

Potential noise receptors include on-Site workers and visitors, pedestrians, vehicle drivers, and residents adjacent to the Site. However, other than on-Site workers, receptors are not anticipated to be significantly impacted by noise from this project.

7.6.2 Noise Monitoring

Noise monitoring will be conducted with a sound level meter as discussed in County of Los Angeles Code, *Title 12 Environmental Protection, Chapter 12.08 Noise Control, Section 340, Sound Level Meter*, 2001). A Quest Micro 14 hand-held noise dosimeter or equivalent will be used and will satisfy the requirements pertinent for Type 2 meters in the American National Standards Institute (ANSI) specifications for sound level meters.

Monitoring will occur within the hot zone and at the perimeters of the hot zone, and at the Site perimeter. The monitoring frequency will be determined according to the type and location of operations.

7.6.3 Worker Protection Requirements

Site workers will be required to have appropriate hearing protection at all times within the hot zone. Also, appropriate worker hearing protection will be required for any anticipated noise exposure above 85 dBA for 8 hours of exposure.

7.6.4 Noise Mitigation Measures

Noise mitigation measures will be specified based on the results of the noise monitoring. If the noise levels exceed 85 dBA outside the hot zone, mitigation measures may include one or more of the following:

- Sound barriers will be placed around the work areas.
- Alternate low-noise-generating equipment will be specified.
- Mufflers will be used on selected equipment.
- Work areas will be expanded such that noise levels will be below 85 dBA at the perimeter.
- Reduce construction vehicle speed.
- Route construction-related traffic away from noise-sensitive areas.

7.7 SOIL SAMPLING AND ANALYSIS PLAN

The field sampling program during and upon completion of soil removal will include confirmation soil sampling within the excavation areas upon completion of impacted soil removal, and stockpile sampling of impacted soil and potential fill soil. The following sections provide specific sampling methods and procedures, sample handling, documentation, and the sample analysis program.

7.7.1 Sample Collection Methodology

Following removal of impacted soil from each of the proposed excavation areas, samples will be collected and analyzed from the sidewalls and excavation bottom to verify the lateral and vertical extent of soil removal. In general, a sampling grid with 10-foot by 10-foot spacing will be established for the collection of excavation bottom samples, and sidewall samples will be collected at ~20-foot intervals or 10-foot intervals at irregularly shaped areas. In smaller excavation areas, sampling will be conducted at closer spacings, as appropriate, to ensure adequate confirmation of impacted soil removal. At a minimum, the smaller excavations will have one confirmation sample per sidewall and one confirmation sample from the excavation bottom. In areas where soil removal is being conducted up to a clean sample location from the PEA investigation, no additional soil samples will be collected.

The bottoms and sidewalls of excavations will be examined for evidence of impact prior to selecting sample locations. If evidence of impact is indicated, the confirmation or additional samples will be collected from those suspect locations. If no evidence of impact is identified in the sidewalls, the sample will be collected from the mid-point of the wall. For example, if the excavation is 4 feet in depth, the sidewall sample would be collected from 2 feet bgs. If there is an obvious change in lithology in a sidewall below the suspected depth of impact, the sidewall sample will be collected at this location just above the contact.

If results of confirmation sampling indicate soil concentrations exceeding removal action goals remain in the subsurface, additional soil excavation will be conducted and additional confirmation samples will be collected to verify removal of the impacted soil.

Soil excavation and sampling will be conducted using an excavator or backhoe, and excavated soil will either be directly loaded onto trucks for removal from the Site, or temporarily stockpiled on Site for waste profiling and later disposal. Excavation soil samples will be collected from the base and/or sidewalls of the excavation from freshly uncovered soil, or from a relatively undisturbed portion of soil within the excavator/backhoe bucket, using 6-inch long by 1.5-inch diameter stainless steel sample tubes, or samples will be collected in 4-ounce glass jars. Each sample will be labeled with the sample identification number, sample depth, and date of collection. After the samples have been labeled and documented in the chain of custody record, they will be placed in a cooler with ice at ~4 degrees Celsius (4 °C) for transport to a State-certified laboratory.

7.7.2 Sample Handling

7.7.2.1 *Sample Containers and Preservation*

Sample containers will be delivered to the sampling Site or office, and will be cleaned and prepared by the analytical laboratory using standard EPA-approved protocols. Sample containers will be protected from dust or other contamination between the time of receipt and the time of usage at the Site.

7.7.2.2 *Sample Identification/Labeling*

Each sample will be assigned a unique sample identification number to allow for proper data management. These sample numbers will be included on the sample label, in the daily field sheets to identify notes pertaining to the sample, and on the chain of custody form. The sample number will consist of a two- to five-digit sample location designator, a two-digit sample depth indicator (soil samples only), and a two-digit number indicating the sequential sample number.

Samples will be labeled immediately after collection. The following information will be included on the sample label: sample location, sample identification number, date and time of collection, preservatives added (if any), and requested analysis. The labels will be filled out in indelible ink and firmly affixed to the sample container. Clear packing tape will then be used to cover the completed sample label to prevent damage to the label during shipping.

7.7.2.3 *Sample Shipping*

A courier service will be used to transport the samples from the Site to the laboratory under chain of custody protocol. Transportation of the samples will adhere to DOT requirements.

7.7.3 Sample Analyses

7.7.3.1 *General*

Analytical methods utilized by the laboratory are those detailed in CalEPA documents. Any deviations from these methods will require the concurrence and approval of the LAUSD. The required levels of analysis and validation for this project are outlined in the QAPP in Appendix A.

7.7.3.2 *Soil Samples*

Confirmation soil samples collected during removal action activities will be analyzed as follows:

- arsenic-impacted areas will be analyzed using EPA Method 6020B;
- lead-impacted areas will be analyzed using EPA Method 6010B; and
- the petroleum hydrocarbon-impacted area will be analyzed for TPH-D and TPH-O using EPA Method 8015B(M).

Stockpile soil samples collected to characterize soil previously identified with elevated lead concentrations will be analyzed as follows:

- lead-impacted stockpiles will be analyzed using EPA Method 6010B, and the samples will be further analyzed for STLC lead and TCLP lead, as needed, using the appropriate extraction method(s) and EPA Method 6010B, to determine the waste classification of the soil.

7.7.3.3 *Quality Assurance/Quality Control*

Equipment Blanks

As discussed in the QAPP (Appendix A), equipment (rinsate) blanks will be collected at a rate of one per sampling crew per day or one per 20 soil samples collected during the soil removal action, whichever is

most frequent. Equipment blanks provide a quality assurance/quality control (QA/QC) check on field decontamination procedures. Equipment blanks will not apply for soil samples collected directly into the individual sample containers. Equipment blanks for soil samples will be collected by pouring deionized water over the decontaminated hand auger sampler and collecting the runoff directly into laboratory-supplied sample jars.

Field Duplicates

As discussed in the QAPP (Appendix A), field duplicates will be collected at a rate of one per 10 soil samples collected, as a QA/QC check on precision and reproducibility of results. Duplicate soil samples will comprise a brass tube adjacent to the original sample tube within the same lithologic layer or material.

Matrix Spike/Matrix Spike Duplicates – Laboratory Internal QA/QC

Matrix spike and laboratory control samples will be obtained and analyzed to determine if sample recoveries falling outside of acceptance windows are attributed to sample matrix interferences and/or to laboratory errors, and to measure the accuracy of the analysis. Laboratory duplicates for inorganic analytes and matrix spike duplicates for organic analytes will be analyzed to evaluate laboratory reproducibility or precision.

7.8 TRANSPORTATION PLAN FOR OFF-SITE DISPOSAL

Waste materials will be handled by personnel and equipment in strict compliance with all Federal, State, and local regulations, statutes, and ordinances, including:

- California Hazardous Waste Control Law, Chapter 6.95, Division 20, Health and Safety Code
- California Code of Regulations, Title 22, Division 4, Chapter 30, Articles 5, 6, 6.5, and 7
- United States Code of Federal Regulations, Title 40, Parts 261 through 265; Title 49, Parts 100 through 179 and Part 387 through 399; and Title 20, Part 1910
- California Highway Patrol, Hazardous Waste Licensing and Transport Route Regulations
- California Vehicle Code, Hazardous Waste Transport
- SCAQMD Rules and Regulations
- EPA Land Disposal Restrictions
- City of Los Angeles Truck Routing Ordinances

Refer to the Transportation Plan in Appendix C for additional waste transportation and disposal details.

7.8.1 Waste Hauling

The hauling contractor(s) used to transport impacted soil and debris to the off-Site disposal facilities will be fully licensed and permitted by the EPA and the State. Contractors shall comply with the City of Los Angeles Truck Route Ordinance and use City-approved truck routes.

Trucks used for the off-Site transportation of impacted soil will remain in clean areas at all times to minimize the need to decontaminate the truck tires. During loading, noise, odor, and dust emissions will be monitored and mitigated as necessary. The hauling trucks will employ spill control measures described in Section 7.9.

7.8.2 Approved Treatment and Disposal Facilities

The disposal facilities shown in the Transportation Plan in Appendix C (Section 5.0) are proposed for use for this project. The Remediation Contractor selected for this project will be required to prepare an amendment to the Transportation Plan that specifies the actual disposal facilities and the transportation routes planned for use (if they vary from those proposed herein), the selected transportation company, and any proposed deviations from the procedures outlined in the Transportation Plan.

7.9 SPILL CONTINGENCY PLAN

Spill prevention and control measures to prevent or reduce the discharge of pollutants to the environment from leaks or spills will be implemented during excavation, stockpiling, loading, and transportation operations. At a minimum, measures to prevent spillage of contaminated soil while loading and hauling will include the following:

- Covering the trucks with tarps or plastic sheeting before proceeding to the off-Site treatment facility.

- When hauling over public highways, loads shall be trimmed and material removed from shelf areas of vehicles to eliminate spilling materials.

In the event of an emergency or spill during transport to the treatment facility, the driver of the hauling truck will use the following procedures:

- Park the vehicle in the most secure area available, away from homes, traffic, waterways, and businesses.

- Stay with the vehicle until appropriate support has arrived; move a safe distance away from the vehicle or spill material if danger exists.

- Notify the appropriate emergency contacts. Reporting will include at least the following information:
  - Name and telephone number of driver
  - Exact location of the spill or threatened spill
  - Time and type of incident
  - Name and quantity of material involved, to the extent known
  - Extent of injuries or property damage, if any
  - Manifest number
  - Possible hazards to human health or the environment (i.e., location of nearby receptors)

Impacted soil that is spilled outside of containment/control/stockpile areas on Site will be immediately recovered and placed into an appropriate storage location/container. If the spill occurs on soil, some additional surface soil will be recovered/removed along with the impacted soil. If the spill occurs on asphalt, residual spilled soil will be scraped up.

Impacted soil that is spilled off Site will be properly removed/cleaned up pursuant to directions of local authorities (e.g., California Highway Patrol, City, County, etc.).

7.10 BACKFILL AND SITE RESTORATION

Areas excavated as a result of removal activities will be backfilled with approved clean fill. The clean fill may consist of one or more of the following sources: 1) clean quarried material; 2) imported material from an off-Site source; and 3) clean soil generated on Site in the course of exposing and removing soil impacts. Debris, plant matter, and other deleterious material shall not be present in soils used for fill. Backfilling and compaction of excavated areas shall be in conformance with City of Los Angeles requirements, and compaction certification will be provided by the LAUSD Geotechnical Engineer of Record.

7.10.1 Borrow Source Evaluation

Prior to using fill material on Site, the soil quality data of the source material will be reviewed. Sampling of fill material intended for use at the Site shall be conducted to verify the quality of the material, unless the fill material originates from a clean, quarried source, in which case no sampling will be conducted. Imported fill will be free of contamination and non-soil material. Clean soil generated on Site from excavation activities must be less than the removal action goals and must comply with LAUSD soil reuse criteria. Soils treated at another site undergoing remediation will not be used as backfill material at the Site.

Sampling of the backfill soils shall be conducted in accordance with the LAUSD Environmental Import/Export Materials Testing (Guidance Section 01 4524) requirements. Soil sample collection shall be performed as described in Section 7.7. At a minimum, backfill materials will be sampled (discrete and composite samples) at a frequency consistent with the volume-specific sampling criteria outlined in LAUSD Guidance Section 01 4524.

Discrete soil samples will be analyzed for the following:

- TPH-G using EPA Methods 8015B(M)/5035; and
- VOCs using EPA Methods 8260B/5035.

Composite soil samples will be analyzed for the following:

- TPH - Full Carbon Speciation using EPA Method 8015B(M);
- PCBs using EPA Method 8082;
- SVOCs using EPA Method 8270C;
- OCPs using EPA Method 8081A;
- Organophosphorus Pesticides (OPPs) using EPA Method 8141A;
- Chlorinated Herbicides using EPA Method 8151A;
- California Title 22 Metals using EPA Methods 6010B/7471A;
- Hexavalent Chromium using EPA Method 7199; and
- Arsenic and Thallium using EPA Method 6020.

The Remediation Contractor will be responsible for providing documentation of the source of clean fill material and for performing and/or providing documentation of the geotechnical suitability and environmental analysis of the clean import fill material.

7.10.2 Site Restoration

Upon completion of excavation, backfill, and compaction activities, each work area will be completed at the surface to comply with the planned reuse of the Site (i.e., covered with new building construction, concrete/asphalt paving, or clean soil for athletic fields and planters).

8.0 PUBLIC PARTICIPATION

In accordance with the public participation requirements outlined in the DTSC Public Participation Manual, the following activities will be completed for this RAW process:

- Develop a mailing list for faculty and students of Roosevelt High School.
- Establish Information Repositories for the Site to provide public access to technical reports and other key project information (locations to be selected prior to the Public Meeting). Final documents, including the Phase I ESA, Draft PEA Report, Draft RAW, fact sheets, and other materials relevant to the Site will be placed in the Information Repositories and maintained throughout the duration of the cleanup work.
- Develop and submit fact sheets to LAUSD for review and approval, and print and distribute fact sheets to the community mailing lists described above.
- Publish, in a major local newspaper(s), a public notice announcing the availability of the RAW for public review and comment. The public comment period will last a minimum of 30 days. All comments regarding the RAW will be directed to the LAUSD.
- Conduct a public meeting to inform the public of the proposed activities and to receive public comments on the RAW.
- Once the public comment period has ended, LAUSD will consider comments received and determine whether revisions to the RAW are necessary.
- If appropriate, TRC will revise the RAW on the basis of comments received from the public, and submit the revised RAW to LAUSD for review and approval. If such a revision is necessary, TRC will also notify the public of any significant changes from the action proposed in the RAW.

9.0 QUALITY ASSURANCE PROJECT PLAN

A QAPP has been prepared to provide data quality assurance, guidance, and requirements for activities associated with field measurements, sampling, laboratory analysis, data management, and reporting during project activities. The QAPP is presented in Appendix A. It is recommended that the Environmental Consultant selected to implement this RAW prepare an amendment to the QAPP to identify quality control sample collection requirements and specific data quality objectives of the measurement data, as well as the analytical laboratory to be used for sample analysis. The primary quality control features of the QA/QC program include the collection and analysis of field quality control samples and the data validation.

10.0 HEALTH AND SAFETY

The LAUSD Remediation Contractor will prepare a comprehensive health and safety plan (HSP) prior to implementation of proposed RAW activities at the Site (see Appendix B for an example). The intent of the HSP, which includes protocols to be followed during remediation activities, is to ensure the health and safety of on-Site project employees, subcontractors, visitors, and the public during all Site work. The HSP identifies policy, procedures, and systems to be followed by project personnel, and is required to be followed and signed by all field personnel, subcontractors, vendors, visitors, and agency representatives at the Site.

The HSP is implemented in conjunction with other health and safety programs, including the Injury and Illness Prevention Program (IIPP). In addition, project procedures will guide the JSA documents created for critical work, safety task assignments used daily to direct that day's activity, as well as additional postings, signs, or informational memos regarding safety. JSA documents are intended to be fluid; sections will be amended or added when new safety hazards are identified as the project proceeds.

A copy of the HSP will be readily available during field activities. On the morning of each day of field activities, a health and safety meeting will be conducted with all Site workers to discuss the health and safety issues and concerns related to the specific work, including safety concerns regarding coordination of investigation activities. All Site workers will be required to review and sign the HSP before conducting work at the Site. In addition, Site workers shall meet the training requirements specified in the OSHA Hazardous Waste Operations and Emergency Response (HAZWOPER) Standard (29 CFR 1910.120[e]).

11.0 PROJECT SCHEDULE AND REPORT OF COMPLETION

The start date for proposed removal action activities is contingent upon receipt of public comments on the draft RAW, preparation of the final RAW, and selection of an Environmental Consultant and Remediation Contractor by LAUSD. At the present time, it is anticipated that excavation activities may begin in the first quarter of 2018 (weather permitting). It is anticipated that work activities can be completed in approximately 1 month of continuous work; the actual duration of work activities is contingent upon how LAUSD stages construction activities at the Site. A detailed work schedule will be provided under separate cover following final approval of the RAW and discussion with LAUSD.

A Remedial Action Completion Report (RACR) will be prepared once all removal action activities have been completed. A licensed Professional Geologist will certify that the removal action activities were performed in accordance with the project plans and specifications. This report will include:

- Summary of the removal action activities;
- Analytical test results of excavation confirmation soil samples, stockpile soil samples, and imported fill material samples, including QA/QC sample results;
- Location(s) of fill material source(s), owner(s) name and address, bills of lading, and rationale for selection of sampling locations and depths;
- Observations and findings of the environmental controls and measurements;
- Final limits of soil excavation with the volumes of soil removed; and
- Documentation showing final disposal of all waste materials generated at the Site.

The draft RACR will be available for LAUSD review within 45 days following completion of field activities, and the final RACR will be provided to LAUSD within 7 days of receiving comments on the draft.

12.0 REFERENCES

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TABLES

Table 1
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			TTLC	STLC	TTLC	STLC	TCLP	4,4'-DDD	4,4'-DDE	4,4'-DDT	alpha-Chlordane	Chlordane	Dieldrin	gamma-Chlordane		
Units:			mg/kg	mg/L	mg/kg	mg/L	mg/L	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	
Screening Level:			12	5.0	80	5.0	5.0		2,000	1,900	NA	430	34	NA		
Area 2 - Physical Education Building and Courts																
PE-1-0.5	10/15/2016	0.5	**5.7**	**---**	**8.4**	---	---	---	---	---	---	---	---	---	---	
PE-1-2.5	10/15/2016	2.5	**4.5**	---	**6.4**	---	---	---	---	---	---	---	---	---	---	
PE-2-0.5	10/15/2016	0.5	**3.2**	---	**13**	---	---	---	---	---	---	---	---	---	---	
PE-2-2.5	10/15/2016	2.5	**2.5**	---	**44**	---	---	---	---	---	---	---	---	---	---	
PE-3-0.5	10/15/2016	0.5	**2.9**	---	**55**	---	---	---	---	---	---	---	---	---	---	
PE-3-0.5 DUP	10/15/2016	0.5	**3.0**	---	**63**	---	---	---	---	---	---	---	---	---	---	
PE-3-2.5	10/15/2016	2.5	**1.8**	---	**92**	**5.5**	ND<0.25	---	---	---	---	---	---	---	---	
PE-3-3.5	3/25/2017	3.5	---	---	**110**	**7.4**	**0.044 J**	---	---	---	---	---	---	---	---	
PE-3b-0.5	11/23/2016	0.5	---	---	**22**	---	---	---	---	---	---	---	---	---	---	
PE-3b-2.5	11/23/2016	2.5	---	---	**86**	**5.8**	ND<0.25	---	---	---	---	---	---	---	---	
PE-3b-3.5	11/23/2016	3.5	---	---	**32**	---	---	---	---	---	---	---	---	---	---	
PE-3b1-0.5	3/25/2017	0.5	---	---	**6.0**	---	---	---	---	---	---	---	---	---	---	
PE-3b1-2.5	3/25/2017	2.5	---	---	**87**	**3.4**	---	---	---	---	---	---	---	---	---	
PE-3b1-3.5	3/25/2017	3.5	---	---	**40**	---	---	---	---	---	---	---	---	---	---	
PE-3c-0.5	11/23/2016	0.5	---	---	**3.2**	---	---	---	---	---	---	---	---	---	---	
PE-3c-2.5	11/23/2016	2.5	---	---	**2.5**	---	---	---	---	---	---	---	---	---	---	
PE-3c-3.5	11/23/2016	3.5	---	---	**2.7**	---	---	---	---	---	---	---	---	---	---	
PE-3c1-0.5	3/25/2017	0.5	---	---	**9.0**	---	---	---	---	---	---	---	---	---	---	
PE-3c1-2.5	3/25/2017	2.5	---	---	**21**	---	---	---	---	---	---	---	---	---	---	
PE-3c1-3.5	3/25/2017	3.5	---	---	**7.6**	---	---	---	---	---	---	---	---	---	---	
PE-3d-0.5	11/23/2016	0.5	---	---	**16**	---	---	---	---	---	---	---	---	---	---	
PE-3d-0.5 DUP	11/23/2016	0.5	---	---	**19**	---	---	---	---	---	---	---	---	---	---	
PE-3d-2.5	11/23/2016	2.5	---	---	**62**	---	---	---	---	---	---	---	---	---	---	
PE-3d-3.5	11/23/2016	3.5	---	---	**64**	---	---	---	---	---	---	---	---	---	---	
PE-4-0.5	10/15/2016	0.5	**2.2**	---	**17**	---	---	---	---	---	---	---	---	---	---	
PE-4-2.5	10/15/2016	2.5	**3.0**	---	**24**	---	---	---	---	---	---	---	---	---	---	
PE-5	N/A	0.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Removed from program
B-6-0.5	10/23/2016	0.5	**2.2**	---	**22**	---	---	---	---	---	---	---	---	---	---	
B-6-2.5	10/23/2016	2.5	**1.9**	---	**110**	**4.7**	---	---	---	---	---	---	---	---	---	
B-6-3.5	6/14/2017	3.5	---	---	**36**	---	---	---	---	---	---	---	---	---	---	
B-6-3.5 DUP	6/14/2017	3.5	---	---	**20**	---	---	---	---	---	---	---	---	---	---	
B-6-4.5	6/14/2017	4.5	---	---	**3.7**	---	---	---	---	---	---	---	---	---	---	
B-6b-0.5	11/23/2016	0.5	---	---	**15**	---	---	---	---	---	---	---	---	---	---	
B-6b-2.5	11/23/2016	2.5	---	---	**280**	**16**	**0.15 J**	---	---	---	---	---	---	---	---	
B-6b-3.5	11/23/2016	3.5	---	---	**5.3**	---	---	---	---	---	---	---	---	---	---	
B-6c-0.5	11/23/2016	0.5	---	---	**85**	**2.6**	---	---	---	---	---	---	---	---	---	
B-6c-2.5	11/23/2016	2.5	---	---	**35**	---	---	---	---	---	---	---	---	---	---	
B-6c-2.5 DUP	11/23/2016	2.5	---	---	**26**	---	---	---	---	---	---	---	---	---	---	
B-6c-3.5	11/23/2016	3.5	---	---	**190**	**3.9**	---	---	---	---	---	---	---	---	---	
B-6c-4.5	6/14/2017	4.5	---	---	**25**	---	---	---	---	---	---	---	---	---	---	
B-6d-0.5	11/23/2016	0.5	---	---	**14**	---	---	---	---	---	---	---	---	---	---	
B-6d-2.5	11/23/2016	2.5	---	---	**18**	---	---	---	---	---	---	---	---	---	---	
B-6d-3.5	11/23/2016	3.5	---	---	**58**	---	---	---	---	---	---	---	---	---	---	

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			TTLC	STLC	TTLC	STLC	TCLP	4,4'-DDD	4,4'-DDE	4,4'-DDT	alpha-Chlordane	Chlordane	Dieldrin	gamma-Chlordane		
		Units:	mg/kg	mg/L	mg/kg	mg/L	mg/L	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	
B-7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Removed from program
B-7-0.5	3/25/2017	0.5	---	---	**15**	---	---	---	---	---	---	---	---	---	---	
B-7-2.5	3/25/2017	2.5	---	---	**5.3**	---	---	---	---	---	---	---	---	---	---	
B-7-3.5	3/25/2017	3.5	---	---	**9.3**	---	---	---	---	---	---	---	---	---	---	
B-7-4.5	3/25/2017	4.5	---	---	**4.0**	---	---	---	---	---	---	---	---	---	---	
B-8-0.5	10/23/2016	0.5	**1.6**	---	**10**	---	---	---	---	---	---	---	---	---	---	
B-8-2.5	10/23/2016	2.5	**1.7**	---	**5.5**	---	---	---	---	---	---	---	---	---	---	
Composite A11	N/A	0.5	**---**	---	**---**	---	---	ND<2.0	**0.34J**	**0.48J**	ND<1.0	**1.2J**	**0.46J**	ND<1.0	---	Composite of B-6-0.5 and B-8-0.5
B-9-0.5	10/8/2016	0.5	**3.7**	---	**20**	---	---	---	---	---	---	---	---	---	---	
B-9-2.5	10/8/2016	2.5	**1.5**	**---**	**30**	---	---	---	---	---	---	---	---	---	---	
B-10-0.5	10/8/2016	0.5	**3.4**	**---**	**43**	---	---	---	---	---	---	---	---	---	---	
B-10-0.5 DUP	10/8/2016	0.5	**5.0**	---	**55**	---	---	---	---	---	---	---	---	---	---	
B-10-2.5	10/8/2016	2.5	**3.1**	---	**65**	---	---	---	---	---	---	---	---	---	---	
B-11-0.5	10/8/2016	0.5	**3.1**	---	**39**	---	---	---	---	---	---	---	---	---	---	
B-11-2.5	10/8/2016	2.5	**1.9**	---	**5.4**	---	---	---	---	---	---	---	---	---	---	
B-12-0.5	10/15/2016	0.5	**1.8**	---	**3.6**	---	---	---	---	---	---	---	---	---	---	
B-12-2.5	10/15/2016	2.5	**1.7**	---	**5.1**	---	---	---	---	---	---	---	---	---	---	
Composite A1	N/A	0.5	**---**	---	**---**	---	---	ND<2.0	**3.2**	**0.88J**	ND<1.0	**1.5J**	ND<2.0	ND<1.0	ND<16	Composite of B-9-0.5, B-10-0.5, B-11-0.5, and B-12-0.5
C-6-0.5	10/23/2016	0.5	**1.6**	---	**11**	---	---	---	---	---	---	---	---	---	---	
C-6-2.5	10/23/2016	2.5	**2.2**	---	**8.6**	---	---	---	---	---	---	---	---	---	---	
C-6-3.5	6/14/2017	3.5	---	---	**16**	---	---	---	---	---	---	---	---	---	---	
C-6-4.5	3/25/2017	4.5	---	---	**57**	---	---	---	---	---	---	---	---	---	---	
C-7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Removed from program
C-7-0.5	3/25/2017	0.5	---	---	**23**	---	---	---	---	---	---	---	---	---	---	
C-7-2.5	3/25/2017	2.5	---	---	**13**	---	---	---	---	---	---	---	---	---	---	
C-7-3.5	3/25/2017	3.5	---	---	**16**	---	---	---	---	---	---	---	---	---	---	
C-7-4.5	3/25/2017	4.5	---	---	**12**	---	---	---	---	---	---	---	---	---	---	
C-8-0.5	10/23/2016	0.5	**3.1**	---	**22**	---	---	---	---	---	---	---	---	---	---	
C-8-2.5	10/23/2016	2.5	**2.0**	---	**31**	---	---	---	---	---	---	---	---	---	---	
C-8-2.5 DUP	10/23/2016	2.5	**2.5**	---	**34**	---	---	---	---	---	---	---	---	---	---	
Composite A12	N/A	0.5	**---**	---	**---**	---	---	**0.36J**	**1.1J**	ND<2.0	ND<1.0	**1.9J**	ND<2.0	**0.23J**	---	Composite of C-6-0.5 and C-8-0.5
C-9-0.5	10/8/2016	0.5	**3.4**	---	**12**	---	---	---	---	---	---	---	---	---	---	
C-9-2.5	10/8/2016	2.5	**1.4**	---	**8.6**	---	---	---	---	---	---	---	---	---	---	
C-10-0.5	10/8/2016	0.5	**1.7**	---	**23**	---	---	---	---	---	---	---	---	---	---	
C-10-2.5	10/8/2016	2.5	**1.2**	---	**9.7**	---	---	---	---	---	---	---	---	---	---	
C-11-0.5	10/8/2016	0.5	**3.0**	---	**18**	---	---	---	---	---	---	---	---	---	---	
C-11-2.5	10/8/2016	2.5	**1.4**	---	**14**	---	---	---	---	---	---	---	---	---	---	
C-12-0.5	10/15/2016	0.5	ND<2.0	---	**120**	**3.3**	---	---	---	---	---	---	---	---	---	
C-12-2.5	10/15/2016	2.5	**1.5**	---	**7.2**	---	---	---	---	---	---	---	---	---	---	
C-12a-0.5	11/23/2016	0.5	---	---	**21**	---	---	---	---	---	---	---	---	---	---	
C-12c-0.5	11/23/2016	0.5	---	---	**16**	---	---	---	---	---	---	---	---	---	---	
C-12d-0.5	11/23/2016	0.5	---	---	**9.2**	---	---	---	---	---	---	---	---	---	---	
Composite A2	N/A	0.5	**---**	---	**---**	---	---	ND<2.0	**1.1J**	ND<2.0	ND<1.0	ND<8.5	ND<2.0	ND<1.0	---	Composite of C-9-0.5, C-10-0.5, C-11-0.5, and C-12-0.5
D-6-0.5	10/23/2016	0.5	**2.9**	---	**18**	---	---	---	---	---	---	---	---	---	---	

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		Units:	mg/kg	mg/L	mg/kg	mg/L	mg/L	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	
D-6-2.5	10/23/2016	2.5	**2.6**	---	**20**	---	---	---	---	---	---	---	---	---	---	
D-7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Removed from program
D-8-0.5	10/23/2016	0.5	**2.7**	---	**15**	---	---	---	---	---	---	---	---	---	---	
D-8-0.5 DUP	10/23/2016	0.5	**2.9**	---	**18**	---	---	---	---	---	---	---	---	---	---	
D-8-2.5	10/23/2016	2.5	**2.3**	---	**12**	---	---	---	---	---	---	---	---	---	---	
Composite A13	N/A	0.5	**---**	---	**---**	---	---	ND<2.0	ND<2.0	ND<2.0	ND<1.0	ND<8.5	ND<2.0	ND<1.0	---	Composite of D-6-0.5 and D-8-0.5
D-9-0.5	10/8/2016	0.5	**3.4**	---	**28**	---	---	---	---	---	---	---	---	---	---	
D-9-2.5	10/8/2016	2.5	**2.6**	---	**28**	---	---	---	---	---	---	---	---	---	---	
D-9-2.5 DUP	10/8/2016	2.5	**4.3**	---	**34**	---	---	---	---	---	---	---	---	---	---	
D-10-0.5	10/8/2016	0.5	**2.9**	---	**25**	---	---	---	---	---	---	---	---	---	---	
D-10-2.5	10/8/2016	2.5	**3.3**	---	**56**	---	---	---	---	---	---	---	---	---	---	
D-11-0.5	10/8/2016	0.5	**4.1**	**---**	**18**	---	---	---	---	---	---	---	---	---	---	
D-11-2.5	10/8/2016	2.5	**1.6**	**---**	**41**	---	---	---	---	---	---	---	---	---	---	
D-12-0.5	10/15/2016	0.5	**3.8**	---	**21**	---	---	---	---	---	---	---	---	---	---	
D-12-2.5	10/15/2016	2.5	**2.8**	---	**38**	---	---	---	---	---	---	---	---	---	---	
D-12-2.5 DUP	10/15/2016	2.5	**1.8**	---	**16**	---	---	---	---	---	---	---	---	---	---	
Composite A3	N/A	0.5	**---**	---	**---**	---	---	**1.2J**	**18**	**3.4**	ND<1.0	**3.0J**	**0.44J**	**0.31J**	---	Composite of D-9-0.5, D-10-0.5, D-11-0.5, and D-12-0.5
E-6-0.5	10/23/2016	0.5	**2.6**	---	**28**	---	---	---	---	---	---	---	---	---	---	
E-6-2.5	10/23/2016	2.5	**4.2**	---	**26**	---	---	---	---	---	---	---	---	---	---	
E-7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Removed from program
E-8-0.5	10/23/2016	0.5	**3.1**	---	**20**	---	---	---	---	---	---	---	---	---	---	
E-8-2.5	10/23/2016	2.5	**1.8**	---	**7.9**	---	---	---	---	---	---	---	---	---	---	
Composite A14	N/A	0.5	**---**	---	**---**	---	---	ND<2.0	**0.20J**	ND<2.0	ND<1.0	**1.5J**	ND<2.0	ND<1.0	---	Composite of E-6-0.5 and E-8-0.5
E-9-0.5	10/8/2016	0.5	**2.9**	---	**24**	---	---	---	---	---	---	---	---	---	---	
E-9-2.5	10/8/2016	2.5	**3.5**	---	**16**	---	---	---	---	---	---	---	---	---	---	
E-10-0.5	10/8/2016	0.5	**3.5**	---	**18**	---	---	---	---	---	---	---	---	---	---	
E-10-2.5	10/8/2016	2.5	**3.1**	---	**16**	---	---	---	---	---	---	---	---	---	---	
E-11-0.5	10/8/2016	0.5	**2.6**	---	**26**	---	---	---	---	---	---	---	---	---	---	
E-11-2.5	10/8/2016	2.5	**3.6**	---	**24**	---	---	---	---	---	---	---	---	---	---	
E-12-0.5	10/15/2016	0.5	ND<2.0	---	**5.7**	---	---	---	---	---	---	---	---	---	---	
E-12-0.5 DUP	10/15/2016	0.5	**1.6**	---	**37**	---	---	---	---	---	---	---	---	---	---	
E-12-2.5	10/15/2016	2.5	**0.94J**	---	**22**	---	---	---	---	---	---	---	---	---	---	
Composite A4	N/A	0.5	**---**	---	**---**	---	---	**0.53J**	**14**	**1.5J**	**0.45J**	**4.6J**	**0.91J**	**0.41J**	---	Composite of E-9-0.5, E-10-0.5, E-11-0.5, and E-12-0.5
F-6-0.5	10/23/2016	0.5	**2.0**	---	**19**	---	---	---	---	---	---	---	---	---	---	
F-6-2.5	10/23/2016	2.5	**2.7**	---	**21**	---	---	---	---	---	---	---	---	---	---	
F-7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Removed from program
F-8-0.5	10/23/2016	0.5	**4.5**	---	**9.2**	---	---	---	---	---	---	---	---	---	---	
F-8-2.5	10/23/2016	2.5	**1.9**	---	**15**	---	---	---	---	---	---	---	---	---	---	
Composite A15	N/A	0.5	**---**	---	**---**	---	---	ND<2.0	ND<2.0	ND<2.0	ND<1.0	ND<8.5	ND<2.0	ND<1.0	---	Composite of F-6-0.5 and F-8-0.5
Composite A15 DUP	N/A	0.5	**---**	---	**---**	---	---	ND<2.0	**0.21J**	ND<2.0	ND<1.0	ND<8.5	ND<2.0	ND<1.0	---	Composite of F-6-0.5 and F-8-0.5
F-9-0.5	10/8/2016	0.5	**3.5**	---	**24**	---	---	---	---	---	---	---	---	---	---	
F-9-0.5 DUP	10/8/2016	0.5	**3.7**	---	**23**	---	---	---	---	---	---	---	---	---	---	
F-9-2.5	10/8/2016	2.5	**3.2**	---	**34**	---	---	---	---	---	---	---	---	---	---	
F-10-0.5	10/8/2016	0.5	**3.0**	---	**34**	---	---	---	---	---	---	---	---	---	---	

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		Units:	mg/kg	mg/L	mg/kg	mg/L	mg/L	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	
F-10-2.5	10/8/2016	2.5	**1.4**	---	**43**	---	---	---	---	---	---	---	---	---	---	
F-11-0.5	10/8/2016	0.5	**2.8**	---	**23**	---	---	---	---	---	---	---	---	---	---	
F-11-2.5	10/8/2016	2.5	**0.97J**	---	**7.2**	---	---	---	---	---	---	---	---	---	---	
F-12-0.5	10/15/2016	0.5	ND<2.0	---	**15**	---	---	---	---	---	---	---	---	---	---	
F-12-2.5	10/15/2016	2.5	**1.8**	---	**5.5**	---	---	---	---	---	---	---	---	---	---	
Composite A5	N/A	0.5	**---**	---	**---**	---	---	**0.32J**	**9.3**	**0.70J**	**0.33J**	**4.2J**	**7.8**	**0.46J**	---	Composite of F-9-0.5, F-10-0.5, F-11-0.5, and F-12-0.5
G-11-0.5	10/15/2016	0.5	**2.9**	**---**	**13**	---	---	---	---	---	---	---	---	---	---	
G-11-2.5	10/15/2016	2.5	**4.7**	---	**5.7**	---	---	---	---	---	---	---	---	---	---	
G-12-0.5	10/15/2016	0.5	ND<5.0	---	**23**	---	---	---	---	---	---	---	---	---	---	
G-12-2.5	10/15/2016	2.5	**1.1**	---	**4.3**	---	---	---	---	---	---	---	---	---	---	
Composite A6	N/A	0.5	**---**	---	**---**	---	---	ND<2.0	ND<2.0	ND<2.0	ND<1.0	ND<8.5	ND<2.0	ND<1.0	---	Composite of G-11-0.5 and G-12-0.5
H-1-0.5	10/15/2016	0.5	**4.3**	---	**8.4**	---	---	---	---	---	---	---	---	---	---	
H-1-2.5	10/15/2016	2.5	**5.0**	---	**6.7**	---	---	---	---	---	---	---	---	---	---	
H-1c-0.5	6/14/2017	0.5	---	---	**13**	---	---	---	---	---	---	---	---	---	---	
H-1c-2.5	6/14/2017	2.5	---	---	**13**	---	---	---	---	---	---	---	---	---	---	
H-1c-3.5	6/14/2017	3.5	---	---	**7.6**	---	---	---	---	---	---	---	---	---	---	
H-1c1-0.5	6/14/2017	0.5	---	---	**15**	---	---	---	---	---	---	---	---	---	---	
H-1c1-2.5	6/14/2017	2.5	---	---	**7.6**	---	---	---	---	---	---	---	---	---	---	
H-1c1-3.5	6/14/2017	3.5	---	---	**3.7**	---	---	---	---	---	---	---	---	---	---	
H-2-0.5	10/15/2016	0.5	**5.3**	---	**8.9**	---	---	---	---	---	---	---	---	---	---	
H-2-2.5	10/15/2016	2.5	**5.6**	---	**230**	**3.3**	---	---	---	---	---	---	---	---	---	
H-2-3.5	3/25/2017	3.5	---	---	**3.8**	---	---	---	---	---	---	---	---	---	---	
H-2a-0.5	11/21/2016	0.5	---	---	**5.2**	---	---	---	---	---	---	---	---	---	---	
H-2a-2.5	11/21/2016	2.5	---	---	**20**	---	---	---	---	---	---	---	---	---	---	
H-2a-3.5	11/21/2016	3.5	---	---	**6.9**	---	---	---	---	---	---	---	---	---	---	
H-2b-0.5	11/21/2016	0.5	---	---	**37**	---	---	---	---	---	---	---	---	---	---	
H-2b-2.5	11/21/2016	2.5	---	---	**9.0**	---	---	---	---	---	---	---	---	---	---	
H-2b-3.5	11/21/2016	3.5	---	---	**7.2**	---	---	---	---	---	---	---	---	---	---	
H-2b1-0.5	3/25/2017	0.5	---	---	**4.2**	---	---	---	---	---	---	---	---	---	---	
H-2b1-2.5	3/25/2017	2.5	---	---	**4.8**	---	---	---	---	---	---	---	---	---	---	
H-2b1-3.5	3/25/2017	3.5	---	---	**5.2**	---	---	---	---	---	---	---	---	---	---	
H-2c-0.5	11/21/2016	0.5	---	---	**81**	**4.1**	---	---	---	---	---	---	---	---	---	
H-2c-2.5	11/21/2016	2.5	---	---	**7.8**	---	---	---	---	---	---	---	---	---	---	
H-2c-2.5 DUP	11/21/2016	2.5	---	---	**8.9**	---	---	---	---	---	---	---	---	---	---	
H-2c-3.5	11/21/2016	3.5	---	---	**5.7**	---	---	---	---	---	---	---	---	---	---	
H-2c1-0.5	3/25/2017	0.5	---	---	**71**	---	---	---	---	---	---	---	---	---	---	
H-2c1-2.5	3/25/2017	2.5	---	---	**3.4**	---	---	---	---	---	---	---	---	---	---	
H-2c1-3.5	3/25/2017	3.5	---	---	**4.0**	---	---	---	---	---	---	---	---	---	---	
H-2d-0.5	11/21/2016	0.5	---	---	**5.9**	---	---	---	---	---	---	---	---	---	---	
H-2d-2.5	11/21/2016	2.5	---	---	**29**	---	---	---	---	---	---	---	---	---	---	
H-2d-3.5	11/21/2016	3.5	---	---	**8.6**	---	---	---	---	---	---	---	---	---	---	
H-2d-3.5 DUP	11/21/2016	3.5	---	---	**9.9**	---	---	---	---	---	---	---	---	---	---	
H-2d1-0.5	3/25/2017	0.5	---	---	**92**	**2.5**	---	---	---	---	---	---	---	---	---	
H-2d1-2.5	3/25/2017	2.5	---	---	**4.0**	---	---	---	---	---	---	---	---	---	---	

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		Units:	mg/kg	mg/L	mg/kg	mg/L	mg/L	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	
H-2d1-3.5	3/25/2017	3.5	---	---	**4.1**	---	---	---	---	---	---	---	---	---	---	
H-2d1-3.5 DUP	3/25/2017	3.5	---	---	**5.4**	---	---	---	---	---	---	---	---	---	---	
H-3-0.5	10/15/2016	0.5	**5.5**	---	**17**	---	---	---	---	---	---	---	---	---	---	
H-3-0.5 DUP	10/15/2016	0.5	**4.6**	---	**14**	---	---	---	---	---	---	---	---	---	---	
H-3-2.5	10/15/2016	2.5	**4.9**	---	**4.7**	---	---	---	---	---	---	---	---	---	---	
Composite A9	N/A	0.5	**---**	---	**---**	---	---	ND<2.0	ND<2.0	ND<2.0	ND<1.0	**0.96J**	ND<2.0	ND<1.0	---	Composite of H-1-0.5, H-2-0.5, and H-3-0.5
H-4-0.5	10/15/2016	0.5	**3.3**	---	**8.5**	---	---	---	---	---	---	---	---	---	---	
H-4-2.5	10/15/2016	2.5	**2.1**	---	**7.3**	---	---	---	---	---	---	---	---	---	---	
H-5-0.5	10/15/2016	0.5	**2.4**	---	**3.9**	---	---	---	---	---	---	---	---	---	---	
H-5-2.5	10/15/2016	2.5	**2.4**	---	**1.7**	---	---	---	---	---	---	---	---	---	---	
H-5-2.5 DUP	10/15/2016	2.5	**3.4**	---	**18**	---	---	---	---	---	---	---	---	---	---	
Composite A10	N/A	0.5	**---**	---	**---**	---	---	ND<2.0	ND<2.0	ND<2.0	**0.29J**	**2.7J**	ND<2.0	**0.28J**	---	Composite of H-4-0.5 and H-5-0.5
Composite A10 DUP	N/A	0.5	**---**	---	**---**	---	---	ND<2.0	ND<2.0	ND<2.0	**0.26J**	**3.4J**	ND<2.0	**0.34J**	---	Composite of H-4-0.5 and H-5-0.5
H-11-0.5	10/15/2016	0.5	**2.6**	---	**14**	---	---	---	---	---	---	---	---	---	---	
H-11-2.5	10/15/2016	2.5	**4.4**	---	**5.6**	---	---	---	---	---	---	---	---	---	---	
H-12-0.5	10/15/2016	0.5	ND<2.0	---	**4.7**	---	---	---	---	---	---	---	---	---	---	
H-12-2.5	10/15/2016	2.5	**1.0J**	---	**3.4**	---	---	---	---	---	---	---	---	---	---	
Composite A7	N/A	0.5	**---**	---	**---**	---	---	ND<2.0	ND<2.0	ND<2.0	**0.24J**	**2.9J**	ND<2.0	**0.29J**	---	Composite of H-11-0.5 and H-12-0.5
I-11-0.5	10/15/2016	0.5	**4.6**	**---**	**15**	---	---	---	---	---	---	---	---	---	---	
I-11-2.5	10/15/2016	2.5	**5.3**	---	**5.1**	---	---	---	---	---	---	---	---	---	---	
I-12-0.5	10/15/2016	0.5	**1.0J**	---	**2.6**	---	---	---	---	---	---	---	---	---	---	
I-12-2.5	10/15/2016	2.5	**0.77J**	---	**2.7**	---	---	---	---	---	---	---	---	---	---	
Composite A8	N/A	0.5	**---**	---	**---**	---	---	ND<2.0	ND<2.0	ND<2.0	ND<1.0	ND<8.5	ND<2.0	ND<1.0	ND<16	Composite of I-11-0.5 and I-12-0.5
Area 3 - Athletic Field and Bleachers																
B-13-0.5	10/9/2016	0.5	**41**	---	**96**	**6.1**	**0.029 J**	---	---	---	---	---	---	---	---	
B-13-2.5	10/9/2016	2.5	**2.4**	---	**16**	---	---	---	---	---	---	---	---	---	---	
B-13-2.5 DUP	10/9/2016	2.5	**4.9**	---	**19**	---	---	---	---	---	---	---	---	---	---	
B-13a-0.5	11/22/2016	0.5	**17**	---	**96**	**6.3**	**0.11 J**	---	---	---	---	---	---	---	---	
B-13a-2.5	11/22/2016	2.5	**12**	---	**95**	**6.8**	**0.050**	---	---	---	---	---	---	---	---	
B-13a-3.5	3/25/2017	3.5	---	---	**82**	**2.6**	---	---	---	---	---	---	---	---	---	
B-13b-0.5	11/22/2016	0.5	**14**	---	**27**	---	---	---	---	---	---	---	---	---	---	
B-13b-2.5	11/22/2016	2.5	**7.5**	---	---	---	---	---	---	---	---	---	---	---	---	
B-13c-0.5	11/22/2016	0.5	**7.8**	---	**99**	**3.6**	---	---	---	---	---	---	---	---	---	
B-13c-2.5	11/22/2016	2.5	---	---	**8.8**	---	---	---	---	---	---	---	---	---	---	
B-13d-0.5	11/22/2016	0.5	**1.9**	---	**17**	---	---	---	---	---	---	---	---	---	---	
B-13d-2.5	11/22/2016	2.5	**1.2**	---	---	---	---	---	---	---	---	---	---	---	---	
B-14-0.5	10/9/2016	0.5	**19**	---	**62**	---	---	---	---	---	---	---	---	---	---	
B-14-2.5	10/9/2016	2.5	**2.9**	---	**58**	---	---	---	---	---	---	---	---	---	---	
B-14a-0.5	11/22/2016	0.5	**12**	---	---	---	---	---	---	---	---	---	---	---	---	
B-14a-0.5 DUP	11/22/2016	0.5	**15**	---	---	---	---	---	---	---	---	---	---	---	---	
B-14a-2.5	11/22/2016	2.5	**6.1**	---	---	---	---	---	---	---	---	---	---	---	---	
B-14b-0.5	11/22/2016	0.5	**19**	---	---	---	---	---	---	---	---	---	---	---	---	
B-14b-2.5	11/22/2016	2.5	**4.5**	---	---	---	---	---	---	---	---	---	---	---	---	

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B-14c-0.5	11/22/2016	0.5	**3.5**	---	---	---	---	---	---	---	---	---	---	---	---	
B-15-0.5	10/9/2016	0.5	**16**	---	**69**	---	---	---	---	---	---	---	---	---	---	
B-15-2.5	10/9/2016	2.5	**4.0**	---	**33**	---	---	---	---	---	---	---	---	---	---	
B-15a-0.5	11/22/2016	0.5	**17**	---	---	---	---	---	---	---	---	---	---	---	---	
B-15a-2.5	11/22/2016	2.5	**5.6**	---	---	---	---	---	---	---	---	---	---	---	---	
B-15b-0.5	11/22/2016	0.5	**5.2**	---	**180**	**2.8**	---	---	---	---	---	---	---	---	---	
B-15b-2.5	11/22/2016	2.5	**---**	---	**32**	---	---	---	---	---	---	---	---	---	---	
B-15c-0.5	11/22/2016	0.5	**3.1**	---	---	---	---	---	---	---	---	---	---	---	---	
Composite B1	N/A	0.5	**---**	---	**---**	---	---	**0.70J**	ND<2.0	**0.16J**	ND<1.0	ND<8.5	ND<2.0	ND<1.0	**---**	Composite of B-13-0.5, B-14-0.5, and B-15-0.5
B-16-0.5	10/9/2016	0.5	**13**	---	**81**	**3.7**	---	---	---	---	---	---	---	---	---	
B-16-0.5 DUP	10/9/2016	0.5	**15**	---	**70**	---	---	---	---	---	---	---	---	---	---	
B-16-2.5	10/9/2016	2.5	**2.7**	---	**76**	---	---	---	---	---	---	---	---	---	---	
B-16a-0.5	11/22/2016	0.5	**15**	---	**49**	---	---	---	---	---	---	---	---	---	---	
B-16a-0.5 DUP	11/22/2016	0.5	**27**	---	**72**	---	---	---	---	---	---	---	---	---	---	
B-16a-2.5	11/22/2016	2.5	**22**	---	---	---	---	---	---	---	---	---	---	---	---	
B-16a-3.5	3/25/2017	3.5	**4.4**	---	---	---	---	---	---	---	---	---	---	---	---	
B-16a-3.5 DUP	3/25/2017	3.5	**4.2**	---	---	---	---	---	---	---	---	---	---	---	---	
B-16b-0.5	11/22/2016	0.5	**3.1**	---	**69**	---	---	---	---	---	---	---	---	---	---	
B-16c-0.5	11/22/2016	0.5	**4.7**	---	**13**	---	---	---	---	---	---	---	---	---	---	
B-16c-0.5 DUP	11/22/2016	0.5	**6.4**	---	**22**	---	---	---	---	---	---	---	---	---	---	
B-17-0.5	10/9/2016	0.5	**2.9**	---	**5.2**	---	---	---	---	---	---	---	---	---	---	
B-17-2.5	10/9/2016	2.5	**12**	---	**53**	---	---	---	---	---	---	---	---	---	---	
Composite B2	N/A	0.5	**---**	---	**---**	---	---	**0.23J**	ND<2.0	ND<2.0	ND<1.0	ND<8.5	ND<2.0	ND<1.0	**---**	Composite of B-16-0.5 and B-17-0.5
C-13-0.5	10/9/2016	0.5	**2.8**	**---**	**150**	**11**	**0.095 J**	---	---	---	---	---	---	---	---	
C-13-2.5	10/9/2016	2.5	**1.6**	---	**15**	---	---	---	---	---	---	---	---	---	---	
C-13b-0.5	11/22/2016	0.5	---	---	**37**	---	---	---	---	---	---	---	---	---	---	
C-13c-0.5	11/22/2016	0.5	---	---	**110**	**3.0**	---	---	---	---	---	---	---	---	---	
C-13c-2.5	11/22/2016	2.5	---	---	**26**	---	---	---	---	---	---	---	---	---	---	
C-13d-0.5	11/22/2016	0.5	---	---	**48**	---	---	---	---	---	---	---	---	---	---	
C-14-0.5	10/9/2016	0.5	**6.5**	---	**44**	---	---	---	---	---	---	---	---	---	---	
C-14-2.5	10/9/2016	2.5	**1.6**	---	**14**	---	---	---	---	---	---	---	---	---	---	
C-15-0.5	10/9/2016	0.5	**5.8**	---	**71**	---	---	---	---	---	---	---	---	---	---	
C-15-2.5	10/9/2016	2.5	**3.0**	---	**28**	---	---	---	---	---	---	---	---	---	---	
Composite B3	N/A	0.5	**---**	---	**---**	---	---	**0.42J**	**0.66J**	**0.63J**	ND<1.0	ND<8.5	ND<2.0	ND<1.0	**---**	Composite of C-13-0.5, C-14-0.5, and C-15-0.5
C-16-0.5	10/9/2016	0.5	**4.7**	---	**70**	---	---	---	---	---	---	---	---	---	---	
C-16-0.5 DUP	10/9/2016	0.5	**2.4**	---	**43**	---	---	---	---	---	---	---	---	---	---	
C-16-2.5	10/9/2016	2.5	**2.7**	---	**29**	---	---	---	---	---	---	---	---	---	---	
C-17-0.5	10/9/2016	0.5	**3.0**	---	**85**	**4.7**	---	---	---	---	---	---	---	---	---	
C-17-2.5	10/9/2016	2.5	**2.8**	---	**22**	---	---	---	---	---	---	---	---	---	---	
C-17a-0.5	11/22/2016	0.5	**---**	---	**55**	---	---	---	---	---	---	---	---	---	---	
C-17b-0.5	11/22/2016	0.5	**---**	---	**99**	**6.6**	**0.036 J**	---	---	---	---	---	---	---	---	
C-17b-2.5	11/22/2016	2.5	**---**	---	**65**	---	---	---	---	---	---	---	---	---	---	
C-17c-0.5	11/22/2016	0.5	**---**	---	**42**	---	---	---	---	---	---	---	---	---	---	
C-17d-0.5	11/22/2016	0.5	**---**	---	**51**	---	---	---	---	---	---	---	---	---	---	
C-18-0.5	3/25/2017	0.5	**---**	---	**53**	---	---	---	---	---	---	---	---	---	---	

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			TTLC	STLC	TTLC	STLC	TCLP	4,4'-DDD	4,4'-DDE	4,4'-DDT	alpha-Chlordane	Chlordane	Dieldrin	gamma-Chlordane		
		Units:	mg/kg	mg/L	mg/kg	mg/L	mg/L	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	
C-18-2.5	3/25/2017	2.5	---	---	6.9	---	---	---	---	---	---	---	---	---	---	
C-18a-0.5	3/25/2017	0.5	---	---	47	---	---	---	---	---	---	---	---	---	---	
C-18a-0.5 DUP	3/25/2017	0.5	---	---	42	---	---	---	---	---	---	---	---	---	---	
C-18a-2.5	3/25/2017	2.5	---	---	5.3	---	---	---	---	---	---	---	---	---	---	
C-18c-0.5	3/25/2017	0.5	---	---	17	---	---	---	---	---	---	---	---	---	---	
C-18c-2.5	3/25/2017	2.5	---	---	4.5	---	---	---	---	---	---	---	---	---	---	
Composite B4	N/A	0.5	---	---	---	---	---	0.34J	0.27J	0.33J	ND<1.0	ND<8.5	ND<2.0	ND<1.0	---	Composite of C-16-0.5 and C-17-0.5
D-13-0.5	10/8/2016	0.5	2.6	---	43	---	---	---	---	---	---	---	---	---	---	
D-13-2.5	10/8/2016	2.5	1.8	---	18	---	---	---	---	---	---	---	---	---	---	
D-14-0.5	10/9/2016	0.5	3.8	---	50	---	---	---	---	---	---	---	---	---	---	
D-14-2.5	10/9/2016	2.5	3.7	---	16	---	---	---	---	---	---	---	---	---	---	
D-14-2.5 DUP	10/9/2016	2.5	2.7	---	1.9	---	---	---	---	---	---	---	---	---	---	
D-15-0.5	10/9/2016	0.5	2.7	---	14	---	---	---	---	---	---	---	---	---	---	
D-15-2.5	10/9/2016	2.5	2.1	---	29	---	---	---	---	---	---	---	---	---	---	
Composite B5	N/A	0.5	---	---	---	---	---	0.34J	0.79J	0.45J	ND<1.0	ND<8.5	ND<2.0	ND<1.0	---	Composite of D-13-0.5, D-14-0.5, and D-15-0.5
D-16-0.5	10/9/2016	0.5	4.8	---	34	---	---	---	---	---	---	---	---	---	---	
D-16-2.5	10/9/2016	2.5	1.9	---	33	---	---	---	---	---	---	---	---	---	---	
D-17-0.5	10/9/2016	0.5	3.9	---	76	---	---	---	---	---	---	---	---	---	---	
D-17-2.5	10/9/2016	2.5	2.8	---	45	---	---	---	---	---	---	---	---	---	---	
Composite B6	N/A	0.5	---	---	---	---	---	0.35J	0.88J	0.51J	ND<1.0	3.5J	ND<2.0	ND<1.0	---	Composite of D-16-0.5 and D-17-0.5
E-13-0.5	10/8/2016	0.5	1.7	---	40	---	---	---	---	---	---	---	---	---	---	
E-13-2.5	10/8/2016	2.5	0.88J	---	3.4	---	---	---	---	---	---	---	---	---	---	
E-14-0.5	10/9/2016	0.5	3.5	---	27	---	---	---	---	---	---	---	---	---	---	
E-14-2.5	10/9/2016	2.5	3.0	---	14	---	---	---	---	---	---	---	---	---	---	
E-14-2.5 DUP	10/9/2016	2.5	3.5	---	15	---	---	---	---	---	---	---	---	---	---	
E-15-0.5	10/9/2016	0.5	3.1	---	20	---	---	---	---	---	---	---	---	---	---	
E-15-2.5	10/9/2016	2.5	2.2	---	8.6	---	---	---	---	---	---	---	---	---	---	
Composite B7	N/A	0.5	---	---	---	---	---	ND<2.0	0.91J	ND<2.0	ND<1.0	ND<8.5	ND<2.0	ND<1.0	---	Composite of E-13-0.5, E-14-0.5, and E-15-0.5
E-16-0.5	10/9/2016	0.5	4.3	---	37	---	---	---	---	---	---	---	---	---	---	
E-16-2.5	10/9/2016	2.5	0.93J	---	49	---	---	---	---	---	---	---	---	---	---	
E-17-0.5	10/9/2016	0.5	4.7	---	68	---	---	---	---	---	---	---	---	---	---	
E-17-2.5	10/9/2016	2.5	1.3	---	11	---	---	---	---	---	---	---	---	---	---	
Composite B8	N/A	0.5	---	---	---	---	---	ND<2.0	0.83J	0.28J	ND<1.0	3.1J	ND<2.0	ND<1.0	---	Composite of E-16-0.5 and E-17-0.5
F-13-0.5	10/8/2016	0.5	1.3	---	12	---	---	---	---	---	---	---	---	---	---	
F-13-2.5	10/8/2016	2.5	2.2	---	30	---	---	---	---	---	---	---	---	---	---	
F-14-0.5	10/9/2016	0.5	4.2	---	48	---	---	---	---	---	---	---	---	---	---	
F-14-0.5 DUP	10/9/2016	0.5	2.6	---	42	---	---	---	---	---	---	---	---	---	---	
F-14-2.5	10/9/2016	2.5	2.0	---	8.8	---	---	---	---	---	---	---	---	---	---	
F-15-0.5	10/9/2016	0.5	4.5	---	28	---	---	---	---	---	---	---	---	---	---	
F-15-2.5	10/9/2016	2.5	1.5	---	16	---	---	---	---	---	---	---	---	---	---	
Composite B9	N/A	0.5	---	---	---	---	---	ND<2.0	1.2J	0.25J	ND<1.0	3.1J	ND<2.0	ND<1.0	---	Composite of F-13-0.5, F-14-0.5, and F-15-0.5
F-16-0.5	10/9/2016	0.5	2.9	---	16	---	---	---	---	---	---	---	---	---	---	
F-16-2.5	10/9/2016	2.5	1.7	---	42	---	---	---	---	---	---	---	---	---	---	

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		Units:	mg/kg	mg/L	mg/kg	mg/L	mg/L	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	
F-17-0.5	10/9/2016	0.5	**3.0**	---	**29**	---	---	---	---	---	---	---	---	---	---	
F-17-2.5	10/9/2016	2.5	**2.1**	---	**55**	---	---	---	---	---	---	---	---	---	---	
Composite B10	N/A	0.5	**---**	---	**---**	---	---	ND<2.0	**2.0**	**0.60J**	**0.53J**	**5.1J**	ND<2.0	**0.23J**	---	Composite of F-16-0.5 and F-17-0.5
Composite B10 DUP	N/A	0.5	**---**	---	**---**	---	---	ND<2.0	**1.1J**	**0.34J**	ND<1.0	**1.6J**	ND<2.0	ND<1.0	---	Composite of F-16-0.5 and F-17-0.5
G-13-0.5	10/8/2016	0.5	**1.6**	---	**10**	---	---	---	---	---	---	---	---	---	---	
G-13-2.5	10/8/2016	2.5	**1.7**	---	**37**	---	---	---	---	---	---	---	---	---	---	
G-13-2.5 DUP	10/8/2016	2.5	**1.6**	---	**4.0**	---	---	---	---	---	---	---	---	---	---	
G-14-0.5	10/9/2016	0.5	**3.4**	---	**29**	---	---	---	---	---	---	---	---	---	---	
G-14-2.5	10/9/2016	2.5	ND<1.0	---	**2.2**	---	---	---	---	---	---	---	---	---	---	
G-15-0.5	10/9/2016	0.5	**3.9**	---	**31**	---	---	---	---	---	---	---	---	---	---	
G-15-2.5	10/9/2016	2.5	**1.1**	---	**8.9**	---	---	---	---	---	---	---	---	---	---	
Composite B11	N/A	0.5	**---**	---	**---**	---	---	ND<2.0	**1.3J**	**0.50J**	**0.24J**	**4.2J**	ND<2.0	ND<1.0	**---**	Composite of G-13-0.5, G-14-0.5, and G-15-0.5
G-16-0.5	10/9/2016	0.5	**4.8**	---	**26**	---	---	---	---	---	---	---	---	---	---	
G-16-2.5	10/9/2016	2.5	**1.2**	---	**6.0**	---	---	---	---	---	---	---	---	---	---	
G-17-0.5	10/9/2016	0.5	**3.8**	---	**48**	---	---	---	---	---	---	---	---	---	---	
G-17-2.5	10/9/2016	2.5	**1.6**	---	**3.4**	---	---	---	---	---	---	---	---	---	---	
Composite B12	N/A	0.5	**---**	---	**---**	---	---	ND<2.0	**1.7J**	ND<2.0	**0.64J**	**4.1J**	ND<2.0	ND<1.0	---	Composite of G-16-0.5 and G-17-0.5
H-13-0.5	10/8/2016	0.5	**3.7**	---	**48**	---	---	---	---	---	---	---	---	---	---	
H-13-2.5	10/8/2016	2.5	**1.5**	---	**2.7**	---	---	---	---	---	---	---	---	---	---	
H-14-0.5	10/9/2016	0.5	ND<5.0	---	**28**	---	---	---	---	---	---	---	---	---	---	
H-14-2.5	10/9/2016	2.5	**1.6**	---	**4.3**	---	---	---	---	---	---	---	---	---	---	
H-15-0.5	10/9/2016	0.5	**4.3**	---	**27**	---	---	---	---	---	---	---	---	---	---	
H-15-2.5	10/9/2016	2.5	**1.4**	**---**	**6.0**	---	---	---	---	---	---	---	---	---	---	
Composite B13	N/A	0.5	**---**	**---**	**---**	---	---	ND<2.0	**1.1J**	**0.41J**	**0.32J**	**2.9J**	ND<2.0	ND<1.0	**---**	Composite of H-13-0.5, H-14-0.5, and H-15-0.5
H-16-0.5	10/9/2016	0.5	**4.7**	**---**	**33**	---	---	---	---	---	---	---	---	---	---	
H-16-2.5	10/9/2016	2.5	**2.4**	**---**	**20**	---	---	---	---	---	---	---	---	---	---	
H-17-0.5	10/9/2016	0.5	**7.3**	**---**	**60**	---	---	---	---	---	---	---	---	---	---	
H-17-0.5 DUP	10/9/2016	0.5	**3.9**	**---**	**65**	---	---	---	---	---	---	---	---	---	---	
H-17-2.5	10/9/2016	2.5	**1.9**	**---**	**3.6**	---	---	---	---	---	---	---	---	---	---	
Composite B14	N/A	0.5	**---**	**---**	**---**	---	---	ND<2.0	**0.75J**	**0.28J**	ND<1.0	**2.1J**	ND<2.0	ND<1.0	---	Composite of H-16-0.5 and H-17-0.5
I-13-0.5	10/8/2016	0.5	**2.5**	**---**	**5.9**	---	---	---	---	---	---	---	---	---	---	
I-13-2.5	10/8/2016	2.5	**1.3**	**---**	**1.6**	---	---	---	---	---	---	---	---	---	---	
I-14-0.5	10/9/2016	0.5	**3.5**	**---**	**49**	---	---	---	---	---	---	---	---	---	---	
I-14-2.5	10/9/2016	2.5	**2.3**	**---**	**6.1**	---	---	---	---	---	---	---	---	---	---	
I-15-0.5	10/9/2016	0.5	**4.7**	**---**	**43**	---	---	---	---	---	---	---	---	---	---	
I-15-2.5	10/9/2016	2.5	**3.5**	**---**	**53**	---	---	---	---	---	---	---	---	---	---	
Composite B15	N/A	0.5	**---**	**---**	**---**	---	---	ND<2.0	**0.28J**	**0.28J**	ND<1.0	ND<8.5	ND<2.0	ND<1.0	(1)	Composite of I-13-0.5, I-14-0.5, and I-15-0.5
I-16-0.5	10/9/2016	0.5	**2.9**	**---**	**13**	---	---	---	---	---	---	---	---	---	---	
I-16-2.5	10/9/2016	2.5	**4.6**	**---**	**35**	---	---	---	---	---	---	---	---	---	---	
I-17-0.5	10/9/2016	0.5	**8.7**	**---**	**79**	---	---	---	---	---	---	---	---	---	---	
I-17-2.5	10/9/2016	2.5	**1.8**	**---**	**2.4**	---	---	---	---	---	---	---	---	---	---	
Composite B16	N/A	0.5	**---**	**---**	**---**	---	---	ND<2.0	**0.58J**	**0.21J**	**0.34J**	**2.7J**	ND<2.0	ND<1.0	---	Composite of I-16-0.5 and I-17-0.5

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		Units:	mg/kg	mg/L	mg/kg	mg/L	mg/L	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	
J-14-0.5	10/9/2016	0.5	**4.3**	**---**	**43**	---	---	---	---	---	---	---	---	---	---	
J-14-2.5	10/9/2016	2.5	**1.8**	**---**	**77**	---	---	---	---	---	---	---	---	---	---	
J-15-0.5	10/9/2016	0.5	**4.6**	**---**	**64**	---	---	---	---	---	---	---	---	---	---	
J-15-2.5	10/9/2016	2.5	**1.2**	**---**	**1.7**	---	---	---	---	---	---	---	---	---	---	
J-16-0.5	10/9/2016	0.5	**3.8**	**---**	**68**	---	---	---	---	---	---	---	---	---	---	
J-16-2.5	10/9/2016	2.5	**2.7**	**---**	**20**	---	---	---	---	---	---	---	---	---	---	
J-17-0.5	10/9/2016	0.5	**4.8**	**---**	**59**	---	---	---	---	---	---	---	---	---	---	
J-17-2.5	10/9/2016	2.5	**2.0**	**---**	**3.8**	---	---	---	---	---	---	---	---	---	---	
Composite B17	N/A	0.5	**---**	**---**	**---**	---	---	ND<2.0	ND<2.0	ND<2.0	ND<1.0	ND<8.5	ND<2.0	ND<1.0	---	Composite of J-14-0.5, J-15-0.5, J-16-0.5, and J-17-0.5
K-14-0.5	10/9/2016	0.5	**3.4**	**---**	**55**	---	---	---	---	---	---	---	---	---	---	
K-14-2.5	10/9/2016	2.5	**1.0**	**---**	**5.6**	---	---	---	---	---	---	---	---	---	---	
K-15-0.5	10/9/2016	0.5	**2.3**	**---**	**47**	---	---	---	---	---	---	---	---	---	---	
K-15-2.5	10/9/2016	2.5	**0.84J**	**---**	**2.2**	---	---	---	---	---	---	---	---	---	---	
K-16-0.5	10/9/2016	0.5	**1.6**	**---**	**9.6**	---	---	---	---	---	---	---	---	---	---	
K-16-2.5	10/9/2016	2.5	**1.8**	**---**	**13**	---	---	---	---	---	---	---	---	---	---	
K-16-2.5 DUP	10/9/2016	2.5	**2.5**	**---**	**25**	---	---	---	---	---	---	---	---	---	---	
K-17-0.5	10/15/2016	0.5	**6.3**	**---**	**9.7**	---	---	---	---	---	---	---	---	---	---	
K-17-0.5 DUP	10/15/2016	0.5	**3.4**	**---**	**8.2**	---	---	---	---	---	---	---	---	---	---	
K-17-2.5	10/15/2016	2.5	**1.2**	**---**	**3.4**	---	---	---	---	---	---	---	---	---	---	
Composite B18	N/A	0.5	**---**	**---**	**---**	---	---	ND<2.0	ND<2.0	ND<2.0	ND<1.0	ND<8.5	ND<2.0	ND<1.0	---	Composite of K-14-0.5, K-15-0.5, K-16-0.5, and K-17-0.5
Area 5 - Auditorium and Lunch Pavilion																
						---	---									
MB-1-0.5	10/15/2016	0.5	**6.9**	**---**	**24**	---	---	---	---	---	---	---	---	---	---	
MB-1-2.5	10/15/2016	2.5	**0.96J**	**---**	**3.0**	---	---	---	---	---	---	---	---	---	---	
MB-2-0.5	10/15/2016	0.5	**8.1**	**---**	**8.1**	---	---	---	---	---	---	---	---	---	---	
MB-2-2.5	10/15/2016	2.5	**4.9**	**---**	**4.9**	---	---	---	---	---	---	---	---	---	---	
MB-2-2.5 DUP	10/15/2016	2.5	**7.6**	**---**	**5.0**	---	---	---	---	---	---	---	---	---	---	
MB-3-0.5	10/16/2016	0.5	**4.4**	**---**	**15**	---	---	---	---	---	---	---	---	---	---	
MB-3-2.5	10/16/2016	2.5	**3.1**	**---**	**7.2**	---	---	---	---	---	---	---	---	---	---	
Composite C1	N/A	0.5	**---**	**---**	**---**	---	---	ND<2.0	ND<2.0	ND<2.0	ND<1.0	ND<8.5	ND<2.0	ND<1.0	---	Composite of MB-1-0.5, MB-2-0.5, MB-3-0.5
MB-4-0.5	10/15/2016	0.5	**6.1**	**---**	**18**	---	---	---	---	---	---	---	---	---	---	
MB-4-2.5	10/15/2016	2.5	**4.2**	**---**	**18**	---	---	---	---	---	---	---	---	---	---	
MB-5-0.5	10/15/2016	0.5	**3.9**	**---**	**24**	---	---	---	---	---	---	---	---	---	---	
MB-5-0.5 DUP	10/15/2016	0.5	**4.3**	**---**	**11**	---	---	---	---	---	---	---	---	---	---	
MB-5-2.5	10/15/2016	2.5	**4.6**	**---**	**5.2**	---	---	---	---	---	---	---	---	---	---	
MB-6-0.5	10/16/2016	0.5	**3.5**	**---**	**41**	---	---	---	---	---	---	---	---	---	---	
MB-6-0.5 DUP	10/16/2016	0.5	**3.5**	**---**	**89**	**2.5**	---	---	---	---	---	---	---	---	---	
MB-6-2.5	10/16/2016	2.5	**2.4**	**---**	**27**	---	---	---	---	---	---	---	---	---	---	
MB-6a-0.5	11/21/2016	0.5	**---**	**---**	**7.7**	---	---	---	---	---	---	---	---	---	---	
MB-6c-0.5	11/21/2016	0.5	**---**	**---**	**8.9**	---	---	---	---	---	---	---	---	---	---	
MB-6d-0.5	11/21/2016	0.5	**---**	**---**	**7.8**	---	---	---	---	---	---	---	---	---	---	
Composite C2	N/A	0.5	**---**	**---**	**---**	---	---	ND<2.0	**1.2J**	ND<2.0	**0.48J**	**5.2J**	ND<2.0	ND<1.0	---	Composite of MB-4-0.5, MB-5-0.5, MB-6-0.5
Composite C2 DUP	N/A	0.5	**---**	**---**	**---**	---	---	ND<2.0	**0.43J**	ND<2.0	ND<1.0	**1.1J**	ND<2.0	ND<1.0	---	Composite of MB-4-0.5, MB-5-0.5, MB-6-0.5

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		Units:	mg/kg	mg/L	mg/kg	mg/L	mg/L	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	
AUD-1-0.5	10/16/2016	0.5	**3.9**	**---**	**24**	---	---	---	---	---	---	---	---	---	---	
AUD-1-2.5	10/16/2016	2.5	**0.98J**	**---**	**5.1**	---	---	---	---	---	---	---	---	---	---	
AUD-2-0.5	10/16/2016	0.5	ND<2.0	**---**	**4.4**	---	---	---	---	---	---	---	---	---	---	
AUD-2-0.5 DUP	10/16/2016	0.5	**6.3**	**---**	**29**	---	---	---	---	---	---	---	---	---	---	
AUD-2-2.5	10/16/2016	2.5	**4.1**	**---**	**10**	---	---	---	---	---	---	---	---	---	---	
AUD-3-0.5	10/16/2016	0.5	**3.5**	**---**	**110**	**6.4**	ND<0.25	---	---	---	---	---	---	---	---	
AUD-3-2.5	10/16/2016	2.5	**2.4**	**---**	**8.5**	---	---	---	---	---	---	---	---	---	---	
AUD-3a-0.5	11/21/2016	0.5	**---**	**---**	**4300**	**74**	**1.7**	---	---	---	---	---	---	---	---	
AUD-3a-2.5	11/21/2016	2.5	**---**	**---**	**53**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	---	---	
AUD-3a1-0.5	3/25/2017	0.5	**---**	**---**	**110**	**5.6**	**0.17 J**	**---**	**---**	**---**	**---**	**---**	**---**	---	---	
AUD-3a1-0.5 DUP	3/25/2017	0.5	**---**	**---**	**110**	**5.7**	**0.16 J**	**---**	**---**	**---**	**---**	**---**	**---**	---	---	
AUD-3a1-2.5	3/25/2017	2.5	**---**	**---**	**9.7**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	---	---	
AUD-3b-0.5	11/21/2016	0.5	**---**	**---**	**140**	**10**	ND<0.25	---	---	---	---	---	---	---	---	
AUD-3b-2.5	11/21/2016	2.5	**---**	**---**	**7.7**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	---	---	
AUD-3b1-0.5	3/25/2017	0.5	**---**	**---**	**22**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	---	---	
AUD-3b1-2.5	3/25/2017	2.5	**---**	**---**	**3.2**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	---	---	
AUD-3c-0.25	11/21/2016	0.25	**---**	**---**	**500**	**13**	**0.015 J**	---	---	---	---	---	---	---	---	
AUD-3c-0.5	11/21/2016	0.5	**---**	**---**	**700**	**22**	**0.28**	---	---	---	---	---	---	---	---	
AUD-3c-2.5	11/21/2016	2.5	**---**	**---**	**42**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	---	---	
AUD-3c1-0.5	3/25/2017	0.5	**---**	**---**	**100**	**4.3**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	---	---	
AUD-3c1-2.5	3/25/2017	2.5	**---**	**---**	**43**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	---	---	
AUD-4-0.25	11/21/2016	0.25	**---**	**---**	**29**	---	---	---	---	---	---	---	---	---	---	
AUD-4-0.25 DUP	11/21/2016	0.25	**---**	**---**	**20**	---	---	---	---	---	---	---	---	---	---	
AUD-4-0.5	10/16/2016	0.5	**8.8**	**---**	**390**	**29**	**0.41**	---	---	---	---	---	---	---	---	
AUD-4-2.5	10/16/2016	2.5	**3.0**	**---**	**12**	---	---	---	---	---	---	---	---	---	---	
AUD-4b-0.25	11/21/2016	0.25	**---**	**---**	**21**	---	---	---	---	---	---	---	---	---	---	
AUD-4b-0.5	11/21/2016	0.5	**---**	**---**	**9.8**	---	---	---	---	---	---	---	---	---	---	
AUD-4c-0.25	11/21/2016	0.25	**---**	**---**	**49**	---	---	---	---	---	---	---	---	---	---	
AUD-4c-0.5	11/21/2016	0.5	**---**	**---**	**460**	ND<1.0	---	---	---	---	---	---	---	---	---	
AUD-4c-2.5	11/21/2016	2.5	**---**	**---**	**18**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	---	---	
AUD-4c1-0.5	3/25/2017	0.5	**---**	**---**	**11**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	---	---	
AUD-4c1-2.5	3/25/2017	2.5	**---**	**---**	**7.4**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	---	---	
Composite C3	N/A	0.5	**---**	**---**	**---**	---	--	**0.22J**	**1.1J**	**0.50J**	**1.2**	**6.8J**	**1.7J**	**0.71J**	(2)	Composite of AUD-1-0.5, AUD-2-0.5, AUD-3-0.5, and AUD-4-0.5
AUD-5-0.25	11/21/2016	0.25	**---**	**---**	**130**	**17**	**0.040 J**	---	---	---	---	---	---	---	---	
AUD-5-0.5	10/16/2016	0.5	ND<5.0	**---**	**620**	**24**	**0.59**	---	---	---	---	---	---	---	---	
AUD-5-2.5	10/16/2016	2.5	**3.2**	**---**	**43**	---	---	---	---	---	---	---	---	---	---	
AUD-5b-0.25	11/21/2016	0.5	**---**	**---**	**13**	---	---	---	---	---	---	---	---	---	---	
AUD-5b-0.5	11/21/2016	0.5	**---**	**---**	**240**	**9.7**	ND<0.25	---	---	---	---	---	---	---	---	
AUD-5b-2.5	11/21/2016	2.5	**---**	**---**	**28**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	---	---	
AUD-5c-0.25	11/21/2016	0.25	**---**	**---**	**110**	**6.0**	ND<0.25	---	---	---	---	---	---	---	---	
AUD-5c-0.5	11/21/2016	0.5	**---**	**---**	**13**	---	---	---	---	---	---	---	---	---	---	
AUD-6-0.25	11/21/2016	0.25	**---**	**---**	**160**	**7.8**	**0.11 J**	---	---	---	---	---	---	---	---	
AUD-6-0.5	10/16/2016	0.5	**5.2**	**---**	**670**	**26**	**1.5**	---	---	---	---	---	---	---	---	
AUD-6-2.5	10/16/2016	2.5	**3.4**	**---**	**19**	---	---	---	---	---	---	---	---	---	---	
AUD-6b-0.25	11/21/2016	0.25	**--**	**---**	**41**	---	---	---	---	---	---	---	---	---	---	
AUD-6b-0.5	11/21/2016	0.5	**--**	**---**	**160**	**13**	ND<0.25	---	---	---	---	---	---	---	---	

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		Units:	mg/kg	mg/L	mg/kg	mg/L	mg/L	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	
AUD-6b-2.5	11/21/2016	2.5	---	---	**2.5**	---	---	---	---	---	---	---	---	---	---	
AUD-6c-0.25	11/21/2016	0.25	--	---	**110**	**3.9**	---	---	---	---	---	---	---	---	---	
AUD-6c-0.25 DUP	11/21/2016	0.25	--	---	**82**	**6.2**	ND<0.25	---	---	---	---	---	---	---	---	
AUD-6c-0.5	11/21/2016	0.5	--	---	**66**	---	---	---	---	---	---	---	---	---	---	
AUD-7-0.5	10/16/2016	0.5	**4.5**	---	**16**	---	---	---	---	---	---	---	---	---	---	
AUD-7-0.5 DUP	10/16/2016	0.5	**4.8**	---	**12**	---	---	---	---	---	---	---	---	---	---	
AUD-7-2.5	10/16/2016	2.5	**4.1**	---	**12**	---	---	---	---	---	---	---	---	---	---	
AUD-8-0.5	10/16/2016	0.5	**1.9**	---	**3.2**	---	---	---	---	---	---	---	---	---	---	
AUD-8-2.5	10/16/2016	2.5	**2.8**	---	**2.3**	---	---	---	---	---	---	---	---	---	---	
AUD-8-2.5 DUP	10/16/2016	2.5	**3.1**	---	**2.4**	---	---	---	---	---	---	---	---	---	---	
Composite C4	N/A	0.5	---	---	---	---	---	ND<2.0	**1.3J**	**1.2J**	**3.0**	**22**	**7.3**	**1.7**	---	Composite of AUD-5-0.5, AUD-6-0.5, AUD-7-0.5, and AUD-8-0.5
AUD-9-0.5	10/16/2016	0.5	**3.8J**	---	**6.0**	---	---	---	---	---	---	---	---	---	---	
AUD-9-0.5 DUP	10/16/2016	0.5	**4.5J**	---	**5.9**	---	---	---	---	---	---	---	---	---	---	
AUD-9-2.5	10/16/2016	2.5	**2.5**	---	**1.3**	---	---	---	---	---	---	---	---	---	---	
AUD-10-0.5	10/16/2016	0.5	**8.4**	---	**19**	---	---	---	---	---	---	---	---	---	---	
AUD-10-2.5	10/16/2016	2.5	**2.2**	---	**9.2**	---	---	---	---	---	---	---	---	---	---	
AUD-11-0.5	10/16/2016	0.5	**3.5**	---	**17**	---	---	---	---	---	---	---	---	---	---	
AUD-11-2.5	10/16/2016	2.5	**1.7**	---	**3.8**	---	---	---	---	---	---	---	---	---	---	
AUD-12-0.5	10/16/2016	0.5	**3.5**	---	**25**	---	---	---	---	---	---	---	---	---	---	
AUD-12-2.5	10/16/2016	2.5	**1.8**	---	**8.1**	---	---	---	---	---	---	---	---	---	---	
Composite C5	N/A	0.5	---	---	---	---	---	**0.25J**	**0.59J**	ND<2.0	ND<1.0	ND<8.5	ND<2.0	ND<1.0	---	Composite of AUD-9-0.5, AUD-10-0.5, AUD-11-0.5, and AUD-12-0.5

UB-1-0.5	10/16/2016	0.5	**4.0J**	---	**6.1**	---	---	---	---	---	---	---	---	---	---	
UB-1-2.5	10/16/2016	2.5	**3.2**	---	**2.8**	---	---	---	---	---	---	---	---	---	---	
UB-2-0.5	10/16/2016	0.5	**5.9**	---	**8.6**	---	---	---	---	---	---	---	---	---	---	
UB-2-2.5	10/16/2016	2.5	**5.3**	---	**4.7**	---	---	---	---	---	---	---	---	---	---	
UB-3-0.5	10/16/2016	0.5	**6.5**	---	**26**	---	---	---	---	---	---	---	---	---	---	
UB-3-2.5	10/16/2016	2.5	**4.7**	---	**5.1**	---	---	---	---	---	---	---	---	---	---	
Composite C6	N/A	0.5	---	---	---	---	---	ND<2.0	ND<2.0	ND<2.0	ND<1.0	ND<8.5	ND<2.0	ND<1.0	ND<16	Composite of UB-1-0.5, UB-2-0.5, and UB-3-0.5
UB-4-0.5	10/16/2016	0.5	**3.1**	---	**6.9**	---	---	---	---	---	---	---	---	---	---	
UB-4-2.5	10/16/2016	2.5	**3.9**	---	**5.0**	---	---	---	---	---	---	---	---	---	---	
UB-5-0.5	10/16/2016	0.5	**6.7**	---	**9.8**	---	---	---	---	---	---	---	---	---	---	
UB-5-2.5	10/16/2016	2.5	**1.9**	---	**2.6**	---	---	---	---	---	---	---	---	---	---	
UB-5-2.5 DUP	10/16/2016	2.5	**2.4**	---	**2.4**	---	---	---	---	---	---	---	---	---	---	
UB-6-0.5	10/16/2016	0.5	**2.3**	---	**6.1**	---	---	---	---	---	---	---	---	---	---	
UB-6-0.5 DUP	10/16/2016	0.5	**2.0**	---	**5.9**	---	---	---	---	---	---	---	---	---	---	
UB-6-2.5	10/16/2016	2.5	**2.0**	---	**3.4**	---	---	---	---	---	---	---	---	---	---	
Composite C7	N/A	0.5	---	---	---	---	---	ND<2.0	ND<2.0	ND<2.0	ND<1.0	ND<8.5	ND<2.0	ND<1.0	---	Composite of UB-4-0.5, UB-5-0.5, and UB-6-0.5
HVAC-1-0.5	10/16/2016	0.5	**3.7**	---	**3.7**	---	---	---	---	---	---	---	---	---	---	
HVAC-1-2.5	10/16/2016	2.5	**2.8**	---	**2.7**	---	---	---	---	---	---	---	---	---	---	
HVAC-2-0.5	10/16/2016	0.5	**3.9**	---	**4.7**	---	---	---	---	---	---	---	---	---	---	
HVAC-2-2.5	10/16/2016	2.5	**3.4**	---	**3.1**	---	---	---	---	---	---	---	---	---	---	
HVAC-3-0.5	10/16/2016	0.5	**2.8**	---	**8.5**	---	---	---	---	---	---	---	---	---	---	
HVAC-3-2.5	10/16/2016	2.5	**2.5**	---	**6.8**	---	---	---	---	---	---	---	---	---	---	
Composite C8	N/A	0.5	---	---	---	---	---	---	---	---	---	---	---	---	ND<16	Composite of HVAC-1-0.5, HVAC-2-0.5, HVAC-3-0.5

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Composite C8 DUP	N/A	0.5	---	---	---	---	---	---	---	---	---	---	---	---	ND<16	Composite of HVAC-1-0.5, HVAC-2-0.5, HVAC-3-0.5
AA-653-1-0.5	10/15/2016	0.5	**3.5**	---	**21**	---	---	---	---	---	---	---	---	---	---	
AA-653-1-2.5	10/15/2016	2.5	**9.0**	---	**12**	---	---	---	---	---	---	---	---	---	---	
AA-653-2-0.5	10/16/2016	0.5	**2.1**	---	**23**	---	---	---	---	---	---	---	---	---	---	
AA-653-2-2.5	10/16/2016	2.5	**1.5**	---	**4.7**	---	---	---	---	---	---	---	---	---	---	
AA-653-3-0.5	10/16/2016	0.5	**10**	---	**17**	---	---	---	---	---	---	---	---	---	---	
AA-653-3-2.5	10/16/2016	2.5	**2.0**	---	**13**	---	---	---	---	---	---	---	---	---	---	
AA-653-3-2.5 DUP	10/16/2016	2.5	**2.9**	---	**9.8**	---	---	---	---	---	---	---	---	---	---	
AA-653-4-0.5	10/16/2016	0.5	ND<5.0	---	**26**	---	---	---	---	---	---	---	---	---	---	
AA-653-4-2.5	10/16/2016	2.5	**2.5**	---	**17**	---	---	---	---	---	---	---	---	---	---	
Composite C9	N/A	0.5	---	---	---	---	---	**1.1J**	**1.0J**	**2.3**	ND<1.0	**1.4J**	ND<2.0	ND<1.0	---	Composite of AA653-1-0.5, AA653-2-0.5, AA653-3-0.5, and AA653-4-0.5
AA-652-1-0.5	10/16/2016	0.5	**3.5**	---	**7.4**	---	---	---	---	---	---	---	---	---	---	
AA-652-1-2.5	10/16/2016	2.5	**1.9**	---	**6.2**	---	---	---	---	---	---	---	---	---	---	
AA-652-2-0.5	10/16/2016	0.5	**2.2**	---	**4.8**	---	---	---	---	---	---	---	---	---	---	
AA-652-2-2.5	10/16/2016	2.5	**1.6**	---	**4.9**	---	---	---	---	---	---	---	---	---	---	
AA-652-3-0.5	10/16/2016	0.5	**2.6**	---	**3.4**	---	---	---	---	---	---	---	---	---	---	
AA-652-3-0.5 DUP	10/16/2016	0.5	**2.8**	---	**13**	---	---	---	---	---	---	---	---	---	---	
AA-652-3-2.5	10/16/2016	2.5	**1.6**	---	**8.3**	---	---	---	---	---	---	---	---	---	---	
AA-652-4-0.5	10/16/2016	0.5	**2.2**	---	**3.2**	---	---	---	---	---	---	---	---	---	---	
AA-652-4-2.5	10/16/2016	2.5	**1.3**	---	**4.0**	---	---	---	---	---	---	---	---	---	---	
Composite C10	N/A	0.5	---	---	---	---	---	ND<2.0	ND<2.0	ND<2.0	ND<1.0	ND<8.5	ND<2.0	ND<1.0	---	Composite of AA652-1-0.5, AA652-2-0.5, AA652-3-0.5, and AA652-4-0.5
P-6-0.5	10/16/2016	0.5	**5.2**	---	**7.5**	---	---	---	---	---	---	---	---	---	---	
P-6-2.5	10/16/2016	2.5	**7.5**	---	**4.3**	---	---	---	---	---	---	---	---	---	---	
P-7-0.5	10/16/2016	0.5	ND<10	---	**13**	---	---	---	---	---	---	---	---	---	---	
P-7-2.5	10/16/2016	2.5	**2.9**	---	**7.3**	---	---	---	---	---	---	---	---	---	---	
Q-6-0.5	10/16/2016	0.5	**1.6**	---	**6.3**	---	---	---	---	---	---	---	---	---	---	
Q-6-0.5 DUP	10/16/2016	0.5	ND<20	---	**4.9J**	---	---	---	---	---	---	---	---	---	---	
Q-6-2.5	10/16/2016	2.5	**5.8**	---	**4.4**	---	---	---	---	---	---	---	---	---	---	
Q-7-0.5	10/16/2016	0.5	**4.6**	---	**9.1**	---	---	---	---	---	---	---	---	---	---	
Q-7-2.5	10/16/2016	2.5	**5.5**	---	**5.6**	---	---	---	---	---	---	---	---	---	---	
Composite C11	N/A	0.5	---	---	---	---	---	ND<2.0	ND<2.0	ND<2.0	ND<1.0	ND<8.5	ND<2.0	ND<1.0	---	Composite of P6-0.5, P7-0.5, Q6-0.5, and Q7-0.5
Q-4-0.5	10/16/2016	0.5	**1.8J**	---	**4.9**	---	---	---	---	---	---	---	---	---	---	
Q-4-2.5	10/16/2016	2.5	**7.8**	---	**8.2**	---	---	---	---	---	---	---	---	---	---	
Q4-2.5 DUP	10/16/2016	2.5	**6.5**	---	**11**	---	---	---	---	---	---	---	---	---	---	
R-4-0.5	10/16/2016	0.5	ND<20	---	**4.0J**	---	---	---	---	---	---	---	---	---	---	
R-4-2.5	10/16/2016	2.5	**5.3**	---	**6.3**	---	---	---	---	---	---	---	---	---	---	
S-4-0.5	10/16/2016	0.5	ND<5.0	---	**8.3**	---	---	---	---	---	---	---	---	---	---	
S-4-2.5	10/16/2016	2.5	**5.3**	---	**4.4**	---	---	---	---	---	---	---	---	---	---	
T4-0.5	10/16/2016	0.5	ND<20	---	**5.4J**	---	---	---	---	---	---	---	---	---	---	
T-4-0.5 DUP	10/16/2016	0.5	**1.2**	---	**3.4**	---	---	---	---	---	---	---	---	---	---	

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			Arsenic (As) EPA 6010B		Lead (Pb) EPA 6010B			Organochlorine Pesticides (OCPs) EPA 8081A							PCBs EPA 8082	
			TTLC	STLC	TTLC	STLC	TCLP	4,4'-DDD	4,4'-DDE	4,4'-DDT	alpha-Chlordane	Chlordane	Dieldrin	gamma-Chlordane		
		Units:	mg/kg	mg/L	mg/kg	mg/L	mg/L	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	
T-4-2.5	10/16/2016	2.5	**4.4**	---	**7.7**	---	---	---	---	---	---	---	---	---	---	
Composite C12	N/A	0.5	---	---	---	---	---	ND<2.0	ND<2.0	ND<2.0	ND<1.0	ND<8.5	ND<2.0	ND<1.0	---	Composite of Q4-0.5, R4-0.5, S4-0.5, and T4-0.5
Composite C12 DUP	N/A	0.5	---	---	---	---	---	ND<2.0	ND<2.0	ND<2.0	ND<1.0	ND<8.5	ND<2.0	ND<1.0	---	Composite of Q4-0.5, R4-0.5, S4-0.5, and T4-0.5
R-7-0.5	10/16/2016	0.5	**2.8**	---	**7.9**	---	---	---	---	---	---	---	---	---	---	
R-7-2.5	10/16/2016	2.5	**5.5**	---	**9.7**	---	---	---	---	---	---	---	---	---	---	
S-7-0.5	10/16/2016	0.5	**9.1**	---	**7.8**	---	---	---	---	---	---	---	---	---	---	
S-7-2.5	10/16/2016	2.5	**4.8**	---	**6.5**	---	---	---	---	---	---	---	---	---	---	
T-7-0.5	10/16/2016	0.5	ND<1.0	---	**4.9**	---	---	---	---	---	---	---	---	---	---	
T-7-2.5	10/16/2016	2.5	**2.9**	---	**17**	---	---	---	---	---	---	---	---	---	---	
Composite C13	N/A	0.5	---	---	---	---	---	ND<2.0	ND<2.0	ND<2.0	ND<1.0	ND<8.5	ND<2.0	ND<1.0	---	Composite of R7-0.5, S7-0.5, and T7-0.5
Area 6																
AA955-1-0.5	10/23/2016	0.5	**7.0**	---	**4.0**	---	---	---	---	---	---	---	---	---	---	
AA955-1-2.5	10/23/2016	2.5	**9.2**	---	**4.1**	---	---	---	---	---	---	---	---	---	---	
AA955-2-0.5	10/23/2016	0.5	**8.2**	---	**5.5**	---	---	---	---	---	---	---	---	---	---	
AA955-2-2.5	10/23/2016	2.5	**9.6**	---	**5.4**	---	---	---	---	---	---	---	---	---	---	
AA955-2-2.5 DUP	10/23/2016	2.5	**11**	---	**5.4**	---	---	---	---	---	---	---	---	---	---	
AA955-3-0.5	10/23/2016	0.5	**1.5**	---	**6.3**	---	---	---	---	---	---	---	---	---	---	
AA955-3-0.5 DUP	10/23/2016	0.5	**2.1**	---	**5.6**	---	---	---	---	---	---	---	---	---	---	
AA955-3-2.5	10/23/2016	2.5	**1.4**	---	**7.4**	---	---	---	---	---	---	---	---	---	---	
Composite F1	N/A	0.5	---	---	---	---	---	ND<20	ND<20	ND<20	ND<10	ND<85	ND<20	ND<10	ND<16	Composite of AA955-1-0.5, AA955-2-0.5, and AA955-3-0.5
AA955-4-0.5	10/23/2016	0.5	**1.2**	---	**3.2**	---	---	---	---	---	---	---	---	---	---	
AA955-4-2.5	10/23/2016	2.5	**1.1**	---	**33**	---	---	---	---	---	---	---	---	---	---	
AA955-5-0.5	10/23/2016	0.5	**2.2**	---	**3.8**	---	---	---	---	---	---	---	---	---	---	
AA955-5-2.5	10/23/2016	2.5	**0.82J**	---	**2.7**	---	---	---	---	---	---	---	---	---	---	
AA955-6-0.5	10/23/2016	0.5	**1.0**	---	**3.4**	---	---	---	---	---	---	---	---	---	---	
AA955-6-2.5	10/23/2016	2.5	ND<1.0	---	**2.1**	---	---	---	---	---	---	---	---	---	---	
Composite F2	N/A	0.5	---	---	---	---	---	ND<20	ND<20	ND<20	ND<10	ND<85	ND<20	ND<10	---	Composite of AA955-4-0.5, AA955-5-0.5, and AA955-6-0.5
AA2573-1-0.5	10/23/2016	0.5	**2.7**	---	**13**	---	---	---	---	---	---	---	---	---	---	
AA2573-1-2.5	10/23/2016	2.5	**2.8**	---	**16**	---	---	---	---	---	---	---	---	---	---	
AA2573-2-0.5	10/29/2016	0.5	**1.9**	---	**3.3**	---	---	---	---	---	---	---	---	---	---	
AA2573-2-0.5 DUP	10/29/2016	0.5	**2.1**	---	**3.5**	---	---	---	---	---	---	---	---	---	---	
AA2573-2-2.5	10/29/2016	2.5	**3.7**	---	**17**	---	---	---	---	---	---	---	---	---	---	
AA2573-3-0.5	10/23/2016	0.5	**1.5**	---	**3.9**	---	---	---	---	---	---	---	---	---	---	
AA2573-3-2.5	10/23/2016	2.5	**2.2**	---	**3.5**	---	---	---	---	---	---	---	---	---	---	
Composite F3	N/A	0.5	---	---	---	---	---	ND<2.0	**1.9J**	**1.9J**	ND<1.0	ND<8.5	**5.6**	ND<1.0	---	Composite of AA2573-1-0.5, AA2573-2-0.5, and AA2573-3-0.5
AA2573-4-0.5	10/23/2016	0.5	**5.2**	---	**6.5**	---	---	---	---	---	---	---	---	---	---	
AA2573-4-2.5	10/23/2016	2.5	**2.4**	---	**4.9**	---	---	---	---	---	---	---	---	---	---	
AA2573-5-0.5	10/23/2016	0.5	**6.2**	---	**13**	---	---	---	---	---	---	---	---	---	---	
AA2573-5-2.5	10/23/2016	2.5	**2.4**	---	**11**	---	---	---	---	---	---	---	---	---	---	
Composite F4	N/A	0.5	---	---	---	---	---	ND<2.0	ND<2.0	ND<2.0	ND<1.0	ND<8.5	**13**	ND<1.0	---	Composite of AA2573-4-0.5 and AA2573-5-0.5
AA1917-1-0.5	10/29/2016	0.5	**1.6**	---	**3.3**	---	---	---	---	---	---	---	---	---	---	

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		Units:	mg/kg	mg/L	mg/kg	mg/L	mg/L	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	
AA1917-1-2.5	10/29/2016	2.5	**1.5**	**---**	**16**	---	---	---	---	---	---	---	---	---	---	
AA1917-2-0.5	10/29/2016	0.5	**2.1**	**---**	**4.5**	---	---	---	---	---	---	---	---	---	---	
AA1917-2-2.5	10/29/2016	2.5	**1.5**	**---**	**9.1**	---	---	---	---	---	---	---	---	---	---	
AA1917-3-0.5	10/29/2016	0.5	**1.8**	**---**	**4.7**	---	---	---	---	---	---	---	---	---	---	
AA1917-3-2.5	10/29/2016	2.5	**1.8**	**---**	**6.1**	---	---	---	---	---	---	---	---	---	---	
AA1917-4-0.5	10/29/2016	0.5	**1.9**	**---**	**5.5**	---	---	---	---	---	---	---	---	---	---	
AA1917-4-2.5	10/29/2016	2.5	**2.5**	**---**	**220**	**0.52 J**	---	---	---	---	---	---	---	---	---	
AA1917-4-3.5	3/25/2017	3.5	---	---	**120**	**0.43 J**	---	---	---	---	---	---	---	---	---	
AA1917-4-3.5 DUP	3/25/2017	3.5	---	---	**12**	---	---	---	---	---	---	---	---	---	---	
AA1917-4b-0.5	11/22/2016	0.5	---	**---**	**3.8**	---	---	---	---	---	---	---	---	---	---	
AA1917-4b-2.5	11/22/2016	2.5	---	**---**	**6.5**	---	---	---	---	---	---	---	---	---	---	
AA1917-4b-3.5	11/22/2016	3.5	---	---	**18**	---	---	---	---	---	---	---	---	---	---	
AA1917-4c-2.5	11/22/2016	2.5	---	---	**3.0**	---	---	---	---	---	---	---	---	---	---	
AA1917-4c-2.5 DUP	11/22/2016	2.5	---	---	**2.3**	---	---	---	---	---	---	---	---	---	---	
AA1917-4c-3.5	11/22/2016	3.5	---	**---**	**3.9**	---	---	---	---	---	---	---	---	---	---	
AA1917-4d-0.5	11/22/2016	0.5	---	---	**5.4**	---	---	---	---	---	---	---	---	---	---	
AA1917-4d-2.5	11/22/2016	2.5	---	**---**	**8.7**	---	---	---	---	---	---	---	---	---	---	
AA1917-4d-2.5 DUP	11/22/2016	2.5	---	---	**7.5**	---	---	---	---	---	---	---	---	---	---	
AA1917-4d-3.5	11/22/2016	3.5	---	**---**	**6.9**	---	---	---	---	---	---	---	---	---	---	
Composite F5	N/A	0.5	**---**	---	**---**	---	---	ND<2.0	ND<2.0	ND<2.0	ND<1.0	ND<8.5	**2.8**	ND<1.0	**---**	Composite of AA1917-1-0.5, AA1917-2-0.5, AA1917-3-0.5, and AA1917-4-0.5
AA2685-1-0.5	10/29/2016	0.5	**5.5**	---	**27**	---	---	---	---	---	---	---	---	---	---	
AA2685-1-2.5	10/29/2016	2.5	**5.2**	**---**	**10**	---	---	---	---	---	---	---	---	---	---	
AA2685-2-0.5	10/29/2016	0.5	**9.5**	---	**9.2**	---	---	---	---	---	---	---	---	---	---	
AA2685-2-2.5	10/29/2016	2.5	**4.9**	**---**	**19**	---	---	---	---	---	---	---	---	---	---	
AA2685-3-0.5	10/29/2016	0.5	**2.2**	---	**14**	---	---	---	---	---	---	---	---	---	---	
AA2685-3-2.5	10/29/2016	2.5	**2.6**	**---**	**19**	---	---	---	---	---	---	---	---	---	---	
AA2685-4-0.5	10/29/2016	0.5	**4.2**	---	**7.7**	---	---	---	---	---	---	---	---	---	---	
AA2685-4-2.5	10/29/2016	2.5	**5.9**	---	**9.5**	---	---	---	---	---	---	---	---	---	---	
AA2685-4-2.5 DUP	10/29/2016	2.5	**6.0**	**---**	**10**	---	---	---	---	---	---	---	---	---	---	
Composite F6	N/A	0.5	**---**	---	**---**	---	---	ND<10	ND<10	**15**	**1.3J**	**18J**	**2.0J**	**2.0J**	**---**	Composite of AA2685-1-0.5, AA2685-2-0.5, AA2685-3-0.5, and AA2685-4-0.5
AA2684-1-0.5	10/29/2016	0.5	**2.0**	---	**11**	---	---	---	---	---	---	---	---	---	---	
AA2684-1-2.5	10/29/2016	2.5	**2.0**	**---**	**16**	---	---	---	---	---	---	---	---	---	---	
AA2684-2-0.5	10/29/2016	0.5	**18**	---	**19**	---	---	---	---	---	---	---	---	---	---	
AA2684-2-2.5	10/29/2016	2.5	**20**	**---**	**16**	---	---	---	---	---	---	---	---	---	---	
AA2684-2-3.5	3/25/2017	3.5	**19**	**---**	**---**	---	---	---	---	---	---	---	---	---	---	
AA2684-2-3.5 DUP	3/25/2017	3.5	**20**	**---**	**---**	---	---	---	---	---	---	---	---	---	---	
AA2684-3-0.5	10/29/2016	0.5	**6.7**	---	**20**	---	---	---	---	---	---	---	---	---	---	
AA2684-3-2.5	10/29/2016	2.5	**33**	**---**	**25**	---	---	---	---	---	---	---	---	---	---	
AA2684-3-3.5	3/25/2017	3.5	**15**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	
AA2684-4-0.5	10/29/2016	0.5	**6.8**	---	**16**	---	---	---	---	---	---	---	---	---	---	
AA2684-4-2.5	10/29/2016	2.5	**8.5**	---	**7.3**	---	---	---	---	---	---	---	---	---	---	
AA2684-5-0.5	12/21/2016	0.5	**2.7**	**---**	---	---	---	---	---	---	---	---	---	---	---	

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AA2684-5-2.5	12/21/2016	2.5	**1.9**	---	---	---	---	---	---	---	---	---	---	---	---	
AA2684-5-3.5	12/21/2016	3.5	**1.6**	---	---	---	---	---	---	---	---	---	---	---	---	
AA2684-6-0.5	12/21/2016	0.5	**27**	**---**	---	---	---	---	---	---	---	---	---	---	---	
AA2684-6-0.5 DUP	12/21/2016	0.5	**28**	---	---	---	---	---	---	---	---	---	---	---	---	
AA2684-6-2.5	12/21/2016	2.5	**28**	**---**	---	---	---	---	---	---	---	---	---	---	---	
AA2684-6-3.5	12/21/2016	3.5	**23**	---	---	---	---	---	---	---	---	---	---	---	---	
AA2684-6-4.5	3/25/2017	4.5	**4.7**	---	---	---	---	---	---	---	---	---	---	---	---	
AA2684-7-0.5	12/21/2016	0.5	**2.3**	**---**	---	---	---	---	---	---	---	---	---	---	---	
AA2684-7-2.5	12/21/2016	2.5	**1.4**	---	---	---	---	---	---	---	---	---	---	---	---	
AA2684-7-3.5	12/21/2016	3.5	**1.2**	---	---	---	---	---	---	---	---	---	---	---	---	
Composite F7	N/A	0.5	**---**	**---**	**---**	---	---	ND<10	ND<10	ND<10	ND<5.0	**5.1J**	ND<10	ND<5.0	**---**	Composite of AA2684-1-0.5, AA2684-2-0.5, AA2684-3-0.5, and AA2684-4-0.5
AA2543-1-0.5	10/29/2016	0.5	**3.9**	**---**	**7.4**	---	---	---	---	---	---	---	---	---	---	
AA2543-1-2.5	10/29/2016	2.5	**34**	---	**26**	---	---	---	---	---	---	---	---	---	---	
AA2543-1-3.5	3/25/2017	3.5	**23**	---	---	---	---	---	---	---	---	---	---	---	---	
AA2543-2-0.5	10/29/2016	0.5	**23**	**---**	**17**	---	---	---	---	---	---	---	---	---	---	
AA2543-2-2.5	10/29/2016	2.5	**25**	---	**17**	---	---	---	---	---	---	---	---	---	---	
AA2543-2-2.5 DUP	10/29/2016	2.5	**24**	**---**	**17**	---	---	---	---	---	---	---	---	---	---	
AA2543-2-3.5	3/25/2017	3.5	**7.2**	**---**	**---**	---	---	---	---	---	---	---	---	---	---	
AA2543-3-0.5	10/29/2016	0.5	**2.0**	---	**7.2**	---	---	---	---	---	---	---	---	---	---	
AA2543-3-2.5	10/29/2016	2.5	**4.2**	**---**	**18**	---	---	---	---	---	---	---	---	---	---	
Composite F8	N/A	0.5	**---**	---	**---**	---	---	ND<10	ND<10	ND<10	ND<5.0	**6.5J**	ND<10	ND<5.0	**---**	Composite of AA2543-1-0.5, AA2543-2-0.5, and AA2543-3-0.5
AA2543-4-0.5	10/29/2016	0.5	**6.2**	**---**	**12**	---	---	---	---	---	---	---	---	---	---	
AA2543-4-2.5	10/29/2016	2.5	**11**	---	**38**	---	---	---	---	---	---	---	---	---	---	
AA2543-5-0.5	10/29/2016	0.5	**25**	**---**	**16**	---	---	---	---	---	---	---	---	---	---	
AA2543-5-2.5	10/29/2016	2.5	**34**	---	**26**	---	---	---	---	---	---	---	---	---	---	
AA2543-5-3.5	3/26/2017	3.5	**27**	---	---	---	---	---	---	---	---	---	---	---	---	
AA2543-5-3.5 DUP	3/26/2017	3.5	**30**	---	---	---	---	---	---	---	---	---	---	---	---	
AA2543-6-0.5	10/29/2016	0.5	**39**	**---**	**34**	---	---	---	---	---	---	---	---	---	---	
AA2543-6-2.5	10/29/2016	2.5	**19**	---	**35**	---	---	---	---	---	---	---	---	---	---	
AA2543-6-3.5	3/26/2017	3.5	**1.2**	---	---	---	---	---	---	---	---	---	---	---	---	
AA2543-7-0.5	12/21/2016	0.5	**2.7**	**---**	**29**	---	---	---	---	---	---	---	---	---	---	
AA2543-7-2.5	12/21/2016	2.5	**1.5**	---	**4.0**	---	---	---	---	---	---	---	---	---	---	
AA2543-7-2.5 DUP	12/21/2016	2.5	**1.6**	**---**	---	---	---	---	---	---	---	---	---	---	---	
AA2543-7-3.5	12/21/2016	3.5	**2.9**	---	---	---	---	---	---	---	---	---	---	---	---	
AA2543-8-0.5	12/21/2016	0.5	**2.8**	**---**	**39**	---	---	---	---	---	---	---	---	---	---	
AA2543-8-2.5	12/21/2016	2.5	**2.0**	---	**8.4**	---	---	---	---	---	---	---	---	---	---	
AA2543-8-3.5	12/21/2016	3.5	**1.5**	**---**	---	---	---	---	---	---	---	---	---	---	---	
Composite F9	N/A	0.5	**---**	---	**---**	---	---	ND<10	ND<10	ND<10	ND<5.0	ND<42	ND<10	ND<5.0	**---**	Composite of AA2543-4-0.5, AA2543-5-0.5, and AA2543-6-0.5
AA2038-1-0.5	10/30/2016	0.5	**23**	**---**	**11**	---	---	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	
AA2038-1-2.5	10/30/2016	2.5	**23**	---	**7.9**	---	---	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	
AA2038-1-3.5	3/26/2017	3.5	**19**	---	---	---	---	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	
AA2038-2-0.5	10/30/2016	0.5	**14**	**---**	**13**	---	---	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	
AA2038-2-2.5	10/30/2016	2.5	**31**	---	**15**	---	---	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	

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		Units:	mg/kg	mg/L	mg/kg	mg/L	mg/L	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	
AA2038-2-3.5	3/26/2017	3.5	**24**	---	---	---	---	---	---	---	---	---	---	---	---	
AA2038-3-0.5	10/30/2016	0.5	**13**	---	**8.0**	---	---	---	---	---	---	---	---	---	---	
AA2038-3-2.5	10/30/2016	2.5	**27**	---	**10**	---	---	---	---	---	---	---	---	---	---	
AA2038-3-3.5	3/26/2017	3.5	**12**	---	---	---	---	---	---	---	---	---	---	---	---	
AA2038-4-0.5	10/30/2016	0.5	**16**	---	**13**	---	---	---	---	---	---	---	---	---	---	
AA2038-4-2.5	10/30/2016	2.5	**20**	---	**9.8**	---	---	---	---	---	---	---	---	---	---	
AA2038-4-2.5 DUP	10/30/2016	2.5	**21**	---	**12**	---	---	---	---	---	---	---	---	---	---	
AA2038-4-3.5	3/26/2017	3.5	**20**	---	---	---	---	---	---	---	---	---	---	---	---	
AA2038-5-0.5	12/21/2016	0.5	**4.1**	---	---	---	---	---	---	---	---	---	---	---	---	
AA2038-5-2.5	12/21/2016	2.5	**3.4**	---	---	---	---	---	---	---	---	---	---	---	---	
AA2038-5-3.5	12/21/2016	3.5	**2.8**	---	---	---	---	---	---	---	---	---	---	---	---	
AA2038-6-0.5	12/21/2016	0.5	**6.1**	---	---	---	---	---	---	---	---	---	---	---	---	
AA2038-6-2.5	12/21/2016	2.5	**3.3**	---	---	---	---	---	---	---	---	---	---	---	---	
AA2038-6-3.5	12/21/2016	3.5	**3.9**	---	---	---	---	---	---	---	---	---	---	---	---	
AA2038-7-0.5	12/21/2016	0.5	**12**	---	**40**	---	---	---	---	---	---	---	---	---	---	
AA2038-7-2.5	12/21/2016	2.5	**11**	---	**37**	---	---	---	---	---	---	---	---	---	---	
AA2038-7-3.5	12/21/2016	3.5	**8.8**	---	---	---	---	---	---	---	---	---	---	---	---	
AA2038-7-3.5 DUP	12/21/2016	3.5	**10**	---	---	---	---	---	---	---	---	---	---	---	---	
AA2038-8-0.5	12/21/2016	0.5	**5.5**	---	**59**	---	---	---	---	---	---	---	---	---	---	
AA2038-8-2.5	12/21/2016	2.5	**4.2**	---	**21**	---	---	---	---	---	---	---	---	---	---	
AA2038-8-3.5	12/21/2016	3.5	**4.0**	---	---	---	---	---	---	---	---	---	---	---	---	
AA2038-9-0.5	12/21/2016	0.5	**6.4**	---	**150**	**8.1**	0.040	---	---	---	---	---	---	---	---	
AA2038-9-2.5	12/21/2016	2.5	**4.2**	---	**14**	---	---	---	---	---	---	---	---	---	---	
AA2038-9-3.5	12/21/2016	3.5	**4.1**	---	---	---	---	---	---	---	---	---	---	---	---	
Composite F10	N/A	0.5	---	---	---	---	---	ND<20	ND<20	ND<20	ND<10	ND<85	ND<20	ND<10	---	Composite of AA2038-1-0.5, AA2038-2-0.5, AA2038-3-0.5, and AA2038-4-0.5
Composite F10 DUP	N/A	0.5	---	---	---	---	---	ND<20	ND<20	ND<20	ND<10	ND<85	ND<20	ND<10	---	Composite of AA2038-1-0.5, AA2038-2-0.5, AA2038-3-0.5, and AA2038-4-0.5
AA2249-1-0.5	10/30/2016	0.5	**24**	---	**14**	---	---	---	---	---	---	---	---	---	---	
AA2249-1-2.5	10/30/2016	2.5	**33**	---	**12**	---	---	---	---	---	---	---	---	---	---	
AA2249-1-3.5	3/26/2017	3.5	**19**	---	---	---	---	---	---	---	---	---	---	---	---	
AA2249-2-0.5	10/30/2016	0.5	**22**	---	**19**	---	---	---	---	---	---	---	---	---	---	
AA2249-2-2.5	10/30/2016	2.5	**35**	---	**13**	---	---	---	---	---	---	---	---	---	---	
AA2249-2-2.5 DUP	10/30/2016	2.5	**31**	---	**14**	---	---	---	---	---	---	---	---	---	---	
AA2249-2-3.5	3/26/2017	3.5	**26**	---	---	---	---	---	---	---	---	---	---	---	---	
AA2249-3-0.5	10/30/2016	0.5	**6.4**	---	**8.5**	---	---	---	---	---	---	---	---	---	---	
AA2249-3-2.5	10/30/2016	2.5	**5.9**	---	**9.2**	---	---	---	---	---	---	---	---	---	---	
AA2249-4-0.5	10/30/2016	0.5	**2.3**	---	**4.2**	---	---	---	---	---	---	---	---	---	---	
AA2249-4-2.5	10/30/2016	2.5	**1.7**	---	**1.9**	---	---	---	---	---	---	---	---	---	---	
AA2249-5-0.5	12/21/2016	0.5	**6.1**	---	---	---	---	---	---	---	---	---	---	---	---	
AA2249-5-0.5 DUP	12/21/2016	0.5	**5.4**	---	---	---	---	---	---	---	---	---	---	---	---	
AA2249-5-2.5	12/21/2016	2.5	**6.1**	---	---	---	---	---	---	---	---	---	---	---	---	
AA2249-5-3.5	12/21/2016	3.5	**10**	---	---	---	---	---	---	---	---	---	---	---	---	
AA2249-6-0.5	12/21/2016	0.5	**1.6**	---	---	---	---	---	---	---	---	---	---	---	---	
AA2249-6-2.5	12/21/2016	2.5	**2.9**	---	---	---	---	---	---	---	---	---	---	---	---	

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			TTLC	STLC	TTLC	STLC	TCLP	4,4'-DDD	4,4'-DDE	4,4'-DDT	alpha-Chlordane	Chlordane	Dieldrin	gamma-Chlordane		
		Units:	mg/kg	mg/L	mg/kg	mg/L	mg/L	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	
AA2249-6-3.5	12/21/2016	3.5	**3.0**	---	---	---	---	---	---	---	---	---	---	---	---	
Composite F11	N/A	0.5	---	---	---	---	---	ND<20	ND<20	ND<20	ND<10	ND<85	ND<20	ND<10	---	Composite of AA2249-1-0.5, AA2249-2-0.5, AA2249-3-0.5, and AA2249-4-0.5
FS-1-0.5	10/23/2016	0.5	**3.0**	---	**19**	---	---	---	---	---	---	---	---	---	---	
FS-1-2.5	10/23/2016	2.5	ND<1.0	---	**3.9**	---	---	---	---	---	---	---	---	---	---	
FS-2-0.5	10/23/2016	0.5	**20**	---	**6.7**	---	---	---	---	---	---	---	---	---	---	
FS-2-2.5	10/23/2016	2.5	**4.9**	---	**3.1**	---	---	---	---	---	---	---	---	---	---	
FS-2b-0.5	11/22/2016	0.5	**10**	---	---	---	---	---	---	---	---	---	---	---	---	
FS-2c-0.5	11/22/2016	0.5	**3.4**	---	---	---	---	---	---	---	---	---	---	---	---	
FS-3-0.5	10/23/2016	0.5	**2.4**	---	**4.5**	---	---	---	---	---	---	---	---	---	---	
FS-3-2.5	10/23/2016	2.5	**3.7**	---	**3.3**	---	---	---	---	---	---	---	---	---	---	
FS-4-0.5	10/23/2016	0.5	**3.9**	---	**29**	---	---	---	---	---	---	---	---	---	---	
FS-4-2.5	10/23/2016	2.5	**1.4**	---	**2.7**	---	---	---	---	---	---	---	---	---	---	
Composite F12	N/A	0.5	---	---	---	---	---	ND<2.0	**0.80J**	ND<2.0	ND<1.0	ND<8.5	**1.0J**	ND<1.0	---	Composite of FS-1-0.5, FS-2-0.5, FS-3-0.5, and FS-4-0.5
IA-1-0.5	10/30/2016	0.5	**0.88J**	---	**3.2**	---	---	---	---	---	---	---	---	---	---	
IA-1-2.5	10/30/2016	2.5	**3.6**	---	**20**	---	---	---	---	---	---	---	---	---	---	
IA-2-0.5	10/30/2016	0.5	**0.80J**	---	**4.0**	---	---	---	---	---	---	---	---	---	---	
IA-2-2.5	10/30/2016	2.5	**0.90J**	---	**3.6**	---	---	---	---	---	---	---	---	---	---	
IA-3-0.5	10/30/2016	0.5	**2.2**	---	**2.6**	---	---	---	---	---	---	---	---	---	---	
IA-3-0.5 DUP	10/30/2016	0.5	**2.0**	---	**3.7**	---	---	---	---	---	---	---	---	---	---	
IA-3-2.5	10/30/2016	2.5	**0.96J**	---	**2.6**	---	---	---	---	---	---	---	---	---	---	
IA-4-0.5	10/30/2016	0.5	**1.8**	---	**13**	---	---	---	---	---	---	---	---	---	---	
IA-4-2.5	10/30/2016	2.5	**2.2**	---	**8.7**	---	---	---	---	---	---	---	---	---	---	
IA-5-0.5	10/30/2016	0.5	**1.7**	---	**29**	---	---	---	---	---	---	---	---	---	---	
IA-5-2.5	10/30/2016	2.5	**2.4**	---	**12**	---	---	---	---	---	---	---	---	---	---	
IA-6-0.5	10/30/2016	0.5	**1.4**	---	**24**	---	---	---	---	---	---	---	---	---	---	
IA-6-2.5	10/30/2016	2.5	**3.4**	---	**35**	---	---	---	---	---	---	---	---	---	---	
IA-7-0.5	3/26/2017	0.5	---	---	**12**	---	---	---	---	---	---	---	---	---	---	
IA-7-2.5	3/26/2017	2.5	---	---	**7.9**	---	---	---	---	---	---	---	---	---	---	
IA-7-3.5	3/26/2017	3.5	---	---	**2.8**	---	---	---	---	---	---	---	---	---	---	
IA-7-4.5	3/26/2017	4.5	---	---	**13**	---	---	---	---	---	---	---	---	---	---	
IA-8-0.5	3/26/2017	0.5	---	---	**21**	---	---	---	---	---	---	---	---	---	---	
IA-8-2.5	3/26/2017	2.5	---	---	**11**	---	---	---	---	---	---	---	---	---	---	
IA-8-3.5	3/26/2017	3.5	---	---	**11**	---	---	---	---	---	---	---	---	---	---	
IA-8-4.5	3/26/2017	4.5	---	---	**9.6**	---	---	---	---	---	---	---	---	---	---	
AS-1-0.5	10/30/2016	0.5	**1.6**	---	**3.9**	---	---	---	---	---	---	---	---	---	---	
AS-1-2.5	10/30/2016	2.5	**1.6**	---	**4.0**	---	---	---	---	---	---	---	---	---	---	
AS-2-0.5	10/30/2016	0.5	**2.0**	---	**65**	---	---	---	---	---	---	---	---	---	---	
AS-2-2.5	10/30/2016	2.5	**1.6**	---	**10**	---	---	---	---	---	---	---	---	---	---	
AS-2-2.5 DUP	10/30/2016	2.5	**2.5**	---	**7.3**	---	---	---	---	---	---	---	---	---	---	
AS-3-0.5	10/30/2016	0.5	**1.7**	---	**5.5**	---	---	---	---	---	---	---	---	---	---	
AS-3-2.5	10/30/2016	2.5	**1.7**	---	**14**	---	---	---	---	---	---	---	---	---	---	
AS-4-0.5	10/30/2016	0.5	**2.0**	---	**4.4**	---	---	---	---	---	---	---	---	---	---	

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		Units:	mg/kg	mg/L	mg/kg	mg/L	mg/L	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	
AS-4-2.5	10/30/2016	2.5	**1.5**	**---**	**3.2**	---	---	---	---	---	---	---	---	---	---	
Composite F13	N/A	0.5	**---**	**---**	**---**	---	---	ND<2.0	ND<2.0	ND<2.0	ND<1.0	ND<8.5	ND<2.0	ND<1.0	ND<16	Composite of AS-1-0.5, AS-2-0.5, AS-3-0.5, and AS-4-0.5
IM-1-0.5	10/30/2016	0.5	**8.3**	---	**42**	---	---	---	---	---	---	---	---	---	---	
IM-1-2.5	10/30/2016	2.5	**20**	---	**35**	---	---	---	---	---	---	---	---	---	---	
IM-1-3.5	3/26/2017	3.5	**4.4**	---	---	---	---	---	---	---	---	---	---	---	---	
IM-1a-0.5	12/21/2016	0.5	**1.1**	---	---	---	---	---	---	---	---	---	---	---	---	
IM-1a-2.5	12/21/2016	2.5	**1.5**	---	---	---	---	---	---	---	---	---	---	---	---	
IM-1a-3.5	12/21/2016	3.5	**1.6**	---	---	---	---	---	---	---	---	---	---	---	---	
IM-1b-0.5	11/23/2016	0.5	**7.2**	---	**44**	---	---	---	---	---	---	---	---	---	---	
IM-1b-2.5	11/23/2016	2.5	**2.0**	---	**10**	---	---	---	---	---	---	---	---	---	---	
IM-1b-3.5	11/23/2016	3.5	**2.9**	---	**8.5**	---	---	---	---	---	---	---	---	---	---	
IM-1d-0.5	11/23/2016	0.5	**5.0**	---	---	---	---	---	---	---	---	---	---	---	---	
IM-1d-2.5	11/23/2016	2.5	**3.7**	---	---	---	---	---	---	---	---	---	---	---	---	
IM-2-0.5	10/30/2016	0.5	**4.2**	---	**42**	---	---	---	---	---	---	---	---	---	---	
IM-2-2.5	10/30/2016	2.5	**4.6**	---	**160**	**13**	**0.020 J**	---	---	---	---	---	---	---	---	
IM-2-3.5	3/26/2017	3.5	---	---	**63**	---	---	---	---	---	---	---	---	---	---	
IM-2a-0.5	12/21/2016	0.5	---	---	**2.5**	---	---	---	---	---	---	---	---	---	---	
IM-2a-2.5	12/21/2016	2.5	---	---	**2.3**	---	---	---	---	---	---	---	---	---	---	
IM-2a-3.5	12/21/2016	3.5	---	---	**2.2**	---	---	---	---	---	---	---	---	---	---	
IM-2b-0.5	11/23/2016	0.5	**17**	---	**100**	**6.8**	**0.028 J**	---	---	---	---	---	---	---	---	
IM-2b-0.5 DUP	11/23/2016	0.5	**17**	---	**150**	**6.3**	**0.038 J**	---	---	---	---	---	---	---	---	
IM-2b-2.5	11/23/2016	2.5	---	---	**4.1**	---	---	---	---	---	---	---	---	---	---	
IM-2b-3.5	11/23/2016	3.5	---	---	**3.3**	---	---	---	---	---	---	---	---	---	---	
IM-3-0.5	10/30/2016	0.5	**25**	---	**74**	---	---	---	---	---	---	---	---	---	---	
IM-3-0.5 DUP	10/30/2016	0.5	**22**	---	**61**	---	---	---	---	---	---	---	---	---	---	
IM-3-2.5	10/30/2016	2.5	**6.9**		**11**	---	---	---	---	---	---	---	---	---	---	
IM-3c-0.5	11/23/2016	0.5	**66**	**4.1**	---	---	---	---	---	---	---	---	---	---	---	
IM-3c-2.5	11/23/2016	2.5	**22**	---	---	---	---	---	---	---	---	---	---	---	---	
IM-3c-3.5	11/23/2016	3.5	**16**	---	---	---	---	---	---	---	---	---	---	---	---	
IM-3c-4.5	3/26/2017	4.5	**2.2**	---	---	---	---	---	---	---	---	---	---	---	---	
Composite F14	N/A	0.5	**---**	---	**---**	---	---	**5.0**	**400**	**18**	**30**	**270**	**6.7**	**30**	**---**	Composite of IM-1-0.5, IM-2-0.5, and IM-3-0.5
IM-4-0.5	10/30/2016	0.5	**16**	---	**66**	---	---	---	---	---	---	---	---	---	---	
IM-4-2.5	10/30/2016	2.5	**20**	---	**22**	---	---	---	---	---	---	---	---	---	---	
IM-4-3.5	3/26/2017	3.5	ND<1.0	---	---	---	---	---	---	---	---	---	---	---	---	
IM-4d-0.5	11/23/2016	0.5	**9.3**	---	---	---	---	---	---	---	---	---	---	---	---	
IM-4d-2.5	11/23/2016	2.5	**4.7**	---	---	---	---	---	---	---	---	---	---	---	---	
IM-4d-3.5	11/23/2016	3.5	**5.7**	---	---	---	---	---	---	---	---	---	---	---	---	
IM-5-0.5	10/30/2016	0.5	**29**	---	**54**	---	---	---	---	---	---	---	---	---	---	
IM-5-2.5	10/30/2016	2.5	**22**	---	**40**	---	---	---	---	---	---	---	---	---	---	
IM-5-3.5	3/26/2017	3.5	**2.1**	---	---	---	---	---	---	---	---	---	---	---	---	
IM-5d-0.5	11/23/2016	0.5	**24**	---	---	---	---	---	---	---	---	---	---	---	---	
IM-5d-2.5	11/23/2016	2.5	**5.5**	---	---	---	---	---	---	---	---	---	---	---	---	
IM-5d-2.5 DUP	11/23/2016	2.5	**7.3**	---	---	---	---	---	---	---	---	---	---	---	---	
IM-5d-3.5	11/23/2016	3.5	**14**	---	---	---	---	---	---	---	---	---	---	---	---	
IM-5d-4.5	3/26/2017	4.5	**11**	---	---	---	---	---	---	---	---	---	---	---	---	

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			TTLC	STLC	TTLC	STLC	TCLP	4,4'-DDD	4,4'-DDE	4,4'-DDT	alpha-Chlordane	Chlordane	Dieldrin	gamma-Chlordane		
		Units:	mg/kg	mg/L	mg/kg	mg/L	mg/L	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	
IM-5d-4.5 DUP	3/26/2017	4.5	**10**	---	---	---	---	---	---	---	---	---	---	---	---	
IM-6-0.5	10/30/2016	0.5	**12**	---	**36**	---	---	---	---	---	---	---	---	---	---	
IM-6-2.5	10/30/2016	2.5	**2.9**	---	**25**	---	---	---	---	---	---	---	---	---	---	
IM-6-2.5 DUP	10/30/2016	2.5	**2.6**	---	**29**	---	---	---	---	---	---	---	---	---	---	
Composite F15	N/A	0.5	**---**	---	**---**	---	---	ND<2.0	**1.1J**	ND<2.0	**1.2**	**13**	**1.3J**	**1.2**	**---**	Composite of IM-4-0.5, IM-5-0.5, and IM-6-0.5
CRA-1-0.5	10/30/2016	0.5	**1.8**	---	**26**	---	---	---	---	---	---	---	---	---	---	
CRA-1-0.5 DUP	10/30/2016	0.5	**2.3**	---	**24**	---	---	---	---	---	---	---	---	---	---	
CRA-1-2.5	10/30/2016	2.5	**2.5**	---	**51**	---	---	---	---	---	---	---	---	---	---	
CRA-2-0.5	10/30/2016	0.5	**3.6**	---	**110**	**10**	ND<0.25	---	---	---	---	---	---	---	---	
CRA-2-2.5	10/30/2016	2.5	**3.5**	---	**140**	**5.4**	**0.033 J**	---	---	---	---	---	---	---	---	
CRA-2-3.5	3/26/2017	3.5	---	---	**23**	---	---	---	---	---	---	---	---	---	---	
CRA-2b-0.5	11/22/2016	0.5	---	---	**89**	**4.5**	---	---	---	---	---	---	---	---	---	
CRA-2b-2.5	11/22/2016	2.5	---	---	**720**	**140**	**0.82**	---	---	---	---	---	---	---	---	
CRA-2b-3.5	11/22/2016	3.5	---	---	**67**	---	---	---	---	---	---	---	---	---	---	
CRA-2c-0.5	11/22/2016	0.5	---	---	**54**	---	---	---	---	---	---	---	---	---	---	
CRA-2c-2.5	11/22/2016	2.5	---	---	**39**	---	---	---	---	---	---	---	---	---	---	
CRA-2c-3.5	11/22/2016	3.5	---	---	**120**	**5.6**	**0.017 J**	---	---	---	---	---	---	---	---	
CRA-2c-4.5	3/26/2017	4.5	---	---	**11**	---	---	---	---	---	---	---	---	---	---	
CRA-2c-4.5 DUP	3/26/2017	4.5	---	---	**5.9**	---	---	---	---	---	---	---	---	---	---	
CRA-2d-0.5	11/22/2016	0.5	**1.9**	---	**31**	---	---	---	---	---	---	---	---	---	---	
CRA-2d-0.5 DUP	11/22/2016	0.5	**2.8**	---	**73**	---	---	---	---	---	---	---	---	---	---	
CRA-2d-2.5	11/22/2016	2.5	---	---	**44**	---	---	---	---	---	---	---	---	---	---	
CRA-2d-2.5 DUP	11/22/2016	2.5	---	---	**51**	---	---	---	---	---	---	---	---	---	---	
CRA-2d-3.5	11/22/2016	3.5	---	---	**13**	---	---	---	---	---	---	---	---	---	---	
CRA-3-0.5	10/30/2016	0.5	**16**	---	**55**	---	---	---	---	---	---	---	---	---	---	
CRA-3-2.5	10/30/2016	2.5	**5.4**	---	**6.0**	---	---	---	---	---	---	---	---	---	---	
CRA-3c-0.5	11/22/2016	0.5	**3.4**	---	---	---	---	---	---	---	---	---	---	---	---	
CRA-3d-0.5	11/22/2016	0.5	**1.7**	---	---	---	---	---	---	---	---	---	---	---	---	
CRA-4-0.5	10/30/2016	0.5	**1.9**	---	**41**	---	---	---	---	---	---	---	---	---	---	
CRA-4-2.5	10/30/2016	2.5	**1.1**	---	**11**	---	---	---	---	---	---	---	---	---	---	
Composite F16	N/A	0.5	**---**	**---**	**---**	---	---	ND<2.0	**0.73J**	**3.8**	ND<1.0	ND<8.5	**2.6**	ND<1.0	**---**	Composite of CRA-1-0.5, CRA-2-0.5, CRA-3-0.5, and CRA-4-0.5
CRB-1-0.5	10/30/2016	0.5	**1.9**	---	**33**	---	---	---	---	---	---	---	---	---	---	
CRB-1-2.5	10/30/2016	2.5	**2.4**	---	**4.8**	---	---	---	---	---	---	---	---	---	---	
CRB-2-0.5	10/30/2016	0.5	**2.1**	---	**3.4**	---	---	---	---	---	---	---	---	---	---	
CRB-2-2.5	10/30/2016	2.5	**1.9**	---	**2.4**	---	---	---	---	---	---	---	---	---	---	
CRB-3-0.5	10/30/2016	0.5	**1.7**	---	**14**	---	---	---	---	---	---	---	---	---	---	
CRB-3-2.5	10/30/2016	2.5	**1.3**	---	**24**	---	---	---	---	---	---	---	---	---	---	
CRB-4-0.5	10/30/2016	0.5	**2.1**	---	**3.5**	---	---	---	---	---	---	---	---	---	---	
CRB-4-2.5	10/30/2016	2.5	**1.7**	---	**4.6**	---	---	---	---	---	---	---	---	---	---	
CRB-4-2.5 DUP	10/30/2016	2.5	**1.6**	---	**3.0**	---	---	---	---	---	---	---	---	---	---	
Composite F17	N/A	0.5	**---**	---	**---**	---	---	ND<2.0	ND<2.0	ND<2.0	ND<1.0	ND<8.5	ND<2.0	ND<1.0	**---**	Composite of CRB-1-0.5, CRB-2-0.5, CRB-3-0.5, and CRB-4-0.5
CR1-1-0.5	10/30/2016	0.5	**3.8**	---	**35**	---	---	---	---	---	---	---	---	---	---	
CR1-1-0.5 DUP	10/30/2016	0.5	**3.5**	---	**44**	---	---	---	---	---	---	---	---	---	---	

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		Units:	mg/kg	mg/L	mg/kg	mg/L	mg/L	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	
CR1-1-2.5	10/30/2016	2.5	**3.5**	---	**14**	---	---	---	---	---	---	---	---	---	---	
CR1-2-0.5	10/30/2016	0.5	**4.1**	---	**100**	**6.3**	**0.017 J**	---	---	---	---	---	---	---	---	
CR1-2-2.5	10/30/2016	2.5	**3.7**	---	**37**	---	---	---	---	---	---	---	---	---	---	
CR1-2a-0.5	11/23/2016	0.5	---	---	**75**	---	---	---	---	---	---	---	---	---	---	
CR1-2b-0.5	11/23/2016	0.5	---	---	**74**	---	---	---	---	---	---	---	---	---	---	
CR1-2d-0.5	11/23/2016	0.5	---	---	**120**	**26**	**0.25**	---	---	---	---	---	---	---	---	
CR1-2d-2.5	11/23/2016	2.5	---	---	**6.5**	---	---	---	---	---	---	---	---	---	---	
CR1-2d1-0.5	3/26/2017	0.5	---	---	**160**	**11**	**0.10 J**	---	---	---	---	---	---	---	---	
CR1-2d1-2.5	3/26/2017	2.5	---	---	**3.3**	---	---	---	---	---	---	---	---	---	---	
CR1-3-0.5	10/30/2016	0.5	**1.6**	---	**9.0**	---	---	---	---	---	---	---	---	---	---	
CR1-3-2.5	10/30/2016	2.5	**1.8**	---	**5.5**	---	---	---	---	---	---	---	---	---	---	
Composite F18	N/A	0.5	---	---	---	---	---	ND<2.0	**0.77J**	ND<2.0	**1.8**	**21**	**7.3**	**1.4**	ND<16	Composite of CR1-1-0.5, CR1-2-0.5, and CR1-3-0.5
Composite F18 DUP	N/A	0.5	---	---	---	---	---	ND<2.0	**0.65J**	ND<2.0	**1.8**	**22**	**6.5**	**1.5**	ND<16	Composite of CR1-1-0.5, CR1-2-0.5, and CR1-3-0.5
CR1-4-0.5	10/30/2016	0.5	**4.9**	---	**130**	**32**	**0.12 J**	---	---	---	---	---	---	---	---	
CR1-4-2.5	10/30/2016	2.5	**3.1**	---	**14**	---	---	---	---	---	---	---	---	---	---	
CR1-4b-0.5	11/23/2016	0.5	---	---	**350**	**22**	**0.12 J**	---	---	---	---	---	---	---	---	
CR1-4b-2.5	11/23/2016	2.5	---	---	**33**	---	---	---	---	---	---	---	---	---	---	
CR1-4b1-0.5	3/26/2017	0.5	---	---	**21**	---	---	---	---	---	---	---	---	---	---	
CR1-4b1-0.5 DUP	3/26/2017	0.5	---	---	**21**	---	---	---	---	---	---	---	---	---	---	
CR1-4b1-2.5	3/26/2017	2.5	---	---	**4.5**	---	---	---	---	---	---	---	---	---	---	
CR1-4c-0.5	11/23/2016	0.5	---	---	**53**	---	---	---	---	---	---	---	---	---	---	
CR1-5-0.25	11/23/2016	0.25	**9.3**	---	**170**	**11**	**0.031 J**	---	---	---	---	---	---	---	---	
CR1-5-0.5	10/30/2016	0.5	**23**	---	**310**	**25**	**0.16 J**	---	---	---	---	---	---	---	---	
CR1-5-2.5	10/30/2016	2.5	**15**	---	**18**	---	---	---	---	---	---	---	---	---	---	
CR1-5-3.5	3/26/2017	3.5	**1.7**	---	---	---	---	---	---	---	---	---	---	---	---	
CR1-5b-0.25	11/23/2016	0.25	**13**	---	**190**	**9.0**	**0.048 J**	---	---	---	---	---	---	---	---	
CR1-5b-0.25 DUP	11/23/2016	0.25	**13**	---	**180**	**12**	**0.034 J**	---	---	---	---	---	---	---	---	
CR1-5b-0.5	11/23/2016	0.5	**32**	---	**630**	**25**	**0.071 J**	---	---	---	---	---	---	---	---	
CR1-5b-2.5	11/23/2016	2.5	**19**	---	**140**	**14**	**0.044 J**	---	---	---	---	---	---	---	---	
CR1-5b-3.5	11/23/2016	3.5	**10**	---	**12**	---	---	---	---	---	---	---	---	---	---	
CR1-5c-0.25	11/23/2016	0.25	**3.6**	---	**43**	---	---	---	---	---	---	---	---	---	---	
CR1-5c-0.5	11/23/2016	0.5	**4.9**	---	**37**	---	---	---	---	---	---	---	---	---	---	
CR1-5c-2.5	11/23/2016	2.5	**1.5**	---	**12**	---	---	---	---	---	---	---	---	---	---	
CR1-5c-3.5	11/23/2016	3.5	**1.9**	---	**6.6**	---	---	---	---	---	---	---	---	---	---	
CR1-5d-0.25	11/23/2016	0.25	**8.6**	---	**91**	**8.5**	**0.024 J**	---	---	---	---	---	---	---	---	
CR1-5d-0.5	11/23/2016	0.5	**6.4**	---	**25**	---	---	---	---	---	---	---	---	---	---	
CR1-5d-2.5	11/23/2016	2.5	**1.9**	---	**22**	---	---	---	---	---	---	---	---	---	---	
CR1-5d-3.5	11/23/2016	3.5	**1.8**	---	**50**	---	---	---	---	---	---	---	---	---	---	
CR1-5d-3.5 DUP	11/23/2016	3.5	**2.3**	---	**5.7**	---	---	---	---	---	---	---	---	---	---	
CR1-5d1-0.5	3/25/2017	0.5	**6.9**	---	**51**	---	---	---	---	---	---	---	---	---	---	
CR1-5d1-0.5 DUP	3/25/2017	0.5	**6.6**	---	**79**	---	---	---	---	---	---	---	---	---	---	
CR1-5d1-2.5	3/25/2017	2.5	**2.6**	---	**3.8**	---	---	---	---	---	---	---	---	---	---	
CR1-6-0.5	10/30/2016	0.5	**3.4**	---	**10**	---	---	---	---	---	---	---	---	---	---	
CR1-6-2.5	10/30/2016	2.5	**2.7**	---	**6.7**	---	---	---	---	---	---	---	---	---	---	
Composite F19	N/A	0.5	---	---	---	---	---	ND<2.0	**0.54J**	ND<2.0	**0.46J**	**5.0J**	ND<2.0	**0.30J**	---	Composite of CR1-4-0.5, CR1-5-0.5, and CR1-6-0.5

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		Units:	mg/kg	mg/L	mg/kg	mg/L	mg/L	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	
P14-0.5	10/29/2016	0.5	**3.1**	---	**6.9**	---	---	---	---	---	---	---	---	---	---	
P14-0.5 DUP	10/29/2016	0.5	**2.6**	---	**6.4**	---	---	---	---	---	---	---	---	---	---	
P14-2.5	10/29/2016	2.5	**3.2**	---	**21**	---	---	---	---	---	---	---	---	---	---	
P15-0.5	10/30/2016	0.5	**3.4**	---	**90**	**4.9**	---	---	---	---	---	---	---	---	---	
P15-2.5	10/30/2016	2.5	**2.9**	---	**140**	**9.7**	ND<0.25	---	---	---	---	---	---	---	---	
P15-3.5	3/25/2017	3.5	---	---	**24**	---	---	---	---	---	---	---	---	---	---	
P15a-0.5	11/22/2016	0.5	---	---	**39**	---	---	---	---	---	---	---	---	---	---	
P15a-2.5	11/22/2016	2.5	---	---	**150**	**2.2**	---	---	---	---	---	---	---	---	---	
P15a-3.5	11/22/2016	3.5	---	---	**13**	---	---	---	---	---	---	---	---	---	---	
P15b-0.5	11/22/2016	0.5	---	---	**190**	**8.5**	**0.014 J**	---	---	---	---	---	---	---	---	
P15b-2.5	11/22/2016	2.5	---	---	**55**	---	---	---	---	---	---	---	---	---	---	
P15b-3.5	11/22/2016	3.5	---	---	**3.6**	---	---	---	---	---	---	---	---	---	---	
P15d-0.5	11/22/2016	0.5	---	---	**140**	**4.8**	---	---	---	---	---	---	---	---	---	
P15d-2.5	11/22/2016	2.5	---	---	**440**	**7.3**	ND<0.25	---	---	---	---	---	---	---	---	
P15d-2.5 DUP	11/22/2016	2.5	---	---	**110**	**11**	**0.043 J**	---	---	---	---	---	---	---	---	
P15d-3.5	11/22/2016	3.5	---	---	**39**	---	---	---	---	---	---	---	---	---	---	
P15d1-0.5	3/25/2017	0.5	---	---	**12**	---	---	---	---	---	---	---	---	---	---	
P15d1-2.5	3/25/2017	2.5	---	---	**21**	---	---	---	---	---	---	---	---	---	---	
P15d1-3.5	3/25/2017	3.5	---	---	**280**	**20**	**0.080 J**	---	---	---	---	---	---	---	---	
P15d1-4.5	3/25/2017	4.5	---	---	**10**	---	---	---	---	---	---	---	---	---	---	
P15d1-4.5 DUP	3/25/2017	4.5	---	---	**11**	---	---	---	---	---	---	---	---	---	---	
P16-0.5	10/30/2016	0.5	**2.9**	---	**110**	**7.4**	**0.028 J**	---	---	---	---	---	---	---	---	
P16-2.5	10/30/2016	2.5	**2.3**	---	**13**	---	---	---	---	---	---	---	---	---	---	
P16a-0.5	11/22/2016	0.5	---	---	**31**	---	---	---	---	---	---	---	---	---	---	
P16b-0.5	11/22/2016	0.5	**5.2**	---	**34**	---	---	---	---	---	---	---	---	---	---	
P16c-0.5	11/22/2016	0.5	**3.1**	---	**84**	**3.6**	---	---	---	---	---	---	---	---	---	
P16c-2.5	11/22/2016	2.5	---	---	**22**	---	---	---	---	---	---	---	---	---	---	
Composite F20	N/A	0.5	**---**	---	**---**	---	---	ND<20	**4.6J**	ND<20	ND<10	ND<85	ND<20	ND<10	**---**	Composite of P14-0.5, P15-0.5, and P16-0.5
Q14-0.5	10/30/2016	0.5	**2.2**	---	**5.6**	---	---	---	---	---	---	---	---	---	---	
Q14-2.5	10/30/2016	2.5	**1.5**	---	**32**	---	---	---	---	---	---	---	---	---	---	
Q15-0.5	10/30/2016	0.5	**3.1**	---	**110**	**6.0**	ND<0.25	---	---	---	---	---	---	---	---	
Q15-2.5	10/30/2016	2.5	**3.8**	---	**59**	---	---	---	---	---	---	---	---	---	---	
Q15a-0.5	11/22/2016	0.5	---	---	**46**	---	---	---	---	---	---	---	---	---	---	
Q15a-2.5	11/22/2016	2.5	---	---	**4200**	**190**	ND<0.25	---	---	---	---	---	---	---	---	
Q15a-3.5	11/22/2016	3.5	---	---	**190**	**120**	**0.029 J**	---	---	---	---	---	---	---	---	
Q15a-3.5 DUP	11/22/2016	3.5	---	---	**280**	**6.5**	ND<0.25	---	---	---	---	---	---	---	---	
Q15a-4.5	3/25/2017	4.5	---	---	**140**	**4.2**	---	---	---	---	---	---	---	---	---	
Q15b-0.5	11/22/2016	0.5	---	---	**56**	---	---	---	---	---	---	---	---	---	---	
Q15b-2.5	11/22/2016	2.5	---	---	**6**	---	---	---	---	---	---	---	---	---	---	
Q15d-0.5	11/22/2016	0.5	---	---	**23**	---	---	---	---	---	---	---	---	---	---	
Q15d-2.5	11/22/2016	2.5	---	---	**97**	**3.9**	---	---	---	---	---	---	---	---	---	
Q15d-3.5	3/25/2017	3.5	---	---	**4.5**	---	---	---	---	---	---	---	---	---	---	
Q15d-4.5	3/25/2017	4.5	---	---	**3.9**	---	---	---	---	---	---	---	---	---	---	
Q15d1-0.5	3/26/2017	0.5	---	---	**5.8**	---	---	---	---	---	---	---	---	---	---	
Q15d1-2.5	3/26/2017	2.5	---	---	**6.3**	---	---	---	---	---	---	---	---	---	---	

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			TTLC	STLC	TTLC	STLC	TCLP	4,4'-DDD	4,4'-DDE	4,4'-DDT	alpha-Chlordane	Chlordane	Dieldrin	gamma-Chlordane		
		Units:	mg/kg	mg/L	mg/kg	mg/L	mg/L	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	
Q15d1-2.5 DUP	3/26/2017	2.5	---	---	**7.2**	---	---	---	---	---	---	---	---	---	---	
Q15d1-3.5	3/26/2017	3.5	---	---	**7.0**	---	---	---	---	---	---	---	---	---	---	
Q15d1-4.5	3/26/2017	4.5	---	---	**4.3**	---	---	---	---	---	---	---	---	---	---	
Q16-0.5	10/30/2016	0.5	**5.3**	---	**36**	---	---	---	---	---	---	---	---	---	---	
Q16-2.5	10/30/2016	2.5	**3.1**	---	**5.9**	---	---	---	---	---	---	---	---	---	---	
Composite F21	N/A	0.5	**---**	---	**---**	---	---	**0.30J**	**2.4**	**3.8**	**0.90J**	**13**	**0.58J**	**0.82J**	**---**	Composite of Q14-0.5, Q15-0.5, and Q16-0.5
R14-0.5	10/30/2016	0.5	**2.2**	---	**2.8**	---	---	---	---	---	---	---	---	---	---	
R14-2.5	10/30/2016	2.5	**2.2**	---	**3.4**	---	---	---	---	---	---	---	---	---	---	
R15-0.25	11/22/2016	0.25	---	---	**95**	**0.78 J**	---	---	---	---	---	---	---	---	---	
R15-0.25 DUP	11/22/2016	0.25	---	---	**19**	---	---	---	---	---	---	---	---	---	---	
R15-0.5	10/30/2016	0.5	**3.8**	---	**300**	**1.9**	---	---	---	---	---	---	---	---	---	
R15-2.5	10/30/2016	2.5	**2.5**	---	**22**	---	---	---	---	---	---	---	---	---	---	
R15a-0.25	11/22/2016	0.25	---	---	**63**	---	---	---	---	---	---	---	---	---	---	
R15a-0.5	11/22/2016	0.5	---	---	**9.4**	---	---	---	---	---	---	---	---	---	---	
R15a-2.5	11/22/2016	2.5	---	---	**2.7**	---	---	---	---	---	---	---	---	---	---	
R15b-0.25	11/22/2016	0.25	---	---	**31**	---	---	---	---	---	---	---	---	---	---	
R15b-0.5	11/22/2016	0.5	---	---	**15**	---	---	---	---	---	---	---	---	---	---	
R15c-0.25	11/22/2016	0.25	---	---	**61**	---	---	---	---	---	---	---	---	---	---	
R15c-0.5	11/22/2016	0.5	---	---	**16**	---	---	---	---	---	---	---	---	---	---	
R15d-0.25	11/22/2016	0.25	---	---	**21**	---	---	---	---	---	---	---	---	---	---	
R15d-0.5	11/22/2016	0.5	---	---	**100**	**8.3**	ND<0.25	---	---	---	---	---	---	---	---	
R15d-2.5	11/22/2016	2.5	---	---	**41**	---	---	---	---	---	---	---	---	---	---	
R16-0.5	10/30/2016	0.5	**2.9**	---	**41**	---	---	---	---	---	---	---	---	---	---	
R16-2.5	10/30/2016	2.5	**3.4**	---	**10**	---	---	---	---	---	---	---	---	---	---	
Composite F22	N/A	0.5	**---**	---	**---**	---	---	ND<2.0	**1.7J**	**2.4**	ND<1.0	ND<8.5	ND<2.0	ND<1.0	**---**	Composite of R14-0.5, R15-0.5, and R16-0.5
Area 8 - South Central Portion of Campus																
AA923-1-0.5	10/22/2016	0.5	**2.9**	---	**1.9**	---	---	---	---	---	---	---	---	---	---	
AA923-1-0.5 DUP	10/22/2016	0.5	**3.0**	---	**1.9**	---	---	---	---	---	---	---	---	---	---	
AA923-1-2.5	10/22/2016	2.5	**2.6**	---	**1.8**	---	---	---	---	---	---	---	---	---	---	
AA923-2-0.5	10/22/2016	0.5	**2.4**	---	**1.5**	---	---	---	---	---	---	---	---	---	---	
AA923-2-2.5	10/22/2016	2.5	**3.2**	---	**1.2**	---	---	---	---	---	---	---	---	---	---	
AA923-2-2.5 DUP	10/22/2016	2.5	**3.8**	---	**1.0**	---	---	---	---	---	---	---	---	---	---	
AA923-3-0.5	10/22/2016	0.5	**3.2**	---	**11**	---	---	---	---	---	---	---	---	---	---	
AA923-3-2.5	10/22/2016	2.5	**3.1**	---	**1.8**	---	---	---	---	---	---	---	---	---	---	
Composite D1	N/A	0.5	**---**	---	**---**	---	---	ND<2.0	ND<2.0	ND<2.0	ND<1.0	ND<8.5	ND<2.0	ND<1.0	**---**	Composite of AA923-1-0.5, AA923-2-0.5, and AA923-3-0.5
AA923-4-0.5	10/22/2016	0.5	**8.0**	---	**1.4**	---	---	---	---	---	---	---	---	---	---	
AA923-4-2.5	10/22/2016	2.5	**4.4**	---	**1.7**	---	---	---	---	---	---	---	---	---	---	
AA923-5-0.5	10/22/2016	0.5	**3.5**	---	**2.6**	---	---	---	---	---	---	---	---	---	---	
AA923-5-2.5	10/22/2016	2.5	**3.1**	---	**3.8**	---	---	---	---	---	---	---	---	---	---	
AA923-6-0.5	10/22/2016	0.5	**3.3**	---	**4.8**	---	---	---	---	---	---	---	---	---	---	
AA923-6-2.5	10/22/2016	2.5	**3.1**	---	**2.7**	---	---	---	---	---	---	---	---	---	---	
Composite D2	N/A	0.5	**---**	---	**---**	---	---	ND<2.0	ND<2.0	ND<2.0	ND<1.0	ND<8.5	ND<2.0	ND<1.0	**---**	Composite of AA923-4-0.5, AA923-5-0.5, and AA923-6-0.5

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		Units:	mg/kg	mg/L	mg/kg	mg/L	mg/L	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	
AA1322-1-0.5	10/22/2016	0.5	**5.1**	---	**1.6**	---	---	---	---	---	---	---	---	---	---	
AA1322-1-2.5	10/22/2016	2.5	**3.2**	---	**2.1**	---	---	---	---	---	---	---	---	---	---	
AA1322-2-0.5	10/22/2016	0.5	**4.9**	---	**1.6**	---	---	---	---	---	---	---	---	---	---	
AA1322-2-2.5	10/22/2016	2.5	**3.0**	---	**1.4**	---	---	---	---	---	---	---	---	---	---	
AA1322-3-0.5	10/22/2016	0.5	**3.6**	---	**2.3**	---	---	---	---	---	---	---	---	---	---	
AA1322-3-2.5	10/22/2016	2.5	**4.7**	---	**1.3**	---	---	---	---	---	---	---	---	---	---	
Composite D3	N/A	0.5	---	---	---	---	---	ND<2.0	ND<2.0	ND<2.0	ND<1.0	ND<8.5	ND<2.0	ND<1.0	---	Composite of AA1322-1-0.5, AA1322-2-0.5, and AA1322-3-0.5
AA1322-4-0.5	10/22/2016	0.5	**4.8**	---	**1.8**	---	---	---	---	---	---	---	---	---	---	
AA1322-4-2.5	10/22/2016	2.5	**4.9**	---	**1.8**	---	---	---	---	---	---	---	---	---	---	
AA1322-5-0.5	10/22/2016	0.5	**6.6**	---	**1.9**	---	---	---	---	---	---	---	---	---	---	
AA1322-5-2.5	10/22/2016	2.5	**3.4**	---	**1.3**	---	---	---	---	---	---	---	---	---	---	
AA1322-6-0.5	10/22/2016	0.5	**2.7**	---	**3.0**	---	---	---	---	---	---	---	---	---	---	
AA1322-6-2.5	10/22/2016	2.5	**2.2**	---	**1.6**	---	---	---	---	---	---	---	---	---	---	
Composite D4	N/A	0.5	---	---	---	---	---	ND<2.0	ND<2.0	ND<2.0	ND<1.0	ND<8.5	ND<2.0	ND<1.0	---	Composite of AA1322-4-0.5, AA1322-5-0.5, and AA1322-6-0.5
AA828-1-0.5	10/23/2016	0.5	**2.1**	---	**3.8**	---	---	---	---	---	---	---	---	---	---	
AA828-1-2.5	10/23/2016	2.5	**2.6**	---	**2.6**	---	---	---	---	---	---	---	---	---	---	
AA828-2-0.5	10/23/2016	0.5	**2.8**	---	**2.5**	---	---	---	---	---	---	---	---	---	---	
AA828-2-2.5	10/23/2016	2.5	**2.6**	---	**1.6**	---	---	---	---	---	---	---	---	---	---	
AA828-3-0.5	10/23/2016	0.5	**2.7**	---	**1.6**	---	---	---	---	---	---	---	---	---	---	
AA828-3-2.5	10/23/2016	2.5	**2.6**	---	**1.1**	---	---	---	---	---	---	---	---	---	---	
Composite D5	N/A	0.5	---	---	---	---	---	ND<2.0	ND<2.0	ND<2.0	ND<1.0	ND<8.5	ND<2.0	ND<1.0	---	Composite of AA828-1-0.5, AA828-2-0.5, and AA828-3-0.5
AA828-4-0.5	10/22/2016	0.5	**10**	---	**16**	---	---	---	---	---	---	---	---	---	---	
AA828-4-2.5	10/22/2016	2.5	**3.9**	---	**1.4**	---	---	---	---	---	---	---	---	---	---	
AA828-5-0.5	10/22/2016	0.5	**3.5**	---	**2.0**	---	---	---	---	---	---	---	---	---	---	
AA828-5-0.5 DUP	10/22/2016	0.5	**3.9**	---	**1.9**	---	---	---	---	---	---	---	---	---	---	
AA828-5-2.5	10/22/2016	2.5	**2.3**	---	**1.3**	---	---	---	---	---	---	---	---	---	---	
AA828-6-0.5	10/22/2016	0.5	**2.5**	---	**1.8**	---	---	---	---	---	---	---	---	---	---	
AA828-6-2.5	10/22/2016	2.5	**2.2**	---	**1.9**	---	---	---	---	---	---	---	---	---	---	
AA828-6-2.5 DUP	10/22/2016	2.5	**2.6**	---	**1.4**	---	---	---	---	---	---	---	---	---	---	
Composite D6	N/A	0.5	---	---	---	---	---	ND<2.0	ND<2.0	ND<2.0	ND<1.0	ND<8.5	ND<2.0	ND<1.0	---	Composite of AA828-4-0.5, AA828-5-0.5, and AA828-6-0.5
AA651/683-1-0.5	10/23/2016	0.5	**2.7**	---	**2.3**	---	---	---	---	---	---	---	---	---	---	
AA651/683-1-2.5	10/23/2016	2.5	**2.6**	---	**1.3**	---	---	---	---	---	---	---	---	---	---	
AA651/683-2-0.5	10/23/2016	0.5	**2.5**	---	**5.6**	---	---	---	---	---	---	---	---	---	---	
AA651/683-2-2.5	10/23/2016	2.5	**1.6**	---	**1.1**	---	---	---	---	---	---	---	---	---	---	
AA651/683-2-2.5 DUP	10/23/2016	2.5	**2.6**	---	**1.5**	---	---	---	---	---	---	---	---	---	---	
AA651/683-3-0.5	10/23/2016	0.5	**2.2**	---	**2.0**	---	---	---	---	---	---	---	---	---	---	
AA651/683-3-0.5 DUP	10/23/2016	0.5	**4.2**	---	**2.6**	---	---	---	---	---	---	---	---	---	---	
AA651/683-3-2.5	10/23/2016	2.5	**1.9**	---	**24**	---	---	---	---	---	---	---	---	---	---	
Composite D7	N/A	0.5	---	---	---	---	---	ND<2.0	ND<2.0	ND<2.0	ND<1.0	ND<8.5	ND<2.0	ND<1.0	---	Composite of AA651/683-1-0.5, AA651/683-2-0.5, and AA651/683-3-0.5
AA651/683-4-0.5	10/23/2016	0.5	**2.6**	---	**6.6**	---	---	---	---	---	---	---	---	---	---	
AA651/683-4-2.5	10/23/2016	2.5	**4.8**	---	**2.3**	---	---	---	---	---	---	---	---	---	---	
AA651/683-5-0.5	10/23/2016	0.5	**3.2**	---	**1.6**	---	---	---	---	---	---	---	---	---	---	
AA651/683-5-2.5	10/23/2016	2.5	**7.3**	---	**1.0J**	---	---	---	---	---	---	---	---	---	---	

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		Units:	mg/kg	mg/L	mg/kg	mg/L	mg/L	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	
AA651/683-6-0.5	10/23/2016	0.5	**3.3**	---	**1.9**	---	---	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	
AA651/683-6-2.5	10/23/2016	2.5	**2.0**	---	**1.4**	---	---	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	
Composite D8	N/A	0.5	**---**	---	**---**	**---**	**---**	ND<2.0	**0.41J**	ND<2.0	ND<1.0	ND<8.5	ND<2.0	ND<1.0	**---**	Composite of AA651/683-4-0.5, AA651/683-5-0.5, and AA651/683-6-0.5
AA-831-1-0.5	10/23/2016	0.5	**3.4**	---	**2.5**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	
AA-831-1-2.5	10/23/2016	2.5	**3.0**	---	**2.4**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	
AA-831-2-0.5	10/23/2016	0.5	**2.9**	---	**5.4**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	
AA-831-2-2.5	10/23/2016	2.5	**5.4**	---	**2.2**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	
AA-831-3-0.5	10/23/2016	0.5	**2.6**	---	**4.6**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	
AA-831-3-0.5 DUP	10/23/2016	0.5	**3.9**	---	**2.8**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	
AA-831-3-2.5	10/23/2016	2.5	**2.5**	---	**2.0**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	
Composite D9	N/A	0.5	**---**	---	**---**	**---**	**---**	ND<2.0	ND<2.0	ND<2.0	ND<1.0	ND<8.5	ND<2.0	ND<1.0	**---**	Composite of AA831-1-0.5, AA831-2-0.5, and AA831-3-0.5
AA-831-4-0.5	10/23/2016	0.5	**3.0**	---	**2.7**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	
AA-831-4-2.5	10/23/2016	2.5	**2.2**	---	**1.7**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	
AA-831-4-2.5 DUP	10/23/2016	2.5	**3.1**	---	**1.6**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	
AA-831-5-0.5	10/23/2016	0.5	**1.8**	---	**2.5**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	
AA-831-5-2.5	10/23/2016	2.5	**2.7**	---	**2.0**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	
AA-831-6-0.5	10/23/2016	0.5	**2.5**	---	**3.0**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	
AA-831-6-2.5	10/23/2016	2.5	**2.8**	---	**2.4**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	
Composite D10	N/A	0.5	**---**	---	**---**	**---**	**---**	ND<2.0	ND<2.0	ND<2.0	ND<1.0	ND<8.5	ND<2.0	ND<1.0	ND<16	Composite of AA831-4-0.5, AA831-5-0.5, and AA831-6-0.5
Composite D10 DUP	N/A	0.5	**---**	---	**---**	**---**	**---**	ND<2.0	ND<2.0	**0.22J**	ND<1.0	**1.1J**	ND<2.0	ND<1.0	ND<16	Composite of AA831-4-0.5, AA831-5-0.5, and AA831-6-0.5
X-8-0.5	10/22/2016	0.5	**2.6**	---	**2.2**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	
X-8-2.5	10/22/2016	2.5	**1.8**	---	**1.6**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	
X-9-0.5	10/22/2016	0.5	**3.4**	---	**1.1**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	
X-9-2.5	10/22/2016	2.5	**2.6**	---	**1.2**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	
X-10-0.5	10/22/2016	0.5	**2.0**	---	**1.3**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	
X-10-2.5	10/22/2016	2.5	**0.85J**	---	**1.2**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	
X-11-0.5	10/22/2016	0.5	**2.3**	---	**3.8**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	
X-11-2.5	10/22/2016	2.5	**1.4**	---	**1.6**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	
Composite D11	N/A	0.5	**---**	---	**---**	**---**	**---**	ND<2.0	**0.39J**	ND<2.0	ND<1.0	ND<8.5	ND<2.0	ND<1.0	---	Composite of X8-0.5, X9-0.5, X10-0.5, and X11-0.5
Y-8-0.5	10/22/2016	0.5	**2.8**	---	**1.4**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	
Y-8-0.5 DUP	10/22/2016	0.5	**3.5**	---	**1.7**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	
Y-8-2.5	10/22/2016	2.5	**1.2**	**---**	**1.3**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	
Y-9-0.5	10/22/2016	0.5	**2.0**	**---**	**1.5**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	
Y-9-2.5	10/22/2016	2.5	**2.0**	---	**1.4**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	
Y-9-2.5 DUP	10/22/2016	2.5	**2.9**	---	**1.3**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	
Y-10-0.5	10/22/2016	0.5	**1.2**	---	**0.68J**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	
Y-10-2.5	10/22/2016	2.5	**4.6**	---	**1.7**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	
Y-11-0.5	10/22/2016	0.5	**3.1**	---	**2.8**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	
Y-11-2.5	10/22/2016	2.5	**4.1**	---	**1.8**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	
Composite D12	N/A	0.5	**---**	---	**---**	**---**	**---**	ND<2.0	ND<2.0	ND<2.0	ND<1.0	ND<8.5	ND<2.0	ND<1.0	**---**	Composite of Y8-0.5, Y9-0.5, Y10-0.5, and Y11-0.5

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Sample Location	Sample Date	Depth (feet bgs)	Analyses and Analytical Methods														Comments
			Arsenic (As) EPA 6010B		Lead (Pb) EPA 6010B			Organochlorine Pesticides (OCPs) EPA 8081A								PCBs EPA 8082	
			TTLC	STLC	TTLC	STLC	TCLP	4,4'-DDD	4,4'-DDE	4,4'-DDT	alpha-Chlordane	Chlordane	Dieldrin	gamma-Chlordane		
		Units:	mg/kg	mg/L	mg/kg	mg/L	mg/L	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	
Area 9 - Southeast Portion of Campus																	
V-13-0.5	10/22/2016	0.5	**10**	---	**6.3**	---	---	---	---	---	---	---	---	---	---	---	
V-13-2.5	10/22/2016	2.5	**1.8**	---	**2.0**	---	---	---	---	---	---	---	---	---	---	---	
V-14-0.5	10/22/2016	0.5	**3.3**	---	**54**	---	---	---	---	---	---	---	---	---	---	---	
V-14-2.5	10/22/2016	2.5	**1.5**	---	**4.1**	---	---	---	---	---	---	---	---	---	---	---	
V-15-0.5	10/22/2016	0.5	**4.1**	---	**46**	---	---	---	---	---	---	---	---	---	---	---	
V-15-2.5	10/22/2016	2.5	**2.6**	---	**27**	---	---	---	---	---	---	---	---	---	---	---	
Composite E1	N/A	0.5	---	---	---	---	---	ND<2.0	**7.2**	**6.7**	**2.6**	**30**	**0.49J**	**3.0**	---	Composite of V13-0.5, V14-0.5, and V15-0.5
V-16-0.25	11/21/2016	0.25	---	---	**14**	---	---	---	---	---	---	---	---	---	---	
V-16-0.5	10/22/2016	0.5	**2.9**	---	**390**	**2.2**	---	---	---	---	---	---	---	---	---	
V-16-2.5	10/22/2016	2.5	**4.1**	---	**25**	---	---	---	---	---	---	---	---	---	---	
V-16a-0.25	11/21/2016	0.25	---	---	**29**	---	---	---	---	---	---	---	---	---	---	
V-16a-0.5	11/21/2016	0.5	---	---	**21**	---	---	---	---	---	---	---	---	---	---	
V-16b-0.25	11/21/2016	0.25	---	---	**12**	---	---	---	---	---	---	---	---	---	---	
V-16b-0.5	11/21/2016	0.5	---	---	**19**	---	---	---	---	---	---	---	---	---	---	
V-16b-0.5 DUP	11/21/2016	0.5	---	---	**22**	---	---	---	---	---	---	---	---	---	---	
V-16c-0.25	11/21/2016	0.25	---	---	**15**	---	---	---	---	---	---	---	---	---	---	
V-16c-0.5	11/21/2016	0.5	---	---	**29**	---	---	---	---	---	---	---	---	---	---	
V-16d-0.25	11/21/2016	0.25	---	---	**7.6**	---	---	---	---	---	---	---	---	---	---	
V-16d-0.5	11/21/2016	0.5	---	---	**12**	---	---	---	---	---	---	---	---	---	---	
V-17-0.5	10/22/2016	0.5	**5.8**	---	**12**	---	---	---	---	---	---	---	---	---	---	
V-17-2.5	10/22/2016	2.5	**2.3**	---	**23**	---	---	---	---	---	---	---	---	---	---	
Composite E2	N/A	0.5	---	---	---	---	---	ND<2.0	**3.8**	**3.5**	**1.3**	**13**	**0.26J**	**1.2**	---	Composite of V16-0.5 and V17-0.5
W-12-0.5	10/22/2016	0.5	**6.7**	---	**12**	---	---	---	---	---	---	---	---	---	---	
W-12-2.5	10/22/2016	2.5	**2.3**	---	**2.0**	---	---	---	---	---	---	---	---	---	---	
W-13-0.5	10/22/2016	0.5	**3.5**	---	**1.2**	---	---	---	---	---	---	---	---	---	---	
W-13-2.5	10/22/2016	2.5	**3.2**	---	**4.5**	---	---	---	---	---	---	---	---	---	---	
W-14-0.5	10/22/2016	0.5	**2.4**	---	**1.5**	---	---	---	---	---	---	---	---	---	---	
W-14-0.5 DUP	10/22/2016	0.5	**12**	---	**21**	---	---	---	---	---	---	---	---	---	---	
W-14-2.5	10/22/2016	2.5	**3.1**	---	**250**	**17**	**0.47**	---	---	---	---	---	---	---	---	
W-14-3.5	3/25/2017	3.5	---	---	**29**	---	---	---	---	---	---	---	---	---	---	
W-14a-0.5	11/21/2016	0.5	---	---	**6300**	**1.3**	---	---	---	---	---	---	---	---	---	
W-14a-2.5	11/21/2016	2.5	---	---	**7.9**	---	---	---	---	---	---	---	---	---	---	
W-14a-3.5	11/21/2016	3.5	---	---	**6.0**	---	---	---	---	---	---	---	---	---	---	
W-14b-0.5	11/21/2016	0.5	---	---	**10**	---	---	---	---	---	---	---	---	---	---	
W-14b-2.5	11/21/2016	2.5	---	---	**32**	---	---	---	---	---	---	---	---	---	---	
W-14b-2.5 DUP	11/21/2016	2.5	---	---	**10**	---	---	---	---	---	---	---	---	---	---	
W-14b-3.5	11/21/2016	3.5	---	---	**3.3**	---	---	---	---	---	---	---	---	---	---	
W-14c-0.5	11/21/2016	0.5	---	---	**9.8**	---	---	---	---	---	---	---	---	---	---	
W-14c-0.5 DUP	11/21/2016	0.5	---	---	**8.4**	---	---	---	---	---	---	---	---	---	---	
W-14c-0.5	6/14/2017	0.5	**14**	---	---	---	---	---	---	---	---	---	---	---	---	
W-14c-0.5 DUP	6/14/2017	0.5	**13**	---	---	---	---	---	---	---	---	---	---	---	---	
W-14c-2.5	11/21/2016	2.5	---	---	**99**	**3.4**	---	---	---	---	---	---	---	---	---	
W-14c-2.5	6/14/2017	2.5	**2.5**	---	---	---	---	---	---	---	---	---	---	---	---	
W-14c-3.5	11/21/2016	3.5	---	---	**43**	---	---	---	---	---	---	---	---	---	---	

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			TTLC	STLC	TTLC	STLC	TCLP	4,4'-DDD	4,4'-DDE	4,4'-DDT	alpha-Chlordane	Chlordane	Dieldrin	gamma-Chlordane		
		Units:	mg/kg	mg/L	mg/kg	mg/L	mg/L	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	
W-14d-0.5	11/21/2016	0.5	---	---	**9.3**	---	---	---	---	---	---	---	---	---	---	
W-14d-2.5	11/21/2016	2.5	---	---	**11**	---	---	---	---	---	---	---	---	---	---	
W-14d-3.5	11/21/2016	3.5	---	---	**3.9**	---	---	---	---	---	---	---	---	---	---	
Composite E3	N/A	0.5	---	---	---	---	---	ND<2.0	**2.6**	**0.74J**	**2.1**	**20**	**0.28J**	**1.8**	---	Composite of W12-0.5, W13-0.5, and W14-0.5
W-15-0.5	10/22/2016	0.5	**3.4**	---	**1.9**	---	---	---	---	---	---	---	---	---	---	
W-15-2.5	10/22/2016	2.5	**2.3**	---	**14**	---	---	---	---	---	---	---	---	---	---	
W-15-2.5 DUP	10/22/2016	2.5	**3.6**	---	**6.3**	---	---	---	---	---	---	---	---	---	---	
W-16-0.5	10/22/2016	0.5	**3.8**	---	**11**	---	---	---	---	---	---	---	---	---	---	
W-16-2.5	10/22/2016	2.5	**2.4**	---	**8.8**	---	---	---	---	---	---	---	---	---	---	
W-17-0.5	10/22/2016	0.5	**3.8**	---	**23**	---	---	---	---	---	---	---	---	---	---	
W-17-2.5	10/22/2016	2.5	**2.6**	---	**8.4**	---	---	---	---	---	---	---	---	---	---	
Composite E4	N/A	0.5	---	---	---	---	---	ND<2.0	**0.65J**	**1.5J**	**0.90J**	**9.2**	ND<2.0	**1.2**	---	Composite of W15-0.5, W16-0.5, and W17-0.5
W-18-0.5	6/14/2017	0.5	**11**	---	---	---	---	---	---	---	---	---	---	---	---	
W-18-2.5	6/14/2017	2.5	**2.4**	---	---	---	---	---	---	---	---	---	---	---	---	
W-18a-0.5	6/14/2017	0.5	**3.0**	---	---	---	---	---	---	---	---	---	---	---	---	
W-18a-2.5	6/14/2017	2.5	**2.5**	---	---	---	---	---	---	---	---	---	---	---	---	
X-12-0.5	10/22/2016	0.5	**13**	---	**13**	---	---	---	---	---	---	---	---	---	---	
X-12-2.5	10/22/2016	2.5	**3.1**	---	**3.3**	---	---	---	---	---	---	---	---	---	---	
X-12a-0.5	6/14/2017	0.5	**12**	---	---	---	---	---	---	---	---	---	---	---	---	
X-12a-2.5	6/14/2017	2.5	**1.7**	---	---	---	---	---	---	---	---	---	---	---	---	
X-12b-0.5	6/14/2017	0.5	**6.5**	---	---	---	---	---	---	---	---	---	---	---	---	
X-12b-2.5	6/14/2017	2.5	**3.1**	---	---	---	---	---	---	---	---	---	---	---	---	
X-12c-0.5	6/14/2017	0.5	**12**	---	---	---	---	---	---	---	---	---	---	---	---	
X-12c-2.5	6/14/2017	2.5	**3.8**	---	---	---	---	---	---	---	---	---	---	---	---	
X-13-0.5	10/22/2016	0.5	**4.1**	---	**5.3**	---	---	---	---	---	---	---	---	---	---	
X-13-2.5	10/22/2016	2.5	**2.7**	---	**41**	---	---	---	---	---	---	---	---	---	---	
X-14-0.5	10/22/2016	0.5	**13**	---	**13**	---	---	---	---	---	---	---	---	---	---	
X-14-2.5	10/22/2016	2.5	**3.0**	---	**80**	**1.5**	---	---	---	---	---	---	---	---	---	
X-14-3.5	3/25/2017	3.5	---	---	**17**	---	---	---	---	---	---	---	---	---	---	
X-14b-0.5	11/21/2016	0.5	---	---	**11**	---	---	---	---	---	---	---	---	---	---	
X-14b-0.5	6/14/2017	0.5	**14**	---	---	---	---	---	---	---	---	---	---	---	---	
X-14b-0.5 DUP	6/14/2017	0.5	**9.8**	---	---	---	---	---	---	---	---	---	---	---	---	
X-14b-2.5	11/21/2016	2.5	---	---	**18**	---	---	---	---	---	---	---	---	---	---	
X-14b-2.5	6/14/2017	2.5	**2.9**	---	---	---	---	---	---	---	---	---	---	---	---	
X-14b-3.5	11/21/2016	3.5	---	---	**13**	---	---	---	---	---	---	---	---	---	---	
X-14c-0.5	11/21/2016	0.5	---	---	**9.8**	---	---	---	---	---	---	---	---	---	---	
X-14c-0.5	6/14/2017	0.5	**9.2**	---	---	---	---	---	---	---	---	---	---	---	---	
X-14c-2.5	11/21/2016	2.5	---	---	**8.7**	---	---	---	---	---	---	---	---	---	---	
X-14c-2.5 DUP	11/21/2016	2.5	---	---	**8.6**	---	---	---	---	---	---	---	---	---	---	
X-14c-2.5	6/14/2017	2.5	**1.7**	---	---	---	---	---	---	---	---	---	---	---	---	
X-14c-3.5	11/21/2016	3.5	---	---	**13**	---	---	---	---	---	---	---	---	---	---	
X-14d-0.5	11/21/2016	0.5	---	---	**5.9**	---	---	---	---	---	---	---	---	---	---	
X-14d-0.5	6/14/2017	0.5	**3.9**	---	---	---	---	---	---	---	---	---	---	---	---	
X-14d-2.5	11/21/2016	2.5	---	---	**10**	---	---	---	---	---	---	---	---	---	---	
X-14d-2.5	6/14/2017	2.5	**2.6**	---	---	---	---	---	---	---	---	---	---	---	---	
X-14d-3.5	11/21/2016	3.5	---	---	**4.5**	---	---	---	---	---	---	---	---	---	---	

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Sample Location	Sample Date	Depth (feet bgs)	Analyses and Analytical Methods													Comments
			Arsenic (As) EPA 6010B		Lead (Pb) EPA 6010B			Organochlorine Pesticides (OCPs) EPA 8081A							PCBs EPA 8082	
			TTLC	STLC	TTLC	STLC	TCLP	4,4'-DDD	4,4'-DDE	4,4'-DDT	alpha-Chlordane	Chlordane	Dieldrin	gamma-Chlordane		
		Units:	mg/kg	mg/L	mg/kg	mg/L	mg/L	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	
Composite E5	N/A	0.5	---	---	---	---	---	**1.1J**	**1.9J**	**0.99J**	**2.3**	**29**	ND<2.0	**2.4**	---	Composite of X12-0.5, X13-0.5, and X14-0.5
X-15-0.5	10/22/2016	0.5	**9.0**	---	**10**	---	---	---	---	---	---	---	---	---	---	
X-15-2.5	10/22/2016	2.5	**6.0**	---	**8.2**	---	---	---	---	---	---	---	---	---	---	
X-16-0.5	10/22/2016	0.5	**9.1**	---	**8.5**	---	---	---	---	---	---	---	---	---	---	
X-16-2.5	10/22/2016	2.5	**2.3**	---	**5.0**	---	---	---	---	---	---	---	---	---	---	
X-17-0.5	10/22/2016	0.5	**14**	---	**9.0**	---	---	---	---	---	---	---	---	---	---	
X-17-0.5 DUP	10/22/2016	0.5	**15**	---	**8.7**	---	---	---	---	---	---	---	---	---	---	
X-17-2.5	10/22/2016	2.5	**2.7**	---	**7.2**	---	---	---	---	---	---	---	---	---	---	
X-17a-0.5	11/21/2016	0.5	**8.5**	---	---	---	---	---	---	---	---	---	---	---	---	
X-17b-0.5	11/21/2016	0.5	**12**	---	---	---	---	---	---	---	---	---	---	---	---	
X-17b-0.5 DUP	11/21/2016	0.5	**11**	---	---	---	---	---	---	---	---	---	---	---	---	
X-17b-2.5	11/21/2016	2.5	**3.7**	---	---	---	---	---	---	---	---	---	---	---	---	
X-17c-0.5	11/21/2016	0.5	**9.9**	---	---	---	---	---	---	---	---	---	---	---	---	
X-17d-0.5	11/21/2016	0.5	**11**	---	---	---	---	---	---	---	---	---	---	---	---	
X-18-0.5	3/25/2017	0.5	**13**	---	---	---	---	---	---	---	---	---	---	---	---	
X-18-2.5	3/25/2017	2.5	**4.2**	---	---	---	---	---	---	---	---	---	---	---	---	
X-18a-0.5	3/25/2017	0.5	**13**	---	---	---	---	---	---	---	---	---	---	---	---	
X-18a-2.5	3/25/2017	2.5	**3.1**	---	---	---	---	---	---	---	---	---	---	---	---	
X-18c-0.5	3/25/2017	0.5	**14**	---	---	---	---	---	---	---	---	---	---	---	---	
X-18c-2.5	3/25/2017	2.5	**2.5**	---	---	---	---	---	---	---	---	---	---	---	---	
Composite E6	N/A	0.5	---	---	---	---	---	**1.4J**	**3.4**	**1.4J**	**2.0**	**33**	**0.37J**	**3.1**	---	Composite of X15-0.5, X16-0.5, and X17-0.5
Y-12-0.5	10/22/2016	0.5	**8.5**	---	**12**	---	---	---	---	---	---	---	---	---	---	
Y-12-2.5	10/22/2016	2.5	**1.9**	---	**4.1**	---	---	---	---	---	---	---	---	---	---	
Y-12-2.5 DUP	10/22/2016	2.5	**3.1**	---	**4.0**	---	---	---	---	---	---	---	---	---	---	
Y-13-0.5	10/22/2016	0.5	**10**	---	**8.9**	---	---	---	---	---	---	---	---	---	---	
Y-13-2.5	10/22/2016	2.5	**3.0**	---	**30**	---	---	---	---	---	---	---	---	---	---	
Y-14-0.5	10/22/2016	0.5	**6.8**	---	**8.2**	---	---	---	---	---	---	---	---	---	---	
Y-14-2.5	10/22/2016	2.5	**2.8**	---	**4.4**	---	---	---	---	---	---	---	---	---	---	
Composite E7	N/A	0.5	---	---	---	---	---	ND<2.0	**0.65J**	**0.32J**	**0.58J**	**5.8J**	ND<2.0	**0.47J**	ND<16	Composite of Y12-0.5, Y13-0.5, and Y14-0.5
Y-15-0.5	10/22/2016	0.5	**3.6**	---	**8.9**	---	---	---	---	---	---	---	---	---	---	
Y-15-2.5	10/22/2016	2.5	**2.4**	---	**8.0**	---	---	---	---	---	---	---	---	---	---	
Y-16-0.5	10/22/2016	0.5	**2.6**	---	**6.1**	---	---	---	---	---	---	---	---	---	---	
Y-16-2.5	10/22/2016	2.5	**8.9**	---	**11**	---	---	---	---	---	---	---	---	---	---	
Y-17-0.5	10/22/2016	0.5	**16**	---	**12**	---	---	---	---	---	---	---	---	---	---	
Y-17-2.5	10/22/2016	2.5	**2.6**	---	**7.5**	---	---	---	---	---	---	---	---	---	---	
Y-17b-0.5	11/21/2016	0.5	**4.9**	---	---	---	---	---	---	---	---	---	---	---	---	
Y-17c-0.5	11/21/2016	0.5	**14**	---	---	---	---	---	---	---	---	---	---	---	---	
Y-17c-2.5	11/21/2016	2.5	**2.6**	---	---	---	---	---	---	---	---	---	---	---	---	
Y-17d-0.5	11/21/2016	0.5	**4.7**	---	---	---	---	---	---	---	---	---	---	---	---	
Y-17d-0.5 DUP	11/21/2016	0.5	**3.2**	---	---	---	---	---	---	---	---	---	---	---	---	
Composite E8	N/A	0.5	---	---	---	---	---	ND<2.0	**1.1J**	**0.75J**	**0.42J**	**3.9J**	ND<2.0	**0.34J**	---	Composite of Y15-0.5, Y16-0.5, and Y17-0.5
Composite E8 DUP	N/A	0.5	---	---	---	---	---	ND<2.0	**0.87J**	**0.47J**	**0.80J**	**7.4J**	ND<2.0	**1.3**	---	Composite of Y15-0.5, Y16-0.5, and Y17-0.5
Z-17-0.5	3/25/2017	0.5	**11**	---	---	---	---	---	---	---	---	---	---	---	---	
Z-17-2.5	3/25/2017	2.5	**3.0**	---	---	---	---	---	---	---	---	---	---	---	---	

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Sample Location	Sample Date	Depth (feet bgs)	Analyses and Analytical Methods													Comments
			Arsenic (As) EPA 6010B		Lead (Pb) EPA 6010B			Organochlorine Pesticides (OCPs) EPA 8081A							PCBs EPA 8082	
			TTLC	STLC	TTLC	STLC	TCLP	4,4'-DDD	4,4'-DDE	4,4'-DDT	alpha-Chlordane	Chlordane	Dieldrin	gamma-Chlordane		
Units:			mg/kg	mg/L	mg/kg	mg/L	mg/L	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	
Z-17b-0.5	3/25/2017	0.5	**4.6**	---	---	---	---	---	---	---	---	---	---	---	---	
Z-17b-2.5	3/25/2017	2.5	**3.4**	---	---	---	---	---	---	---	---	---	---	---	---	
Z-17d-0.5	3/25/2017	0.5	**10**	---	---	---	---	---	---	---	---	---	---	---	---	
Z-17d-2.5	3/25/2017	2.5	**2.8**	---	---	---	---	---	---	---	---	---	---	---	---	
Units:			mg/L		mg/L			µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	
Equipment Blanks																
EB-1-10/8/16	10/8/2016	-	ND<0.010	---	ND<0.0050	---	---	ND<0.05	ND<0.05	ND<0.05	ND<0.02	ND<0.25	ND<0.05	ND<0.02	ND	
EB-1-10/9/16	10/9/2016	-	ND<0.010	---	ND<0.0050	---	---	ND<0.05	ND<0.05	ND<0.05	ND<0.02	ND<0.25	ND<0.05	ND<0.02	ND	
EB-2-10/9/16	10/9/2016	-	ND<0.010	---	ND<0.0050	---	---	ND<0.05	ND<0.05	ND<0.05	ND<0.02	ND<0.25	ND<0.05	ND<0.02	ND	
EB-4-10/15/16	10/15/2016	-	ND<0.010	---	ND<0.0050	---	---	ND<0.05	ND<0.05	ND<0.05	ND<0.02	ND<0.25	ND<0.05	ND<0.02	ND	
EB-5-10/15/16	10/15/2016	-	ND<0.010	---	ND<0.0050	---	---	ND<0.05	ND<0.05	ND<0.05	ND<0.02	ND<0.25	ND<0.05	ND<0.02	ND	
EB-6-10/16/16	10/16/2016	-	ND<0.010	---	ND<0.0050	---	---	ND<0.05	ND<0.05	ND<0.05	ND<0.02	ND<0.25	ND<0.05	ND<0.02	ND	
EB-7-10/16/16	10/16/2016	-	ND<0.010	---	ND<0.0050	---	---	ND<0.05	ND<0.05	ND<0.05	ND<0.02	ND<0.25	ND<0.05	ND<0.02	ND	
EB-8-10/22/16	10/22/2016	-	ND<0.010	---	ND<0.0050	---	---	ND<0.05	ND<0.05	ND<0.05	ND<0.02	ND<0.25	ND<0.05	ND<0.02	ND	
EB-9-10/22/16	10/22/2016	-	ND<0.010	---	**0.0066**	---	---	ND<0.05	ND<0.05	ND<0.05	ND<0.02	ND<0.25	ND<0.05	ND<0.02	ND	
EB-10-10/22/16	10/22/2016	-	ND<0.010	---	ND<0.0050	---	---	ND<0.05	ND<0.05	ND<0.05	ND<0.02	ND<0.25	ND<0.05	ND<0.02	ND	
EB-11-10/23/16	10/23/2016	-	ND<0.010	---	ND<0.0050	---	---	ND<0.05	ND<0.05	ND<0.05	ND<0.02	ND<0.25	ND<0.05	ND<0.02	ND	
EB-12-10/23/16	10/23/2016	-	ND<0.010	---	ND<0.0050	---	---	ND<0.05	ND<0.05	ND<0.05	ND<0.02	ND<0.25	ND<0.05	ND<0.02	ND	
EB-13-10/29/16	10/29/2016	-	ND<0.050	---	ND<0.025	---	---	ND<0.05	ND<0.05	ND<0.05	ND<0.02	ND<0.25	ND<0.05	ND<0.02	ND	
EB-14-10/29/16	10/29/2016	-	ND<0.050	---	ND<0.025	---	---	ND<0.05	ND<0.05	ND<0.05	ND<0.02	ND<0.25	ND<0.05	ND<0.02	ND	
EB-15-10/30/16	10/30/2016	-	ND<0.010	---	ND<0.0050	---	---	ND<0.05	ND<0.05	ND<0.05	ND<0.02	ND<0.25	ND<0.05	ND<0.02	ND	
EB-16-10/30/16	10/30/2016	-	ND<0.010	---	ND<0.0050	---	---	ND<0.06	ND<0.06	ND<0.06	ND<0.03	ND<0.28	ND<0.06	ND<0.03	ND	
EB-17	11/21/2016	-	ND<0.010	---	ND<0.0050	---	---	---	---	---	---	---	---	---	---	
EB-18	11/21/2016	-	ND<0.010	---	**0.013**	---	---	---	---	---	---	---	---	---	---	
EB-19	11/22/2016	-	ND<0.010	---	ND<0.0050	---	---	---	---	---	---	---	---	---	---	
EB-20	11/22/2016	-	ND<0.010	---	ND<0.0050	---	---	---	---	---	---	---	---	---	---	
EB-21	11/23/2016	-	ND<0.010	---	**0.0030 J**	---	---	---	---	---	---	---	---	---	---	
EB-22	11/23/2016	-	ND<0.010	---	ND<0.0050	---	---	---	---	---	---	---	---	---	---	
EB-23	12/21/2016	-	ND<0.010	---	**0.0031 J**	---	---	---	---	---	---	---	---	---	---	
EB-24-3/25/17	3/25/2017	-	ND<0.010	---	ND<0.0050	---	---	---	---	---	---	---	---	---	---	
EB-25-3/25/17	3/25/2017	-	**0.0093 J**	---	**0.0029 J**	---	---	---	---	---	---	---	---	---	---	
EB-26-3/26/17	3/26/2017	-	**0.0090 J**	---	ND<0.0050	---	---	---	---	---	---	---	---	---	---	
EB-27-3/26/17	3/26/2017	-	ND<0.010	---	ND<0.0050	---	---	---	---	---	---	---	---	---	---	
EB-28-6/14/17	6/14/2017	-	ND<0.010	---	**0.0032 J**	---	---	---	---	---	---	---	---	---	---	
EB-29-6/14/17	6/14/2017	-	ND<0.010	---	**0.0034 J**	---	---	---	---	---	---	---	---	---	---	

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Sample Location	Sample Date	Depth (feet bgs)	Analyses and Analytical Methods													Comments
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			TTLC	STLC	TTLC	STLC	TCLP	4,4'-DDD	4,4'-DDE	4,4'-DDT	alpha-Chlordane	Chlordane	Dieldrin	gamma-Chlordane		
		Units:	mg/kg	mg/L	mg/kg	mg/L	mg/L	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	

Notes:

Table summarizes arsenic and lead laboratory analytical reports for soil samples.
Samples with detectable concentrations presented in **bold** font.
Arsenic screening level based on California background level.
TTLC screening level based on Department of Toxic Substances Control (DTSC) Office of Human Ecological Risk (HERO) Human Health Risk Assessment (HRRA) Note Number 3, Table 1 (DTSC, 2015).
OCPs screening levels are based on Department of Toxic Substances Control (DTSC) Office of Human Ecological Risk (HERO) Human Health Risk Assessment (HRRA) Note Number 3-Table 1 Cancer Value (or Non-Cancer value, lowest value) (DTSC, 2015) or United States Environmental Protection Agency (US EPA) Regional Screening Level [carcinogenic or non-carcinogenic, lowest value) (EPA, 2015).

LAUSD = Los Angeles Unified School District
ID = Identification
bgs = below ground surface
EPA = Environmental Protection Agency
--- = not analyzed

mg/kg = milligrams per kilogram
mg/L = milligrams per liter
µg/L = micrograms per liter
DUP = Duplicate of preceeding sample
J = Analyte detected below the Practical Quantitation Limit but above or equal to the Method Detection Limit. Result is an estimated concentration.

(1) = 3.8J Aroclor 1260
(2) = 11J Aroclor 1260

Table 2
Summary of Hoist and Clarifier Soil Sample Results - TPH, VOCs, OCPs, PCBs, and Metals
Preliminary Environmental Assessment Equivalent Report
LAUSD - Roosevelt High School
456 South Mathews Street
Los Angeles, California

Sample Location	Date	Depth (feet bgs)	Total Petroleum Hydrocarbons (TPH) EPA Method 8015			VOCs EPA Method 8260B	SVOCs EPA Method 8270C	Organochlorine Pesticides (OCPs) EPA 8081A	Polychlorinated Biphenyls (PCBs) - EPA Method 8082	Metals - EPA Methods 6010B/7471A																Comments
			Gasoline Range	Diesel Range (C10-22)	Motor Oil Range (C23-C36)					Antimony	Arsenic	Barium	Berrylium	Cadmium	Chromium	Cobalt	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc	
Units:			mg/kg	mg/kg	mg/kg	(µg/kg)	(µg/kg)	µg/kg	µg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	
Screening Level:			NA	NA	NA					12								80									
Hydraulic Hoist Samples																											
HL1-1-0.5-1.0	10/22/2016	0.5-1.0	---	**2.6**	**3.2**	---	---	---	ND<16	ND<2.0	**1.3**	**72**	**0.34J**	ND<1.0	**7.5**	**3.7**	**6.5**	**2.1**	**0.03J**	ND<1.0	**5.7**	ND<1.0	ND<1.0	ND<1.0	**17**	**19**	
HL1-1-2.0-2.5	10/22/2016	2.0-2.5	---	**2.6**	**2.1**	---	---	---	ND<16	ND<2.0	**1.5**	**99**	**0.36J**	ND<1.0	**11**	**5.7**	**8.7**	**1.8**	**0.02J**	ND<1.0	**7.6**	ND<1.0	ND<1.0	ND<1.0	**32**	**32**	
HL1-1-5.0-5.5	10/22/2016	5.0-5.5	---	**3.1**	**2.2**	---	---	---	ND<16	ND<2.0	**1.4**	**42**	**0.16J**	ND<1.0	**8.0**	**3.6**	**5.2**	**1.3**	**0.03J**	ND<1.0	**5.8**	ND<1.0	ND<1.0	ND<1.0	**14**	**15**	
HL1-1-9.5-10.0	10/22/2016	9.5-10.0	---	**1.5**	**1.0**	---	---	---	ND<16	ND<2.0	**2.3**	**29**	**0.10J**	ND<1.0	**4.0**	**2.4**	**3.3**	**1.1**	ND<0.10	**0.20J**	**2.6**	ND<1.0	ND<1.0	ND<1.0	**19**	**11**	
HL1-2-0.5-1.0	10/22/2016	0.5-1.0	---	**3.2**	**3.6**	---	---	---	ND<16	ND<2.0	ND<1.0	**96**	**0.37J**	ND<1.0	**9.9**	**9.7**	**8.2**	**2.3**	**0.02J**	ND<1.0	**7.3**	ND<1.0	ND<1.0	ND<1.0	**22**	**27**	
HL1-2-2.0-2.5	10/22/2016	2.0-2.5	---	**1.4**	**1.3**	---	---	---	ND<16	ND<2.0	**1.4**	**120**	**0.47J**	ND<1.0	**14**	**5.4**	**13**	**3.1**	**0.05J**	ND<1.0	**9.3**	ND<1.0	ND<1.0	ND<1.0	**29**	**32**	
HL1-2-5.0-5.5	10/22/2016	5.0-5.5	---	**1.6**	**1.3**	---	---	---	ND<16	ND<2.0	**1.4**	**48**	**0.20J**	ND<1.0	**11**	**5.9**	**5.4**	**1.8**	**0.03J**	ND<1.0	**7.0**	ND<1.0	ND<1.0	ND<1.0	**25**	**15**	
HL1-2-9.5-10.0	10/22/2016	9.5-10.0	---	**3.6**	**2.2**	---	---	---	ND<16	ND<2.0	**1.2**	**39**	**0.19J**	ND<1.0	**11**	**4.1**	**4.9**	**1.4**	**0.03J**	ND<1.0	**6.3**	ND<1.0	ND<1.0	ND<1.0	**23**	**15**	
HL1-2-9.5-10.0 Duplicate	10/22/2016	9.5-10.0	---	**1.6**	**1.3**	---	---	---	ND<16	ND<2.0	**1.2**	**39**	ND<1.0	**0.11J**	**8.6**	**4.1**	**5.1**	**1.4**	**0.05J**	ND<1.0	**6.5**	ND<1.0	ND<1.0	ND<1.0	**19**	**16**	
HL2-1-0.5-1.0	10/22/2016	0.5-1.0	---	**2.0**	**1.6**	---	---	---	ND<16	ND<2.0	**1.7**	**75**	**0.25J**	ND<1.0	**9.5**	**4.6**	**8.0**	**5.0**	**0.03J**	ND<1.0	**6.0**	ND<1.0	ND<1.0	**0.56J**	**19**	**30**	
HL2-1-2.0-2.5	10/22/2016	2.0-2.5	---	**4.2**	**3.0**	---	---	---	ND<16	ND<2.0	**1.2**	**61**	**0.34J**	ND<1.0	**10**	**5.6**	**5.8**	**2.1**	**0.02J**	ND<1.0	**8.1**	ND<1.0	ND<1.0	ND<1.0	**24**	**17**	
HL2-1-5.0-5.5	10/22/2016	5.0-5.5	---	**1.3**	**1.5**	---	---	---	ND<16	ND<2.0	**0.77J**	**44**	**0.20J**	ND<1.0	**9.7**	**5.8**	**4.5**	**1.4**	**0.02J**	ND<1.0	**7.1**	ND<1.0	ND<1.0	ND<1.0	**18**	**17**	
HL2-1-9.5-10.0	10/22/2016	9.5-10.0	---	ND<1.0	ND<1.0	---	---	---	ND<16	ND<2.0	**1.7**	**17**	**0.09J**	ND<1.0	**3.2**	**1.7**	**2.6**	**0.72J**	**0.02J**	**1.1**	**1.9**	ND<1.0	ND<1.0	ND<1.0	**13**	**6.4**	
HL2-2-0.5-1.0	10/22/2016	0.5-1.0	---	**3.6**	**4.2**	---	---	---	ND<16	ND<2.0	**1.3**	**76**	**0.37J**	ND<1.0	**12**	**7.9**	**7.9**	**2.7**	**0.03J**	ND<1.0	**7.8**	ND<1.0	ND<1.0	ND<1.0	**27**	**23**	
HL2-2-2.0-2.5	10/22/2016	2.0-2.5	---	**1.9**	**1.4**	---	---	---	ND<16	ND<2.0	**0.89J**	**70**	**0.30J**	ND<1.0	**8.6**	**4.1**	**5.6**	**2.2**	**0.02J**	ND<1.0	**6.5**	ND<1.0	ND<1.0	ND<1.0	**21**	**19**	
HL2-2-5.0-5.5	10/22/2016	5.0-5.5	---	**1900**	**4700**	---	---	---	ND<16	ND<2.0	**1.1**	**70**	**0.23J**	ND<1.0	**11**	**5.3**	**5.9**	**1.6**	**0.03J**	ND<1.0	**8.9**	ND<1.0	ND<1.0	ND<1.0	**19**	**22**	
HL2-2-10.0-10.5	10/22/2016	10.0-10.5	---	**7.3**	**8.2**	---	---	---	ND<16	ND<2.0	**0.88J**	**38**	ND<1.0	ND<1.0	**2.7**	**1.1**	**2.6**	**0.79J**	ND<0.10	**0.52J**	**2.1**	ND<1.0	ND<1.0	ND<1.0	**10**	**5.9**	
HL3-1-0.5-1.0	10/22/2016	0.5-1.0	---	**1.8**	**1.8**	---	---	---	ND<16	ND<2.0	ND<1.0	**51**	**0.22J**	ND<1.0	**7.7**	**3.8**	**5.2**	**3.0**	**0.03J**	ND<1.0	**4.3**	ND<1.0	ND<1.0	ND<1.0	**16**	**17**	
HL3-1-2.0-2.5	10/22/2016	2.0-2.5	---	**2.3**	**2.3**	---	---	---	ND<16	ND<2.0	ND<1.0	**57**	**0.34J**	ND<1.0	**10**	**6.1**	**6.7**	**2.4**	**0.03J**	ND<1.0	**7.1**	ND<1.0	ND<1.0	ND<1.0	**24**	**26**	
HL3-1-5.0-5.5	10/22/2016	5.0-5.5	---	**3.8**	**3.0**	---	---	---	ND<16	ND<2.0	**1.1**	**59**	**0.30J**	ND<1.0	**12**	**4.2**	**5.0**	**1.6**	**0.03J**	ND<1.0	**8.1**	ND<1.0	ND<1.0	ND<1.0	**19**	**16**	
HL3-1-5.0-5.5 Duplicate	10/22/2016	5.0-5.5	---	**1.5**	**1.3**	---	---	---	ND<16	ND<2.0	**1.3**	**54**	ND<1.0	ND<1.0	**13**	**2.9**	**5.7**	**1.7**	**0.03J**	ND<1.0	**7.2**	ND<1.0	ND<1.0	ND<1.0	**19**	**18**	
HL3-1-9.5-10.0	10/22/2016	9.5-10.0	---	**2.4**	**1.6**	---	---	---	ND<16	ND<2.0	**1.1**	**65**	**0.06J**	ND<1.0	**2.5**	**1.2**	**2.0J**	**0.61J**	ND<0.10	**0.61J**	**2.5**	ND<1.0	ND<1.0	ND<1.0	**9.7**	**4.6**	
HL3-2-0.5-1.0	10/22/2016	0.5-1.0	---	**2.3**	**2.7**	---	---	---	ND<16	ND<2.0	**0.93J**	**69**	**0.27J**	ND<1.0	**7.5**	**3.1**	**7.4**	**2.2**	**0.03J**	ND<1.0	**4.4**	ND<1.0	ND<1.0	ND<1.0	**17**	**21**	
HL3-2-2.0-2.5	10/22/2016	2.0-2.5	---	**3.6**	**3.5**	---	---	---	ND<16	ND<2.0	**1.1**	**130**	**0.33J**	ND<1.0	**9.6**	**4.6**	**7.2**	**1.8**	**0.02J**	ND<1.0	**6.8**	ND<1.0	ND<1.0	ND<1.0	**23**	**23**	
HL3-2-5.0-5.5	10/22/2016	5.0-5.5	---	**2.0**	**2.3**	---	---	---	ND<16	ND<2.0	ND<1.0	**36**	**0.09J**	ND<1.0	**5.5**	**2.6**	**3.4**	**0.88J**	ND<0.10	ND<1.0	**2.8**	ND<1.0	ND<1.0	ND<1.0	**12**	**11**	
HL3-2-9.5-10.0	10/22/2016	9.5-10.0	---	**3.6**	**3.3**	---	---	---	ND<16	ND<2.0	**1.9**	**100**	**0.32J**	ND<1.0	**11**	**4.7**	**7.4**	**17**	**0.03J**	ND<1.0	**6.5**	ND<1.0	ND<1.0	ND<1.0	**24**	**37**	
HL4-1-0.5-1.0	10/22/2016	0.5-1.0	---	**3.0**	**13**	---	---	---	ND<16	ND<2.0	**1.5**	**140**	**0.37J**	ND<1.0	**13**	**6.6**	**9.3**	**2.8**	ND<0.10	ND<1.0	**9.3**	ND<1.0	ND<1.0	ND<1.0	**31**	**30**	
HL4-1-2.0-2.5	10/22/2016	2.0-2.5	---	**3.7**	**3.9**	---	---	---	ND<16	ND<2.0	**1.3**	**150**	**0.41J**	ND<1.0	**14**	**6.9**	**9.8**	**3.0**	**0.02J**	ND<1.0	**9.9**	ND<1.0	ND<1.0	ND<1.0	**28**	**32**	
HL4-1-5.0-5.5	10/22/2016	5.0-5.5	---	**1.1**	**1.0**	---	---	---	ND<16	ND<2.0	**1.6**	**99**	**0.42J**	ND<1.0	**14**	**4.2**	**7.0**	**2.9**	**0.02J**	ND<1.0	**8.8**	ND<1.0	ND<1.0	ND<1.0	**30**	**22**	
HL4-1-9.5-10.0	10/22/2016	9.5-10.0	---	**2.7**	**3.1**	---	---	---	ND<16	ND<2.0	**2.6**	**32**	**0.11J**	ND<1.0	**6.6**	**2.1**	**3.3**	**1.2**	ND<0.10	**0.47J**	**3.1**	ND<1.0	ND<1.0	ND<1.0	**34**	**8.8**	
HL4-2-0.5-1.0	10/22/2016	0.5-1.0	---	**5.5**	**11**	---	---	---	**(1)**	ND<2.0	**2.2**	**88**	**0.27J**	ND<1.0	**13**	**5.0**	**8.4**	**4.3**	**0.02J**	ND<1.0	**8.0**	ND<1.0	ND<1.0	ND<1.0	**25**	**25**	
HL4-2-2.0-2.5	10/22/2016	2.0-2.5	---	**1.6**	**1.5**	---	---	---	ND<16	ND<2.0	**1.4**	**82**	**0.21J**	ND<1.0	**8.5**	**4.2**	**5.4**	**1.6**	**0.02J**	ND<1.0	**6.5**	ND<1.0	ND<1.0	ND<1.0	**21**	**19**	
HL4-2-5.0-5.5	10/22/2016	5.0-5.5	---	**5.6**	**5.7**	---	---	---	ND<16	ND<2.0	**2.4**	**54**	**0.28J**	ND<1.0	**10**	**3.5**	**4.5**	**1.8**	**0.02J**	ND<1.0	**8.1**	ND<1.0	ND<1.0	ND<1.0	**26**	**17**	
HL4-2-5.0-5.5 Duplicate	10/22/2016	5.0-5.5	---	**1.0**	**ND<1.0**	---	---	---	ND<16	ND<2.0	**3.0**	**61**	**0.06J**	**0.18J**	**12**	**3.1**	**5.2**	**1.8**	**0.02J**	ND<1.0	**9.1**	ND<1.0	ND<1.0	ND<1.0	**30**	**20**	
HL4-2-9.5-10.0	10/22/2016	9.5-10.0	---	**2.5**	**2.5**	---	---	---	ND<16	ND<2.0	**5.1**	**32**	**0.10J**	ND<1.0	**3.4**	**1.8**	**4.4**	**1.0**	ND<0.10	**0.90J**	**3.6**	ND<1.0	ND<1.0	ND<1.0	**27**	**6.8**	
Clarifier Samples																											
CL1-1-0.5-1.0	10/22/2016	0.5-1.0	---	ND<1.0	ND<1.0	ND	**(2)**	---	---	ND<2.0	**1.8**	**61**	**0.35J**	ND<1.0	**11**	**4.0**	**5.8**	**2.4**	**0.03J**	ND<1.0	**6.4**	ND<1.0	ND<1.0	ND<1.0	**26**	**17**	
CL1-1-2.0-2.5	10/22/2016	2.0-2.5	---	**1.4**	**3.6**	**(3)**	ND	---	---	ND<2.0	**1.2**	**110**	**0.36J**	ND<1.0	**11**	**5.0**	**7.4**	**2.7**	**0.02J**	ND<1.0	**6.7**	ND<1.0	ND<1.0	ND<1.0	**26**	**28**	
CL1-1-5.0-5.5	10/22/2016	5.0-5.5	---	**1.2**	ND<1.0	ND	ND	---	---	ND<2.0	**2.0**	**39**	**0.13J**	ND<1.0	**4.2**	**2.0**	**3.5**	**0.96J**	ND<0.10	ND<1.0	**3.2**	ND<1.0	ND<1.0	ND<1.0	**19**	**9.6**	
CL1-1-9.5-10.0	10/22/2016	9.5-10.0	---	ND<1.0	ND<1.0	ND	ND	---	---	ND<2.0	**6.4**	**86**	**0.13J**	ND<1.0	**4.3**	**2.6**	**4.6**	**1.0**	**0.05J**	ND<1.0	**3.4**	ND<1.0	ND<1.0	ND<1.0	**32**	**12**	
CL1-2-0.5-1.0	10/22/2016	0.5-1.0	---	**2.6**	**7.3**	ND	ND	---	---	ND<2.0	**2.7**	**82**	**0.28J**	ND<1.0	**17**	**4.8**	**12**	**11**	**0.04J**	ND<1.0	**10**	ND<1.0	ND<1.0	**0.58J**	**22**	**28**	
CL1-2-2.0-2.5	10/22/2016	2.0-2.5	---	**4.2**	**1.6**	ND	**(4)**	---	---	ND<2.0	**1.2**	**80**	**0.36J**	ND<1.0	**12**	**6.4**	**6.2**	**2.9**	**0.03J**	ND<1.0	**6.1**	ND<1.0	ND<1.0	ND<1.0	**25**	**21**	
CL1-2-5.0-5.5	10/22/2016	5.0-5.5	---	**2.6**	**2.6**	ND	ND	---	---	ND<2.0	**2.6**	**50**	**0.25J**	ND<1.0	**11**	**4.6**	**4.5**	**1.7**	**0.03J**	ND<1.0	**4.9**	ND<1.0	ND<1.0	ND<1.0	**31**	**12**	
CL1-2-5.0-5.5 Dup	10/22/2016	5.0-5.5	---	**1.2**	ND<1.0	ND	ND	---	---	ND<2.0	**2.5**	**54**	ND<1.0	**0.09 J**	**12**	**8.4**	**5.4**	**1.9**	**0.03 J**	ND<1.0	**5.6**	ND<1.0	ND<1.0	ND<1.0	**34**	**15**	
CL1-2-9.5-10.0	10/22/2016	9.5-10.0	---	**1.4**	ND<1.0	ND	ND	---	---	ND<2.0	**1.5**	**87**	**0.11J**	ND<1.0	**3.7**	**1.9**	**3.1**	**1.0**	**0.02J**	**0.51J**	**2.1**	ND<1.0	ND<1.0	ND<1.0	**14**	**8.9**	

Table 2
Summary of Hoist and Clarifier Soil Sample Results - TPH, VOCs, OCPs, PCBs, and Metals
Preliminary Environmental Assessment Equivalent Report
LAUSD - Roosevelt High School
456 South Mathews Street
Los Angeles, California

Sample Location	Date	Depth (feet bgs)	Total Petroleum Hydrocarbons (TPH) EPA Method 8015					Organochlorine Pesticides (OCPs) EPA 8081A	Polychlorinated Biphenyls (PCBs) - EPA Method 8082	Metals - EPA Methods 6010B/7471A															Comments
			Gasoline Range	Diesel Range (C10-22)	Motor Oil Range (C23-C36)	VOCs EPA Method 8260B	SVOCs EPA Method 8270C			Antimony	Arsenic	Barium	Berrylium	Cadmium	Chromium	Cobalt	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc	
Units:			mg/kg	mg/kg	mg/kg	(µg/kg)	(µg/kg)	µg/kg	µg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	
Screening Level:			NA	NA	NA					12								80									
Undocumented Fill Samples																											
FILL-1-5.0-5.5	10/22/2016	5.0-5.5	ND<0.82	--	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	--	---	---	
Composite 1	N/A	N/A	---	**1.7**	**3.4**	---	ND	ND	ND<16	ND<2.0	**3.0**	**74**	ND<1.0	**0.13J**	**10**	**4.8**	**8.0**	**6.9**	**0.02J**	ND<1.0	**6.7**	ND<1.0	ND<1.0	ND<1.0	**33**	**23**	Composite of FILL-1-2.0-2.5, FILL-1-5.0-5.5, and FILL-1-10-10.5
FILL-2-10.0-10.5	10/22/2016	10.0-10.5	ND<1.0	---	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
Composite 2	N/A	N/A	---	**1.5**	**1.8**	---	ND	ND	ND<16	ND<2.0	**3.5**	**42**	ND<1.0	**0.14J**	**10**	**2.6**	**5.1**	**1.3**	**0.02J**	ND<1.0	**5.6**	ND<1.0	ND<1.0	ND<1.0	**24**	**17**	Composite of FILL-2-2.0-2.5, FILL-2-5.0-5.5, FILL-2-10-10.5, and FILL-2-13.5-14.0
Equipment Blanks																											
Units:			mg/L	mg/L	mg/L	µg/L	µg/L		µg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	
EB-CL-10-22-16	10/22/2016	N/A	---	ND<0.05	ND<0.05	ND	ND	---	---	ND<0.010	ND<0.010	ND<0.0030	ND<0.0030	ND<0.0030	ND<0.0030	ND<0.0030	ND<0.0090	ND<0.0050	ND<0.00020	ND<0.0050	ND<0.0050	**0.0042J**	**0.0007J**	ND<0.015	ND<0.0030	**0.0075J**	
EB-HL-10-22-16	10/22/2016	N/A	---	ND<0.05	ND<0.05	---	---	---	ND	ND<0.010	ND<0.010	ND<0.0030	ND<0.0030	ND<0.0030	ND<0.0030	ND<0.0030	**0.0030J**	ND<0.0050	ND<0.00020	ND<0.0050	ND<0.0050	**0.0046J**	ND<0.0030	ND<0.015	ND<0.0030	**0.0042J**	
EB-UF-10-22-16	10/22/2016	N/A	ND<0.05	ND<0.05	ND<0.05	ND	ND	---	ND	**0.0028J**	ND<0.010	ND<0.0030	**0.0005J**	ND<0.0030	ND<0.0030	ND<0.0030	ND<0.0090	ND<0.0050	ND<0.00020	**0.0011J**	ND<0.0050	**0.0058J**	ND<0.0030	**0.0028J**	ND<0.0030	ND<0.025	
Trip Blanks																											
Units:			mg/L	mg/L	mg/L	µg/L	µg/L			mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	
Trip Blank	10/22/2016	N/A	ND<0.05	---	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
Trip Blank	10/22/2016	N/A	ND<0.05	---	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	

Notes:

Table summarizes TPH, VOC, PCB, and Metals laboratory analytical reports for all soil samples.
Samples with detectable concentrations presented in **bold** font.

Screening levels are based on Department of Toxic Substances Control (DTSC) Office of Human Ecological Risk (HERO) Human Health Risk Assessment (HRRA) Note Number 3-Table 1 Cancer Value (or Non-Cancer value, lowest value) (DTSC, 2015) or United States Environmental Protection Agency (US EPA) Regional Screening Level [carcinogenic or non-carcinogenic, lowest value) (EPA, 2015).

Samples exceeding the screening levels are highlighted yellow.
* Samples analyzed past holding time for confirmation only.

LAUSD = Los Angeles Unified School District
ID = Identification
bgs = Below ground surface
C4-C11 = Indicates the hydrocarbon chain range
EPA = Environmental Protection Agency
µg/kg = Micrograms per kilogram
mg/kg = Milligrams per kilogram
µg/L = micrograms per liter
PQL = Practical Quantitation Limit as identified in the laboratory reports
NA = US EPA Region IX Regional Screening Level Resident Soil not available
CS = Compound specific
ND<2.0 = Constituent not detected at or above the laboratory PQL shown
--- = Sample was not analyzed for the particular constituent

(1) = 6.7J µg/kg Aroclor 1254
(2) = 180J µg/kg Phenol
(3) = 1.5J µg/kg Carbon disulfide
(4) = 190J µg/kg bis(2-ethylhexyl)phthalate

Table 3A

SUMMARY OF FIELD MEASUREMENTS AND LABORATORY ANALYSIS OF VAPOR SAMPLES
METHANE, HYDROGEN SULFIDE, OXYGEN, AND CARBON DIOXIDE
LAUSD Roosevelt High School
456 South Mathews Street
Los Angeles, California

Methane Probe	Date	Depth (feet)	Field Measurements						Results of Laboratory Analysis of Soil Gas Samples				
			Sample Collection Time	Pressure (IWC)	Methane (ppmv)	Hydrogen Sulfide (ppmv)	Oxygen (percent)	Carbon Dioxide (percent)	Sample Collection Time	Methane (ppm)	Hydrogen Sulfide (ppm)	Oxygen (ppm)	Carbon Dioxide (ppm)
M1	10/15/2016	7	7:39	0.0	0	0.0	18.9	1.62	--	--	--	--	--
	10/15/2016	12	7:44	0.0	25.1	0.0	15.1	2.38	--	--	--	--	--
	10/15/2016	22	7:47	0.0	300	0.0	9.8	9,480 ppmv	--	--	--	--	--
M1	10/16/2016	7	7:22	0.0	0	0.0	19.6	2.05	--	--	--	--	--
	10/16/2016	12	7:26	0.0	10	0.0	20.2	2.75	--	--	--	--	--
	10/16/2016	22	7:28	0.0	5	0.0	19.8	1.88	15:30	17	ND<1.0	126,000	44,000
M2	10/15/2016	7	8:37	0.0	100	0.0	18.7	1.25	--	--	--	--	--
	10/15/2016	12	8:38	0.0	290	0.0	15.9	1.50	--	--	--	--	--
	10/15/2016	22	8:39	0.0	910	0.0	14.1	2.84	--	--	--	--	--
M2	10/16/2016	7	7:47	0.0	130	0.0	18.9	1.30	--	--	--	--	--
	10/16/2016	12	7:52	0.0	55	0.0	18.2	1.35	--	--	--	--	--
	10/16/2016	22	7:55	0.0	630	0.0	17.4	3.70	--	--	--	--	--
M3	10/15/2016	7	7:55	0.0	0	0.0	17.6	2.48	--	--	--	--	--
	10/15/2016	12	8:01	0.0	0	0.0	16.1	2.56	--	--	--	--	--
	10/15/2016	22	8:04	0.0	45	0.0	13.4	900 ppmv	--	--	--	--	--
M3	10/16/2016	7	7:34	0.0	0	0.0	17.5	2.80	--	--	--	--	--
	10/16/2016	12	7:36	0.0	20	0.0	19.0	2.30	--	--	--	--	--
	10/16/2016	22	7:39	0.0	65	0.0	19.3	1.20	--	--	--	--	--
M3	3/19/2017	7	8:08	0.0	0.0	0.0	12.7	--	--	--	--	--	--
	3/19/2017	12	8:17	0.0	0.0	0.0	20.1	--	--	--	--	--	--
	3/19/2017	22	8:21	0.0	35	0.0	11.7	--	--	--	--	--	--
M4	10/15/2016	7	8:26	0.0	0	0.0	16.9	1.75	--	--	--	--	--
	10/15/2016	12	8:27	0.0	75	0.0	15.2	1.27	--	--	--	--	--
	10/15/2016	22	8:29	0.0	130	0.0	13.9	9,560 ppmv	--	--	--	--	--
M4	10/16/2016	7	8:00	0.0	0	0.0	17.7	2.35	--	--	--	--	--
	10/16/2016	12	8:03	0.0	0	0.0	15.9	3.75	--	--	--	--	--
	10/16/2016	22	8:06	0.0	20	0.0	16.1	3.70	--	--	--	--	--

Table 3A

SUMMARY OF FIELD MEASUREMENTS AND LABORATORY ANALYSIS OF VAPOR SAMPLES
METHANE, HYDROGEN SULFIDE, OXYGEN, AND CARBON DIOXIDE
LAUSD Roosevelt High School
456 South Mathews Street
Los Angeles, California

Methane Probe	Date	Depth (feet)	Field Measurements						Results of Laboratory Analysis of Soil Gas Samples				
			Sample Collection Time	Pressure (IWC)	Methane (ppmv)	Hydrogen Sulfide (ppmv)	Oxygen (percent)	Carbon Dioxide (percent)	Sample Collection Time	Methane (ppm)	Hydrogen Sulfide (ppm)	Oxygen (ppm)	Carbon Dioxide (ppm)
M5	10/15/2016	7	13:09	0.0	0	0.0	8.7	> 5.0	--	--	--	--	--
	10/15/2016	12	13:12	0.11	12	0.0	5.8	> 5.0	--	--	--	--	--
	10/15/2016	22	13:16	0.23	800	0.0	7.2	> 5.0	--	--	--	--	--
M5	10/16/2016	7	12:05	0.0	55	0.0	18.3	> 5.0	15:03	ND<1.2	ND<1.0	110,000	133,000
	10/16/2016	12	12:07	0.015	20	0.0	12.5	> 5.0	15:09	ND<1.2	ND<1.0	88,100	147,000
	10/16/2016	22	12:09	0.05	0	0.0	9.9	> 5.0	15:13	ND<1.2	ND<1.0	98,300	128,000
M5	3/19/2017	7	13:57	0.0	75	0.0	3.9	--	--	--	--	--	--
	3/19/2017	12	14:10	0.0	100	0.0	4.1	--	14:10	ND<1.2	--	--	--
	3/19/2017	22	14:13	0.0	35	0.0	8.2	--	--	--	--	--	--
M6	10/15/2016	7	8:14	0.0	0	0.0	17.9	1.12	--	--	--	--	--
	10/15/2016	12	8:15	0.0	0	0.0	17.8	1.16	--	--	--	--	--
M6	10/16/2016	7	8:18	0.0	0	0.0	18.0	1.30	--	--	--	--	--
	10/16/2016	12	8:20	0.0	0	0.0	19.0	1.38	--	--	--	--	--
M6	3/19/2017	7	13:40	0.02	0.0	0.0	17.8	--	--	--	--	--	--
	3/19/2017	12	13:47	0.03	0.0	0.0	18.3	--	--	--	--	--	--
M7	10/15/2016	7	8:49	0.0	0	0.0	17.3	2.25	--	--	--	--	--
M7	10/16/2016	7	8:11	0.0	30	0.0	18.8	2.9	--	--	--	--	--
M8	10/15/2016	7	12:57	0.0	0	0.0	19.0	4,880 ppmv	--	--	--	--	--
	10/15/2016	12	12:59	0.05	0	0.0	17.1	2.34	--	--	--	--	--
	10/15/2016	16	13:01	0.07	0	0.0	16.6	3.2	--	--	--	--	--
M8	10/16/2016	7	11:52	0.0	25	0.0	20.0	8,800 ppmv	--	--	--	--	--
	10/16/2016	12	11:53	0.01	0	0.0	17.8	2.8	--	--	--	--	--
	10/16/2016	16	11:55	0.01	0	0.0	17.5	3.1	--	--	--	--	--
M8	3/19/2017	7	13:20	0.0	10	0.0	18.8	--	--	--	--	--	--
	3/19/2017	12	13:27	0.0	23	0.0	16.5	--	--	--	--	--	--
	3/19/2017	16	13:32	0.03	28	0.0	16.8	--	--	--	--	--	--

Table 3A

SUMMARY OF FIELD MEASUREMENTS AND LABORATORY ANALYSIS OF VAPOR SAMPLES
METHANE, HYDROGEN SULFIDE, OXYGEN, AND CARBON DIOXIDE
LAUSD Roosevelt High School
456 South Mathews Street
Los Angeles, California

Methane Probe	Date	Depth (feet)	Field Measurements						Results of Laboratory Analysis of Soil Gas Samples				
			Sample Collection Time	Pressure (IWC)	Methane (ppmv)	Hydrogen Sulfide (ppmv)	Oxygen (percent)	Carbon Dioxide (percent)	Sample Collection Time	Methane (ppm)	Hydrogen Sulfide (ppm)	Oxygen (ppm)	Carbon Dioxide (ppm)
M9	10/15/2016	7	12:43	0.0	150	0.0	15.6	2.30	--	--	--	--	--
	10/15/2016	12	12:45	0.04	1,800	0.0	15.0	2.02	--	--	--	--	--
	10/15/2016	22	12:47	0.02	2,400	0.0	13.4	1.82	--	--	--	--	--
M9	10/16/2016	7	11:39	0.0	30	0.0	17.1	2.50	--	--	--	--	--
	10/16/2016	12	11:42	0.0	800	0.0	20.3	2.80	15:49	1.3	ND<1.0	170,000	37,600
	10/16/2016	22	11:44	0.0	120	0.0	20.9	1.30	15:58	120	ND<1.0	179,000	39,800
M9	3/19/2017	7	12:50	0.0	43	0.0	19.5	--	12:50	ND<1.2	--	--	--
	3/19/2017	12	13:04	0.0	23	0.0	14.6	--	--	--	--	--	--
	3/19/2017	22	13:12	0.0	--	--	--	--	--	--	--	--	--
M10	10/15/2016	7	9:14	0.0	0	0.0	18.7	1.51	--	--	--	--	--
	10/15/2016	12	9:15	0.0	80	0.0	18.6	1.80	--	--	--	--	--
M10	10/16/2016	7	8:26	0.0	0	0.0	19.1	1.50	--	--	--	--	--
	10/16/2016	12	8:28	0.0	0	0.0	19.8	1.98	--	--	--	--	--
M10	3/19/2017	7	9:13	0.01	0.0	0.0	17.1	--	--	--	--	--	--
	3/19/2017	12	9:21	--	43	0.0	17.0	--	--	--	--	--	--
M11	10/15/2016	7	9:07	0.0	12	0.0	18.1	1.65	--	--	--	--	--
	10/15/2016	12	9:08	0.0	0	0.0	18.1	1.87	--	--	--	--	--
M11	10/16/2016	7	8:34	0.0	0	0.0	20.7	2.10	--	--	--	--	--
	10/16/2016	12	8:36	0.0	0	0.0	19.7	2.20	--	--	--	--	--
M11	3/19/2017	7	8:58	0.0	0.0	0.0	17.9	--	--	--	--	--	--
	3/19/2017	12	9:06	0.0	0.0	0.0	17.9	--	--	--	--	--	--
M12	10/15/2016	7	9:40	0.0	0	0.0	18.5	1.50	--	--	--	--	--
	10/15/2016	12	9:43	0.0	23	0.0	18.2	5,730 ppmv	--	--	--	--	--
	10/15/2016	16	9:45	0.0	10	0.0	17.8	1.67	--	--	--	--	--
M12	10/16/2016	7	8:45	0.0	0	0.0	18.5	1.80	--	--	--	--	--
	10/16/2016	12	8:48	0.0	15	0.0	18.8	1.90	--	--	--	--	--
	10/16/2016	16	8:50	0.0	15	0.0	19.0	1.70	--	--	--	--	--
M12	3/19/2017	7	9:35	0.0	0.0	0.0	18.0	--	--	--	--	--	--
	3/19/2017	12	9:41	0.0	13	0.0	17.9	--	--	--	--	--	--
	3/19/2017	16	9:44	0.0	12	0.0	18.3	--	--	--	--	--	--

Table 3A

SUMMARY OF FIELD MEASUREMENTS AND LABORATORY ANALYSIS OF VAPOR SAMPLES
METHANE, HYDROGEN SULFIDE, OXYGEN, AND CARBON DIOXIDE
LAUSD Roosevelt High School
456 South Mathews Street
Los Angeles, California

Methane Probe	Date	Depth (feet)	Field Measurements						Results of Laboratory Analysis of Soil Gas Samples				
			Sample Collection Time	Pressure (IWC)	Methane (ppmv)	Hydrogen Sulfide (ppmv)	Oxygen (percent)	Carbon Dioxide (percent)	Sample Collection Time	Methane (ppm)	Hydrogen Sulfide (ppm)	Oxygen (ppm)	Carbon Dioxide (ppm)
M13	10/15/2016	7	12:33	0.0	0	0.0	12.0	2.80	--	--	--	--	--
	10/15/2016	12	12:40	0.0	21	0.0	13.2	> 5.0	--	--	--	--	--
M13	10/16/2016	7	11:31	0.0	0	0.0	17.4	3.20	--	--	--	--	--
	10/16/2016	12	11:33	0.0	0	0.0	16.3	> 5.0	--	--	--	--	--
M13	3/19/2017	20	12:25	0.0	20	0.0	13.3	--	--	--	--	--	--
		33	12:30	0.0	33	0.0	14.4	--	--	--	--	--	--
M14	10/15/2016	7	9:55	0.0	0	0.0	17.7	2.48	--	--	--	--	--
	10/15/2016	12	9:58	0.0	0	0.0	17.1	2.70	--	--	--	--	--
M14	10/16/2016	7	8:58	0.0	50	0.0	17.3	2.80	--	--	--	--	--
	10/16/2016	12	9:06	0.0	15	0.0	17.5	3.10	--	--	--	--	--
M14	3/19/2017	7	10:13	--	0.0	0.0	17.9	--	--	--	--	--	--
	3/19/2017	12	10:18	--	0.0	0.0	16.0	--	--	--	--	--	--
M15	10/15/2016	7	11:28	0.0	0	0.0	10.0	> 5.0	--	--	--	--	--
	10/15/2016	12	11:31	0.0	2,200	0.0	2.3	> 5.0	--	--	--	--	--
	10/15/2016	22	11:33	0.0	6,050	4.0	3.6	> 5.0	--	--	--	--	--
M15	10/16/2016	7	11:09	0.0	10	0.0	8.8	4.85	--	--	--	--	--
	10/16/2016	12	11:10	0.0	1,050	0.0	16.3	> 5.0	14:46	11,000	ND<1.0	33,700	248,000
	10/16/2016	22	11:13	0.0	380	0.0	19.2	> 5.0	14:52	11,000	ND<1.0	23,400	329,000
M15	3/19/2017	--	12:35	--	--	--	--	--	--	--	--	--	--
	3/19/2017	--	12:37	--	--	--	--	--	--	--	--	--	--
	3/19/2017	--	12:40	--	--	--	--	--	--	--	--	--	--
M16	10/15/2016	7	11:44	0.0	0	0.0	18.8	2.20	--	--	--	--	--
	10/15/2016	12	11:45	0.0	0	0.0	18.5	2.30	--	--	--	--	--
M16	10/16/2016	7	11:21	0.0	0	0.0	18.4	2.10	--	--	--	--	--
	10/16/2016	12	11:24	0.0	20	0.0	19.1	2.05	--	--	--	--	--
M16	3/19/2017	7	12:10	0.0	0.0	0.0	19.0	--	--	--	--	--	--
	3/19/2017	12	12:15	0.0	15	0.0	19.3	--	--	--	--	--	--

Table 3A

SUMMARY OF FIELD MEASUREMENTS AND LABORATORY ANALYSIS OF VAPOR SAMPLES
METHANE, HYDROGEN SULFIDE, OXYGEN, AND CARBON DIOXIDE
LAUSD Roosevelt High School
456 South Mathews Street
Los Angeles, California

Methane Probe	Date	Depth (feet)	Field Measurements						Results of Laboratory Analysis of Soil Gas Samples				
			Sample Collection Time	Pressure (IWC)	Methane (ppmv)	Hydrogen Sulfide (ppmv)	Oxygen (percent)	Carbon Dioxide (percent)	Sample Collection Time	Methane (ppm)	Hydrogen Sulfide (ppm)	Oxygen (ppm)	Carbon Dioxide (ppm)
M17	10/15/2016	7	10:16	0.0	3,600	0.0	14.1	9,800 ppmv	--	--	--	--	--
	10/15/2016	12	10:22	0.0	120	0.0	12.1	3.20	--	--	--	--	--
	10/15/2016	19	10:24	0.0	1,000	0.0	18.8	8,800 ppmv	--	--	--	--	--
M17	10/16/2016	7	9:15	0.0	170	0.0	15.6	1.37	--	--	--	--	--
	10/16/2016	12	9:17	0.0	85	0.0	11.7	4.98	--	--	--	--	--
	10/16/2016	19	9:20	0.0	95	0.0	13.8	8,990 ppmv	--	--	--	--	--
M17	3/19/2017	7	10:31	0.0	210	0.0	13.0	--	10:31	ND<1.2	--	--	--
	3/19/2017	12	10:37	0.0	150	0.0	12.7	--	10:37	ND<1.2	--	--	--
	3/19/2017	22	10:42	0.0	--	--	--	--	--				--
M18	10/15/2016	7	10:35	0.0	0	0.0	20.8	4,350 ppmv	--	--	--	--	--
	10/15/2016	12	10:36	0.0	0	0.0	19.9	7,250 ppmv	--	--	--	--	--
	10/15/2016	22	10:38	0.0	7,210	0.0	19.3	4,800 ppmv	--	--	--	--	--
M18	10/16/2016	7	9:56	0.0	0	0.0	20.3	4,900 ppmv	--	--	--	--	--
	10/16/2016	12	9:59	0.0	0	0.0	20.1	7,500 ppmv	--	--	--	--	--
	10/16/2016	22	10:02	0.0	65	0.0	20.0	--	--	--	--	--	--
M19	10/15/2016	7	11:13	0.01	0	0.0	20.8	3,890 ppmv	--	--	--	--	--
	10/15/2016	12	11:15	0.015	0	0.0	20.4	2,850 ppmv	--	--	--	--	--
M19	10/16/2016	7	10:59	0.0	40	0.0	20.9	2,330 ppmv	--	--	--	--	--
	10/16/2016	12	11:02	0.0	0	0.0	20.9	3,280 ppmv	--	--	--	--	--
M19	3/19/2017	7	11:50	0.0	5.0	0.0	20.1	--	--	--	--	--	--
	3/19/2017	12	11:56	0.0	7.0	0.0	20.4	--	11:56	ND<1.2	--	--	--

Table 3A

SUMMARY OF FIELD MEASUREMENTS AND LABORATORY ANALYSIS OF VAPOR SAMPLES
METHANE, HYDROGEN SULFIDE, OXYGEN, AND CARBON DIOXIDE
LAUSD Roosevelt High School
456 South Mathews Street
Los Angeles, California

Methane Probe	Date	Depth (feet)	Field Measurements						Results of Laboratory Analysis of Soil Gas Samples				
			Sample Collection Time	Pressure (IWC)	Methane (ppmv)	Hydrogen Sulfide (ppmv)	Oxygen (percent)	Carbon Dioxide (percent)	Sample Collection Time	Methane (ppm)	Hydrogen Sulfide (ppm)	Oxygen (ppm)	Carbon Dioxide (ppm)
M20	10/15/2016	7	10:48	0.0	2,300	0.0	6.4	4.90	--	--	--	--	--
	10/15/2016	12	10:50	0.0	24,500	34.5	6.2	3.90	--	--	--	--	--
	10/15/2016	22	11:01	0.0	14,250	19.3	10.3	2,210 ppmv	--	--	--	--	--
M20	10/16/2016	7	10:08	0.0	500	0.0	10.7	> 5.0	14:22	ND<1.2	ND<1.0	83,100	156,000
	10/16/2016	12	10:13	0.0	7500	3.0	7.2	4.80	14:27	ND<1.2	ND<1.0	84,100	151,000
	10/16/2016	12 (DUP)	--	--	--	--	--	--	14:35	ND<1.2	ND<1.0	85,700	146,000
	10/16/2016	22	10:17	0.03	750	0.0	8.9	--	--	--	--	--	--
M20	3/19/2017	7	11:18	0.0	--	--	--	--	--	--	--	--	--
	3/19/2017	12	11:25	0.0	--	--	--	--	--	--	--	--	--
	3/19/2017	22	11:30	0.2	--	--	--	--	--	--	--	--	--

NOTES:

EPA = Environmental Protection Agency
ASTM = American Standard Test Method
ppm = part per million
ppmv = part per million by volume
IWC = inch of water column
feet = feet below ground surface
DUP = duplicate sample

ND = parameter not detected at limit indicated
-- = not measured, not analyzed, or not available

Methane analyzed using EPA Method TO3M
Hydrogen sulfide analyzed using EPA Method 6
Oxygen and carbon dioxide analyzed using ASTM Method D1946

Table 3B

LABORATORY ANALYSIS OF VAPOR SAMPLES - VOLATILE ORGANIC COMPOUNDS
LAUSD Roosevelt High School
456 South Mathews Street
Los Angeles, California

Methane Probe	Date	Depth (feet)	Sample Collection Time	Volatile Organic Compounds using EPA Method TO-15M															
				Benzene (µg/m3)	Toluene (µg/m3)	Ethylbenzene (µg/m3)	Total Xylenes (µg/m3)	MTBE (µg/m3)	PCE (µg/m3)	TCE (µg/m3)	2-Butanone (µg/m3)	Carbon Disulfide (µg/m3)	Chloroform (µg/m3)	Chloromethane (µg/m3)	Dichloro-difluoro-methane (µg/m3)	4-Ethyl-toluene (µg/m3)	4-Methyl-2-Pentanone (µg/m3)	1,3,5-TMB (µg/m3)	1,2,4-TMB (µg/m3)
M1	10/16/2016	22	15:30	8.0	41	9.0	40.9	ND<7.2	12	ND<2.7	ND<4.4	33	ND<2.4	6.0	ND<2.5	2.5	ND<6.1	2.5	ND<7.4
M5	10/16/2016	7	15:03	15	190	39	184	ND<7.2	9.4	ND<2.7	ND<4.4	ND<31	ND<2.4	ND<1.0	ND<2.5	11	ND<6.1	12	30
	10/16/2016	12	15:09	11	200	58	304	ND<7.2	ND<3.4	ND<2.7	24	42	ND<2.4	ND<1.0	2.7	24	26	29	70
	10/16/2016	22	15:13	2.8	57	16	93	ND<7.2	4.1	ND<2.7	11	ND<31	ND<2.4	ND<1.0	4.3	9.5	ND<6.1	8.6	27
M9	10/16/2016	12	15:49	37	360	86	397	ND<7.2	ND<3.4	ND<2.7	31	130	6.4	ND<1.0	ND<2.5	22	31	25	58
	10/16/2016	22	15:58	12	160	40	192	ND<7.2	ND<3.4	ND<2.7	15	53	10	ND<1.0	ND<2.5	13	ND<6.1	10	26
M15	10/16/2016	12	14:46	33	210	50	206	ND<7.2	ND<3.4	ND<2.7	9.0	260	ND<2.4	ND<1.0	ND<2.5	13	ND<6.1	15	35
	10/16/2016	22	14:52	89	510	79	294	ND<7.2	ND<3.4	ND<2.7	14	ND<31	ND<2.4	ND<1.0	ND<2.5	23	28	23	58
M20	10/16/2016	7	14:22	3.4	51	11	57	ND<7.2	ND<3.4	ND<2.7	ND<4.4	ND<31	ND<2.4	ND<1.0	ND<2.5	4.1	ND<6.1	4.4	10
	10/16/2016	12	14:27	17	190	35	173	ND<7.2	ND<3.4	ND<2.7	ND<4.4	32	ND<2.4	ND<1.0	ND<2.5	11	ND<6.1	11	24
	10/16/2016	12(DUP)	14:35	19	220	38	194	ND<7.2	ND<3.4	ND<2.7	ND<4.4	42	ND<2.4	ND<1.0	ND<2.5	11	ND<6.1	11	24

NOTES:

EPA = Environmental Protection Agency
feet = feet below ground surface
DUP = duplicate sample
µg/m3 = micrograms per cubic meter
ND = parameter not detected at limit indicated
MTBE = methyl tertiary butyl ether
PCE = tetrachloroethylene
TCE = trichloroethene
1,3,5-TBM = 1,3,5 trimethylbenzene
1,2,4-TBM = 1,2,4 trimethylbenzene

Table 4A

REVISED SUMMARY OF PROPOSED EXCAVATION VOLUMES
SCREENING LEVELS: 80 mg/kg LEAD AND 12 mg/kg ARSENIC
Preliminary Environmental Assessment Equivalent Report
LAUSD - Roosevelt High School
456 South Mathews Street
Los Angeles, California

Location ID	Chemicals of Concern	Length (feet)	Width (feet)	Depth (feet)	Volume (cubic yards)	Volume (tons)	Notes
AREA 2							
C-12	Lead (Pb)	20	20	2.5	37.04	55.56	
B-6	Lead (Pb)	40	30	4.5	200.00	300.00	Confirmation sample at 4.5 feet bgs. See Table 3A, includes CAL-HAZ lead-affected soil.
PE-3	Lead (Pb)	40	15	4.5	100.00	150.00	Confirmation sample at 4.5 feet bgs. See Table 3A, includes CAL-HAZ lead-affected soil.
H-2	Lead (Pb)	20	45	3.5	116.67	175.00	H-2 total volume: 204.17 cubic yards or 306.25 tons.
H-2	Lead (Pb)	27	25	3.5	87.50	131.25	
Area 2 Subtotal					***541.20***	***811.81***	
AREA 3							
C-17 / C-17b	Lead (Pb)	50	25	2.5	115.74	173.61	See Table 3A, includes CAL-HAZ lead-affected soil.
B-16 / B-16a	Arsenic (As) & Lead (Pb)	25	25	3.5	81.02	121.53	
B-15b	Lead (Pb)	25	25	2.5	57.87	86.81	
B-13b / B-14 / B-14a/b / B-15 / B-15a	Arsenic (As)	100	25	2.5	231.48	347.22	
B-13 / B-13a	Arsenic (As) & Lead (Pb)	20	25	4.5	83.33	125.00	Confirmation sample at 4.5 feet bgs. See Table 3A, includes CAL-HAZ lead-affected soil.
B-13c / C-13 / C-13c	Lead (Pb)	20	75	2.5	138.89	208.33	See Table 3A, includes CAL-HAZ lead-affected soil.
Area 3 Subtotal					***708.33***	***1062.50***	
AREA 5							
MB-6	Lead (Pb)	15	20	2.5	27.78	41.67	
AUD-3a / AUD-3a1	Lead (Pb)	55	55	2.5	280.09	420.14	See Table 3A, includes CAL-HAZ lead-affected soil.
AUD-3 /AUD-3b	Lead (Pb)	35	45	2.5	145.83	218.75	See Table 3A, includes CAL-HAZ lead-affected soil.
AUD-3c / AUD-3c1	Lead (Pb)	57	37	2.5	195.28	292.92	See Table 3A, includes CAL-HAZ lead-affected soil.
AUD-4/AUD-4c	Lead (Pb)	20	100	2.5	185.19	277.78	See Table 3A, includes CAL-HAZ lead-affected soil.
AUD-5 / AUD-5b	Lead (Pb)	35	53	2.5	171.76	257.64	See Table 3A, includes CAL-HAZ lead-affected soil.
AUD-5c / AA2038-9	Lead (Pb)	20	60	2.5	111.11	166.67	See Table 3A, includes CAL-HAZ lead-affected soil.
AUD-6 / AUD-6b	Lead (Pb)	35	62	2.5	200.93	301.39	See Table 3A, includes CAL-HAZ lead-affected soil.
AUD-6c	Lead (Pb)	60	58	2.5	322.22	483.33	See Table 3A, includes CAL-HAZ lead-affected soil.
Area 5 Subtotal					***1640.19***	***2460.28***	
AREA 6							
FS-2	Arsenic (As)	15	15	2.5	20.83	31.25	FS-2 total: 28.24 cubic yards or 42.36 tons
FS-2	Arsenic (As)	10	8	2.5	7.41	11.11	
AA1917	Lead (Pb)	20	15	4.5	50.00	75.00	Confirmation sample at 4.5 feet bgs
IM1	Arsenic (As)	30	17	3.5	66.11	99.17	
IM-2 / IM-2b	Lead (Pb)	45	17	3.5	99.17	148.75	See Table 3A, includes CAL-HAZ lead-affected soil.
IM-3 / IM-3c	Arsenic (As)	15	40	4.5	100.00	150.00	
IM-4	Arsenic (As)	20	10	3.5	25.93	38.89	
IM-5 / IM-5d	Arsenic (As)	35	10	4.5	58.33	87.50	
IM-6	Arsenic (As)	15	30	2.5	41.67	62.50	
CRA-2	Lead (Pb)	45	22	4.5	165.00	247.50	See Table 3A, includes CAL-HAZ lead-affected soil.
CRA-3	Arsenic (As)	25	22	2.5	50.93	76.39	
CR1-2	Lead (Pb)	50	15	2.5	69.44	104.17	See Table 3A, includes CAL-HAZ lead-affected soil.
CR1-4 / CR1-4b	Lead (Pb)	82	7	2.5	53.15	79.72	CR1-4 / CR1-4b total: 87.87 cubic yards or 131.80 tons. See Table 3A, includes CAL-HAZ lead-affected soil.
CR1-4 / CR1-4b	Lead (Pb)	15	25	2.5	34.72	52.08	
CR1-5 / CR1-5b	Arsenic (As) & Lead (Pb)	85	12	3.5	132.22	198.33	See Table 3A, includes CAL-HAZ lead-affected soil.
CR1-5d	Lead (Pb)	35	17	0.5	11.02	16.53	See Table 3A, includes CAL-HAZ lead-affected soil.
R-15	Lead (Pb)	40	22	2.5	81.48	122.22	See Table 3A, includes CAL-HAZ lead-affected soil.
Q-15b / Q-15d	Lead (Pb)	50	32	3.5	207.41	311.11	See Table 3A, includes CAL-HAZ lead-affected soil.
P-15 / P-15a/d / P-15d1 / Q-15a	Lead (Pb)	48	50	5.5	488.89	733.33	Confirmation sample at 5.5 feet bgs. See Table 3A, includes CAL-HAZ lead-affected soil.
P-15b / P-16 / P-16a/b/c	Lead (Pb)	48	38	2.5	168.89	253.33	Total: 196.67 cubic yards or 295 tons. See Table 3A, includes CAL-HAZ lead-affected soil.
P-15b / P-16 / P-16a/b/c	Lead (Pb)	25	12	2.5	27.78	41.67	

Table 4A

REVISED SUMMARY OF PROPOSED EXCAVATION VOLUMES
SCREENING LEVELS: 80 mg/kg LEAD AND 12 mg/kg ARSENIC
Preliminary Environmental Assessment Equivalent Report
LAUSD - Roosevelt High School
456 South Mathews Street
Los Angeles, California

Location ID	Chemicals of Concern	Length (feet)	Width (feet)	Depth (feet)	Volume (cubic yards)	Volume (tons)	Notes
AA2684-2 / AA2684-3 AA2684-6 / AA2543-1 AA2543-2	Arsenic (As)	60	30	4.5	300.00	450.00	Total: 337.50 cubic yards or 506.25 tons. Confirmation sample at 4.5 feet bgs
AA2684-2 / AA2684-3 AA2684-6 / AA2543-1 AA2543-2	Arsenic (As)	15	15	4.5	37.50	56.25	
AA2543-6	Arsenic (As)	10	28	3.5	36.30	54.44	Confirmation sample at 3.5 feet bgs
AA2543-5	Arsenic (As)	45	15	4.5	112.50	168.75	Confirmation sample at 4.5 feet bgs
AA2038-1 / AA2249-1	Arsenic (As)	70	18	4.5	210.00	315.00	Confirmation sample at 4.5 feet bgs
AA2038-3 / AA2038-4	Arsenic (As)	15	60	4.5	150.00	225.00	Confirmation sample at 4.5 feet bgs
AA2038-2	Arsenic (As)	30	15	4.5	75.00	112.50	Confirmation sample at 4.5 feet bgs
AA2249-2	Arsenic (As)	10	38	4.5	63.33	95.00	Confirmation sample at 4.5 feet bgs
Area 6 Subtotal					***2945.00***	***4417.50***	
AREA 9							
V-16	Lead (Pb)	25	25	2.5	57.87	86.81	
X-12	Arsenic (As)	12	50	2.5	55.56	83.33	
W-14 / W-14a	Lead (Pb)	25	60	3.5	194.44	291.67	See Table 3A, includes CAL-HAZ lead-affected soil.
X-14	Arsenic (As) & Lead (Pb)	62	62	3.5	498.30	747.44	
Y-17 / Y-17c	Arsenic (As)	25	48	2.5	111.11	166.67	
X-17 / X-17b / X-18 X-18 a/c	Arsenic (As)	30	25	2.5	69.44	104.17	X-17/X-18 total volume: 219.90 cubic yards or 329.86 tons.
X-17 / X-17b / X-18 X-18 a/c	Arsenic (As)	25	65	2.5	150.46	225.69	
Area 9 Subtotal					***1137.19***	***1705.78***	
HYDRAULIC HOISTS AND CLARIFIER							
HL2-2	Hydrocarbons	18	10	7	46.67	70.00	Confirmation sample at 7 feet bgs
Hydraulic Hoists and Clarifier Subtotal					***46.67***	***70.00***	
Total Proposed Excavation Volume					***7018.58***	***10527.87***	

Notes:

1 cubic yard = 1.5 tons
bgs = below ground surface
CAL-HAZ = California Hazardous Waste

Table 4B

SUMMARY OF CALIFORNIA HAZARDOUS LEAD EXCAVATION VOLUMES
SCREENING LEVEL 80 mg/kg LEAD
Preliminary Environmental Assessment Equivalent Report
LAUSD - Roosevelt High School
456 South Mathews Street
Los Angeles, California

Location ID	Chemicals of Concern	Length (feet)	Width (feet)	Depth (feet)	Volume (cubic yards)	Volume (tons)	Notes
AREA 2							
B-6b	CAL-HAZ Lead (Pb)	29	15	3.5	56.39	84.58	
PE-3 / PE-3b	CAL-HAZ Lead (Pb)	27	15	4.5	67.50	101.25	Confirmation sample at 4.5 feet bgs
Area 2 Subtotal					***123.89***	***185.83***	
AREA 3							
C-17b	CAL-HAZ Lead (Pb)	25	25	2.5	57.87	86.81	
B-13 / B-13a	CAL-HAZ Lead (Pb)	20	25	3.5	64.81	97.22	
C-13	CAL-HAZ Lead (Pb)	20	25	2.5	46.30	69.44	
Area 3 Subtotal					***168.98***	***253.47***	
AREA 5							
AUD-3a / AUD-3a1	CAL-HAZ Lead (Pb)	55	55	2.5	280.09	420.14	
AUD-3 / AUD-3b	CAL-HAZ Lead (Pb)	35	45	2.5	145.83	218.75	
AUD-3c	CAL-HAZ Lead (Pb)	35	37	2.5	119.91	179.86	
AUD-4	CAL-HAZ Lead (Pb)	20	50	2.5	92.59	138.89	
AUD-5 AUD-5b	CAL-HAZ Lead (Pb)	35	53	2.5	171.76	257.64	
AUD-5c / AA2038-9	CAL-HAZ Lead (Pb)	20	60	2.5	111.11	166.67	
AUD-6 AUD-6b	CAL-HAZ Lead (Pb)	35	62	2.5	200.93	301.39	
AUD-6c	CAL-HAZ Lead (Pb)	60	58	2.5	322.22	483.33	
Area 5 Subtotal					***1444.44***	***2166.67***	
AREA 6							
IM-2 / IM-2b	CAL-HAZ Lead (Pb)	45	17	3.5	99.17	148.75	
CRA-2 / CRA-2b CRA-2c	CAL-HAZ Lead (Pb)	45	22	4.5	165.00	247.50	
CR1-2 / CR1-2d CR1-2d1	CAL-HAZ Lead (Pb)	50	15	2.5	69.44	104.17	
CR1-4 / CR1-4b	CAL-HAZ Lead (Pb)	82	7	2.5	53.15	79.72	CR1-4 / CR1-4b total: 87.87 cubic yards or 131.80 tons
CR1-4 / CR1-4b	CAL-HAZ Lead (Pb)	15	25	2.5	34.72	52.08	
CR1-5	CAL-HAZ Lead (Pb)	40	12	2.5	44.44	66.67	
CR1-5b	CAL-HAZ Lead (Pb)	45	12	3.5	70.00	105.00	
CR1-5d	CAL-HAZ Lead (Pb)	35	17	0.5	11.02	16.53	
R-15d	CAL-HAZ Lead (Pb)	30	20	2.5	55.56	83.33	
Q-15	CAL-HAZ Lead (Pb)	20	25	2.5	46.30	69.44	
P-16	CAL-HAZ Lead (Pb)	20	20	2.5	37.04	55.56	
P-15b	CAL-HAZ Lead (Pb)	25	50	2.5	115.74	173.61	
P-15 / P-15d P-15d1 /Q-15a	CAL-HAZ Lead (Pb)	50	45	4.5	375.00	562.50	
Area 6 Subtotal					***1176.57***	***1764.86***	
AREA 9							
W-14	CAL-HAZ Lead (Pb)	25	25	3.5	81.02	121.53	
W-14a	CAL-HAZ Lead (Pb)	25	25	2.5	57.87	86.81	
Area 9 Subtotal					***138.89***	***208.33***	
Total Proposed Excavation Volume					***3052.78***	***4579.17***	

Notes:

1 cubic yard = 1.5 tons
bgs = below ground surface
CAL-HAZ = California Hazardous Waste

Table 5

Applicable or Relevant and Appropriate Requirements
Roosevelt High School
Los Angeles, California

ARAR Reference Number	Regulation, Standard or Level of Control	Description	Comments
Chemical-Specific Requirements			
1	RCRA, 40 CFR Part 261, 263, and 264 & Title 22 CCR Section 66261, 66263, and 66264, Hazardous Waste Identification, Transportation, and Disposal	Definition and identification of waste material as hazardous, and transporation and disposal criteria.	**Applicable** to waste transportation and disposal
2	California Proposition 65, No Significant Risk Levels (NSRLs) for Carcinogens and Maximum Allowable Dose Levels for Chemicals Causing Reproductive Toxicity	Proposition 65 requires notification of the public when the public may be exposed to listed chemicals known to the State of California to cause toxicity. The NSRLs provide "safe harbor" numbers below which public notification is not required.	**Applicable**
3	EPA Region 9 Preliminary Remediation Goals (PRGs) and Soil Screening Levels & California Modified PRGs	Risk-based tools for evaluating and cleaning up contaminated sites. They are being used to streamline and standardize all stages of the risk decision-making process. The risk-based concentrations presented in the Table may be used as screening goals or initial cleanup goals if applicable. Generally a screening goal is intended to provide health protection without knowledge of the specific exposure conditions at a site. PRGs may also be used as initial cleanup goals when the exposure assumptions based on site-specific data match up with the default exposure assumptions in the PRG Table.	**To be considered.** These values are relevant as baseline indicators of potential risk during the receptor pathway survey/risk assessment screening in order to determine whether or not additional site-specific, risk-based cleanup criteria are needed in the RI/FS.
4	National Ambient Air Quality Standards (NAAQS), 40 CFR Part 15	Establishes NAAQS for criteria pollutants: particulate matter (PM10), sulfer dioxide, carbon monoxide, nitrogen dioxide, ozone and lead.	**Applicable**
Location-Specific Requirements			
5	Endangered Species Act, 50 CFR Parts 200 and 402	Provides for the protection of endangered or threatened plant and animal species through an evaluation of affected habitats in the site area, as well as consultation with the appropriate government agencies.	**Applicable** if endangered or threatened species or their habitat are present at the Site. At this time, it appears that no endangered or threatened species or their habitats are present.
6	California Endangered Species Act, California Fish and Game Code Sections 2050 et seq.	Provides for the recognition and protection of rare, threatened and endangered species of plant and animals.	**Applicable** if endangered or threatened species or their habitat are present at the Site. At this time, it appears that no endangered or threatened species or their habitats are present.
7	Migratory Bird Act, 15 U.S.C. 703 et seq.	Protects certain migratory birds or their nests or eggs.	**Applicable** if nesting birds are present at the Site, and must be protected if present at the time of ground disturbing activities.
8	National Archaeological and Historic Preservation Act, 36 CFR Part 65	Provides for the protection of any historically significant artifacts that may be unearthed during excavation activities.	**Applicable.** Historic artifacts must be protected if observed during excavation.

Table 5

Applicable or Relevant and Appropriate Requirements
Roosevelt High School
Los Angeles, California

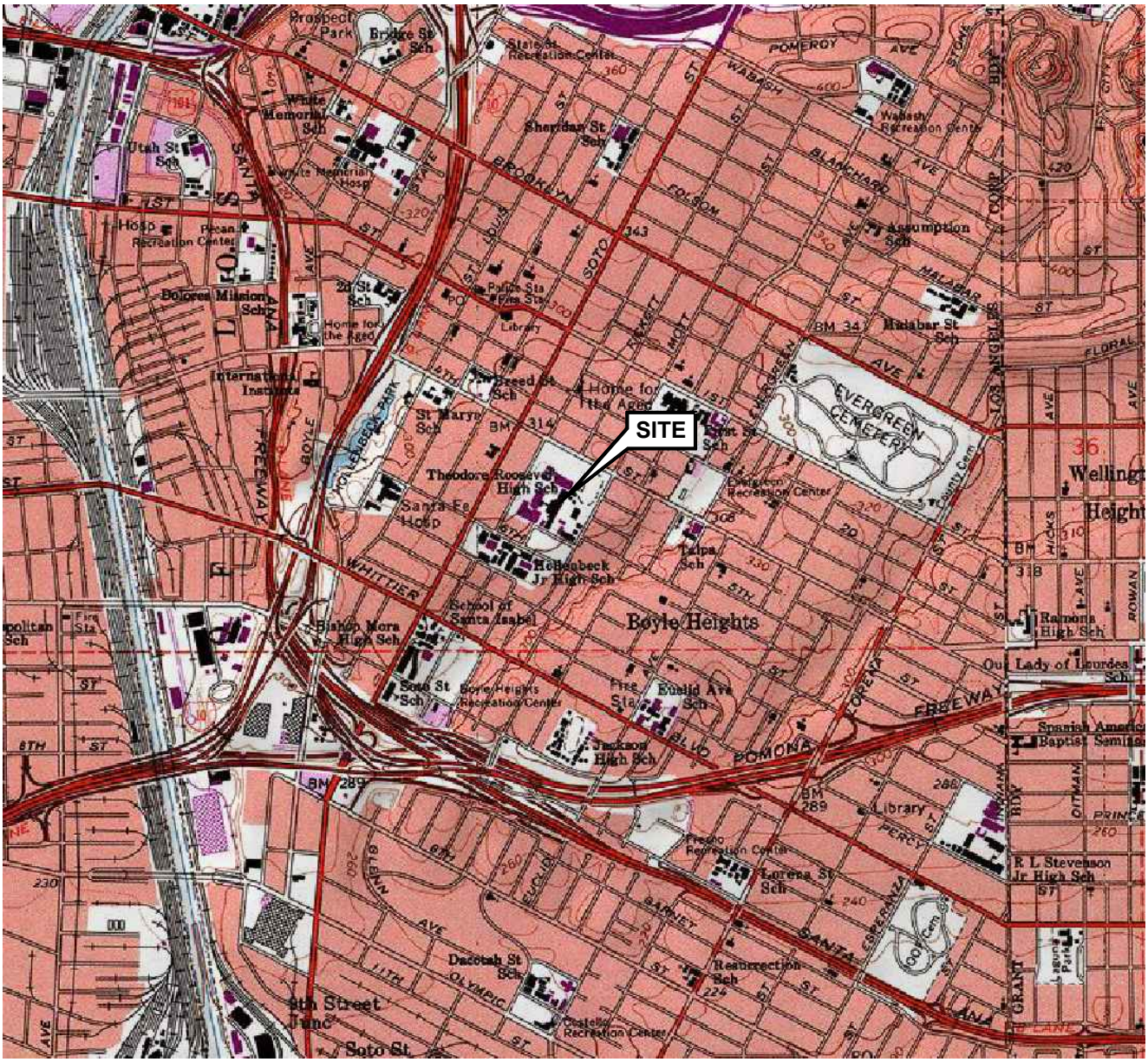
ARAR Reference Number	Regulation, Standard or Level of Control	Description	Comments
Action-Specific Requirements			
9	RCRA, Subtitle C & Title 22 CCR Division 4.5	Regulates the treatment, storage and disposal aspects of hazardous waste.	**Applicable**
10	CEQA, California Statute, Public Resources Code, Sections 21000 et seq.	Requires disclosure to the public and government decision-makers of the environmental effects of a proposed action that a government agency has the discretion to approve or disapprove.	**Applicable**
11	SCAQMD Rule 401 - Visible Emissions	Prohibits discharge of air contaminants based on "darkness in shade" measured by the Ringleman chart.	**Applicable** to soil excavation and handling operations during the removal action, as well as exhaust from construction equipment.
12	SCAQMD Rule 402 - Odor and Nuisance	Prohibits discharge of air contaminants or other materials that cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause or may cause injury or damage to business or property.	**Applicable** to soil excavation and handling operations during the removal action, as well as exhaust from construction equipment.
13	SCAQMD Rule 403 - Fugitive Dust	The purpose is to reduce the amount of particulate matter entrained in the ambient air as a result of man-made fugitive dust sources by requiring actions to prevent, reduce, or mitigate fugitive dust sources. Requires use of best available control measures to minimize fugitive dust emissions.	**Applicable** to soil excavation and handling operations during the removal action, as well as exhaust from construction equipment.
14	SCAQMD Rule 1166 - VOC Emissions from Decontamination of Soil	Imposes requirements to control the emission of VOCs from excavating, grading, handling, and treating VOC-contaminated soil (50 ppm or greater).	**Not Applicable** to soil excavation and handling operations during the removal action (no VOCs above removal action goals were identified during PEA)..
15	SCAQMD Rule 1466 - Control of Particulate Emissions from Soil with Toxic Air Contaminants	Imposes requirements to minimize the amount of off-site fugitive dust emissions containing toxic air contaminants by reducing particulate emissions associated with earth-moving activities, including soil excavation, handling, stockpiling, loading, etc.	**Applicable** to soil excavation and handling operations during the removal action.
16	OSHA, 29 CFR 1910	Establishes standards for worker protection, particularly for workers involved in hazardous waste operations.	**Applicable** to the regulation of worker safety throughout the removal action.

Table 6

Cost Estimate for Soil Excavation and Disposal
LAUSD Roosevelt High School
456 South Mathews Street
Los Angeles, California

Task	Description	Cost
1	Field Supervision and Project Management	$45,000
2	Excavation - mob/demob, permitting, excavation, and segregation	$217,000
3	Excavation - clean soil and gravel import. Assumes 11,581 tons of fill material from a clean, quarried source (includes an additional 10% volume for compaction).	$405,328
4	Excavation - backfill, compaction, and geotechnical testing (up to 11,581 tons of backfill material)	$138,972
5	Excavation - impacted soil loading/transport/recycling (non-hazardous; up to 5,949 tons)	$386,685
6	Excavation - impacted soil loading/transport/disposal (California hazardous; up to 4,579 tons)	$549,480
7	Excavation - soil analytical	$5,000
8	Reporting - Remedial Action Completion Report	$15,000
	Total	***$1,762,465***

FIGURES



N

0 1/4 1/2 3/4 1 MILE

SCALE 1:24,000



SOURCE:

United States Geological Survey
7.5 Minute Topographic Map:
Los Angeles Quadrangle

TRC
17911 Von Karman Avenue
Suite 400
Irvine, CA 92614
Phone: 949.727.9336

PROJECT:
LAUSD
ROOSEVELT HIGH SCHOOL
456 S. MATHEWS STREET
LOS ANGELES, CALIFORNIA

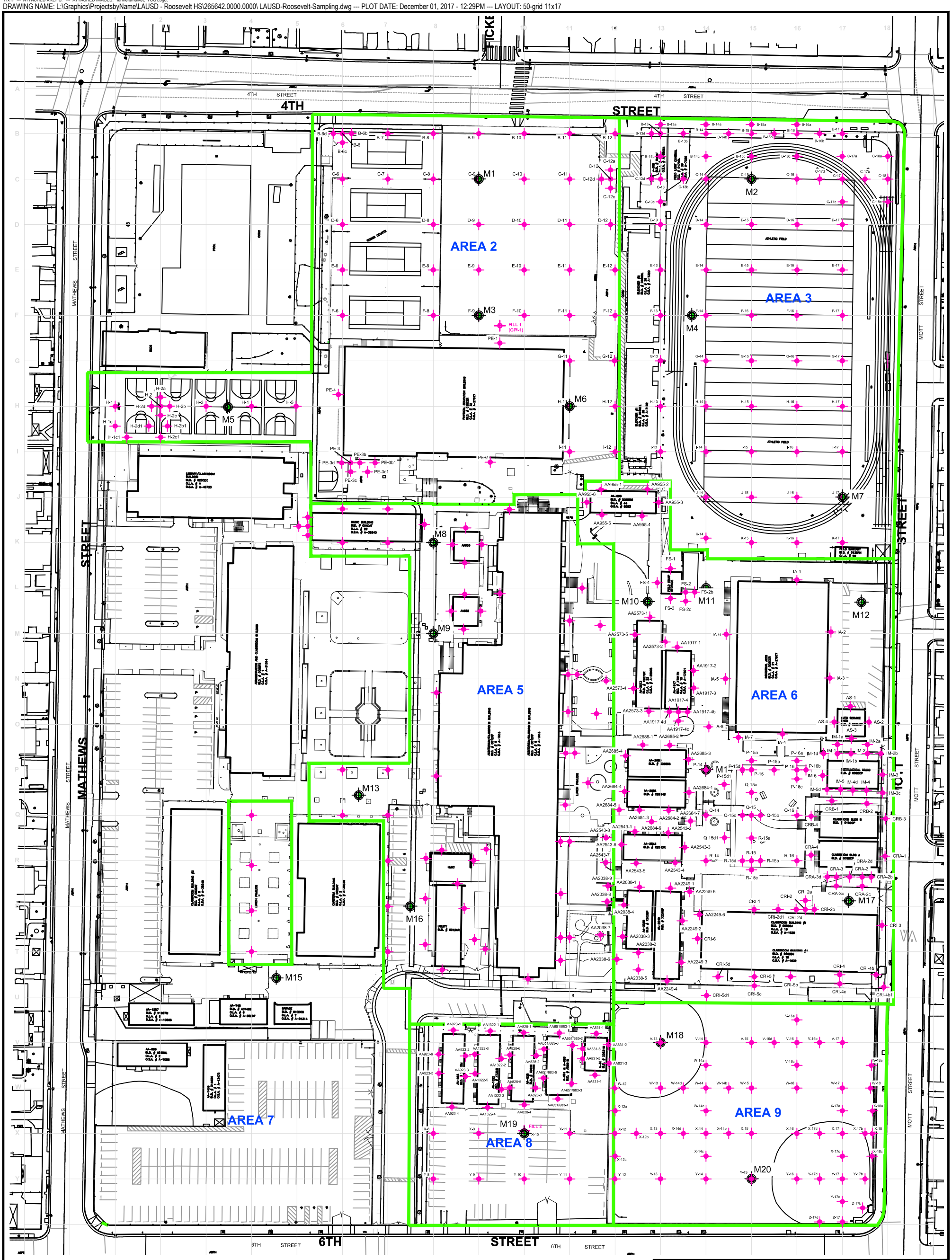
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VICINITY MAP

DRAWN BY:	RMC
CHECKED BY:	JM
APPROVED BY:	JM
DATE:	11/03/2016
PROJ. NO.:	265642.0000.0000
FILE:	LAUSD-Roosevelt-VM.dwg

FIGURE 1

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11x17 --- ATTACHED XREF'S: --- ATTACHED IMAGES: farmersmarket; TCG Logo;
DRAWING NAME: L:\Graphics\ProjectsbyName\LAUSD - Roosevelt HS\265642.0000.0000\ LAUSD-Roosevelt-Sampling.dwg --- PLOT DATE: December 01, 2017 - 12:29PM --- LAYOUT: 50-grid 11x17



LEGEND

- Proposed LBP and OCP Sample Location
- Undocumented Fill Sampling Location
- Methane Probe Location

NOTES:

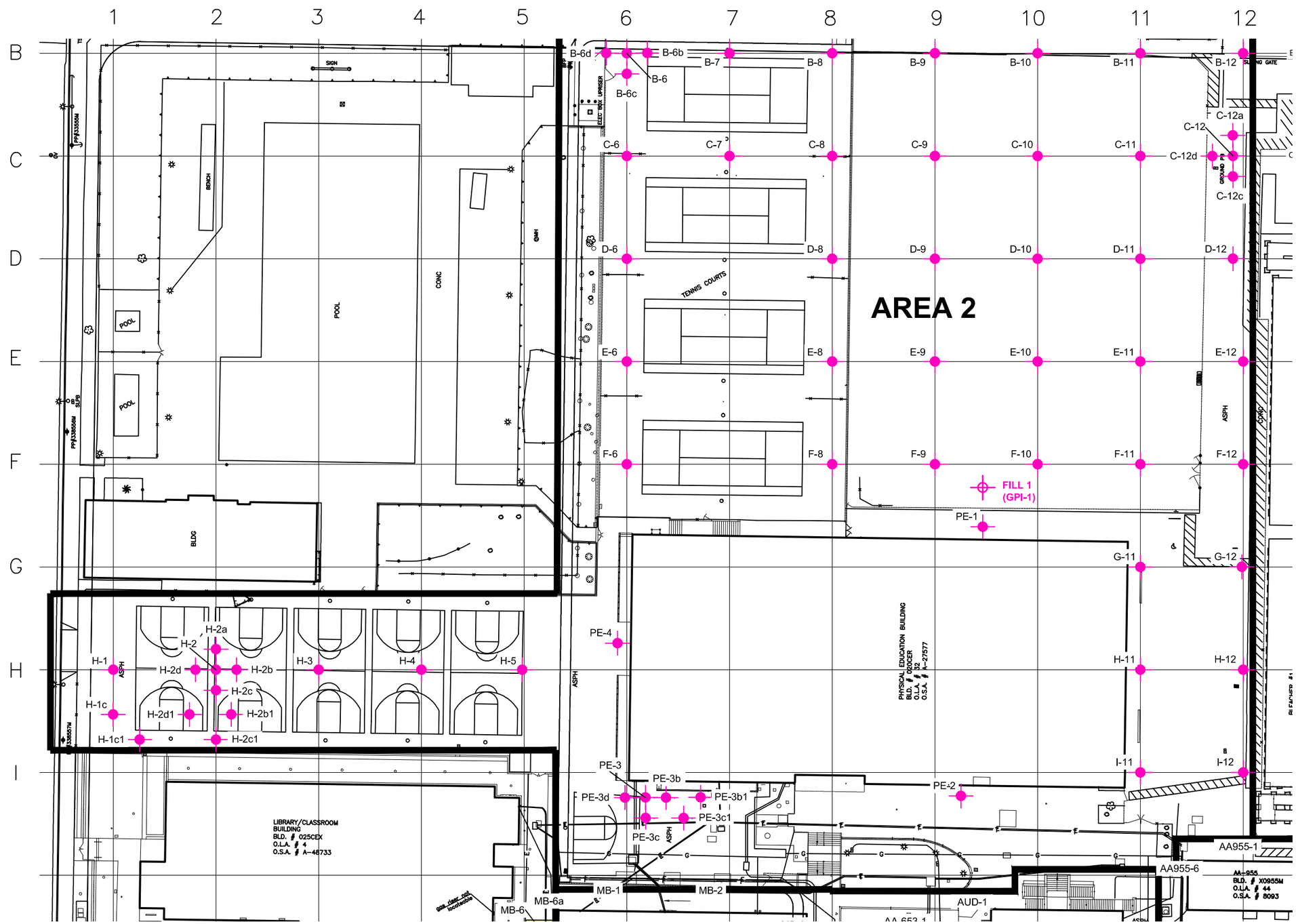
LBP = lead based paint.
OCP = organochlorine pesticides.

Source: Base map provided by Converse Consultants.

PROJECT:	LAUSD ROOSEVELT HIGH SCHOOL 456 S. MATHEWS STREET LOS ANGELES, CALIFORNIA
TITLE:	SITE PLAN
DRAWN BY:	RMC
CHECKED BY:	JM
APPROVED BY:	JM
DATE:	November 2017
PROJ NO.:	265642.0000.0000
	FIGURE 2

TRC
17911 Von Karman Avenue
Suite 400
Irvine, CA 92614
Phone: 949.727.9336

FILE NO.: LAUSD-Roosevelt-Sampling.dwg



LEGEND

B-12 Sample Location

Undocumented Fill Sampling Location

N

APPROXIMATE SCALE (FEET)

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Source: Base map provided by Converse Consultants.

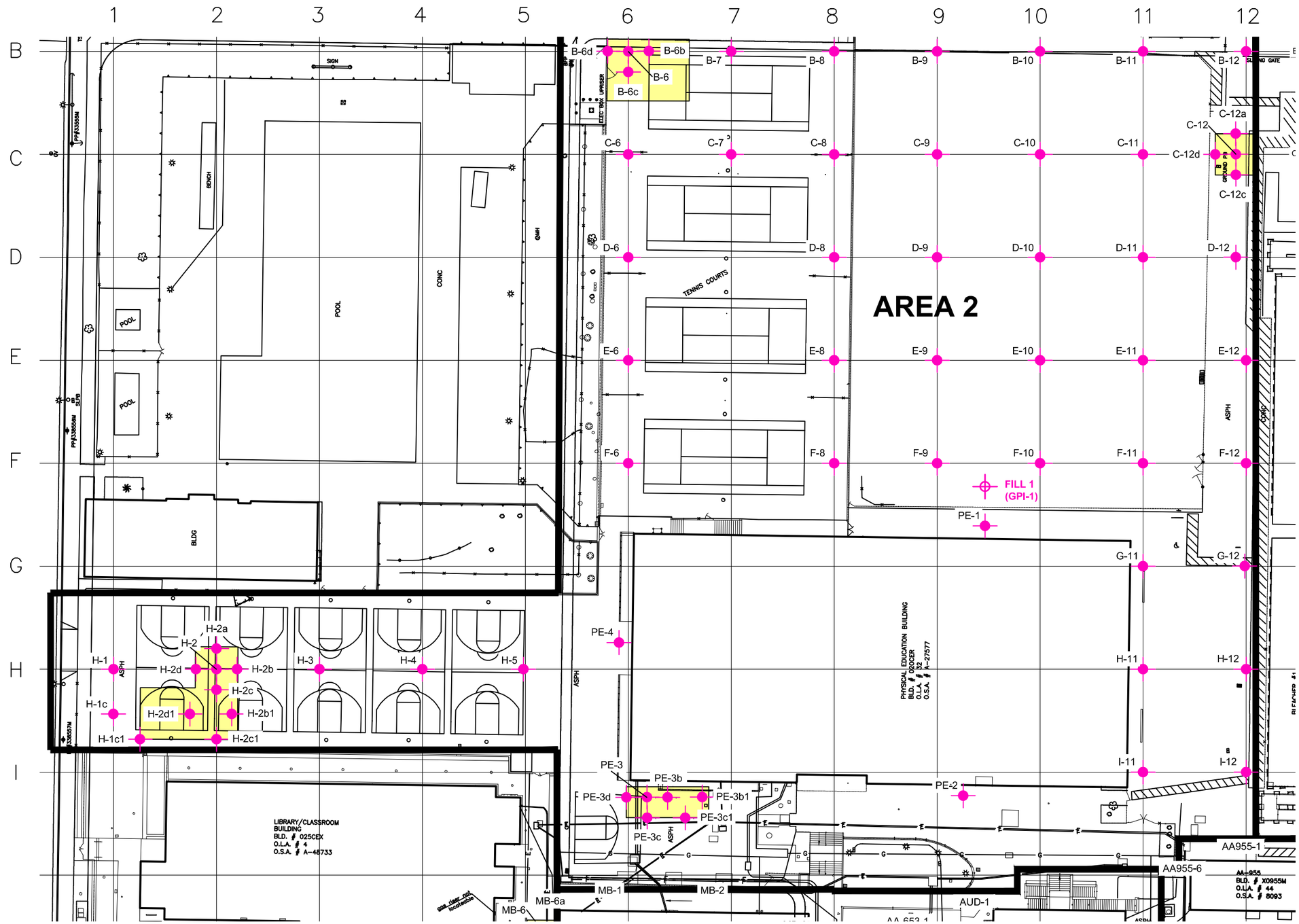
PROJECT:	LAUSD ROOSEVELT HIGH SCHOOL 456 S. MATHEWS STREET LOS ANGELES, CALIFORNIA
TITLE:	AREA 2 SAMPLING LOCATIONS

DRAWN BY:	RMC	PROJ NO.:	265642.0000.0000
CHECKED BY:	JM		FIGURE 3
APPROVED BY:	JM		
DATE:	November 2017		

TRC
17911 Von Karman Avenue
Suite 400
Irvine, CA 92614
Phone: 949.727.9336

FILE NO.: LAUSD-Roosevelt-Sampling.dwg

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DRAWING NAME: L:\Graphics\Projects\Name\LAUSD - Roosevelt HS\265642.0000.0000 LAUSD-Roosevelt-Sampling.dwg — PLOT DATE: December 01, 2017 - 12:30PM — LAYOUT: AREA2-Sampling



LEGEND

- B-12 — Sample Location
- Undocumented Fill Sampling Location
- Proposed Excavation Area for Lead

N

APPROXIMATE SCALE (FEET)

0 50 100

Source: Base map provided by Converse Consultants.

PROJECT:
LAUSD
ROOSEVELT HIGH SCHOOL
456 S. MATHEWS STREET
LOS ANGELES, CALIFORNIA

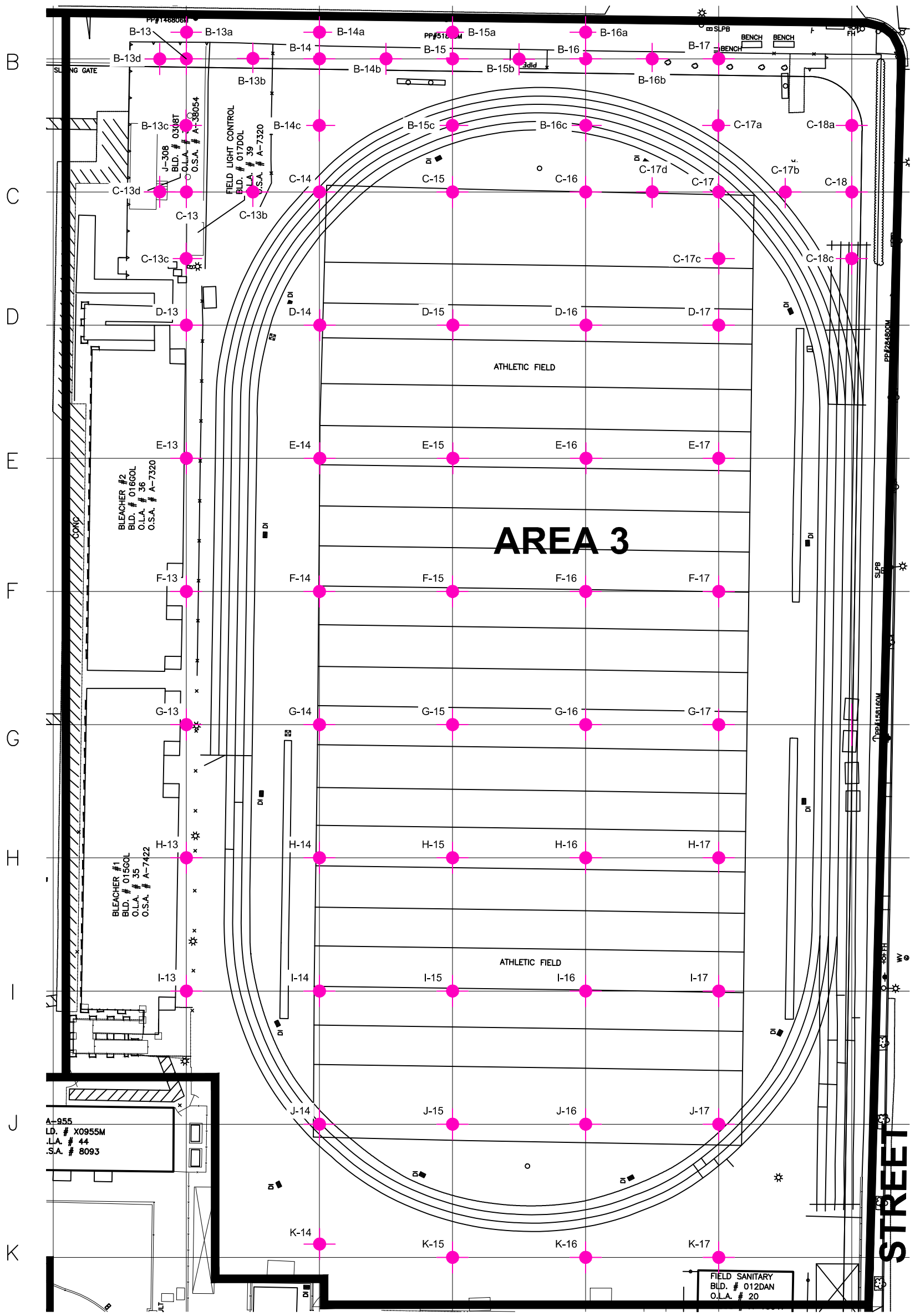
TITLE:
AREA 2
PROPOSED EXCAVATION LOCATIONS

DRAWN BY:	RMC	PROJ NO.:	265642.0000.0000
CHECKED BY:	JM		
APPROVED BY:	JM		**FIGURE 3A**
DATE:	June 2017		

TRC
17911 Von Karman Avenue
Suite 400
Irvine, CA 92614
Phone: 949.727.9336

FILE NO.: LAUSD-Roosevelt-Sampling.dwg

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LEGEND

B-13 Sample Location

N

APPROXIMATE SCALE (FEET)

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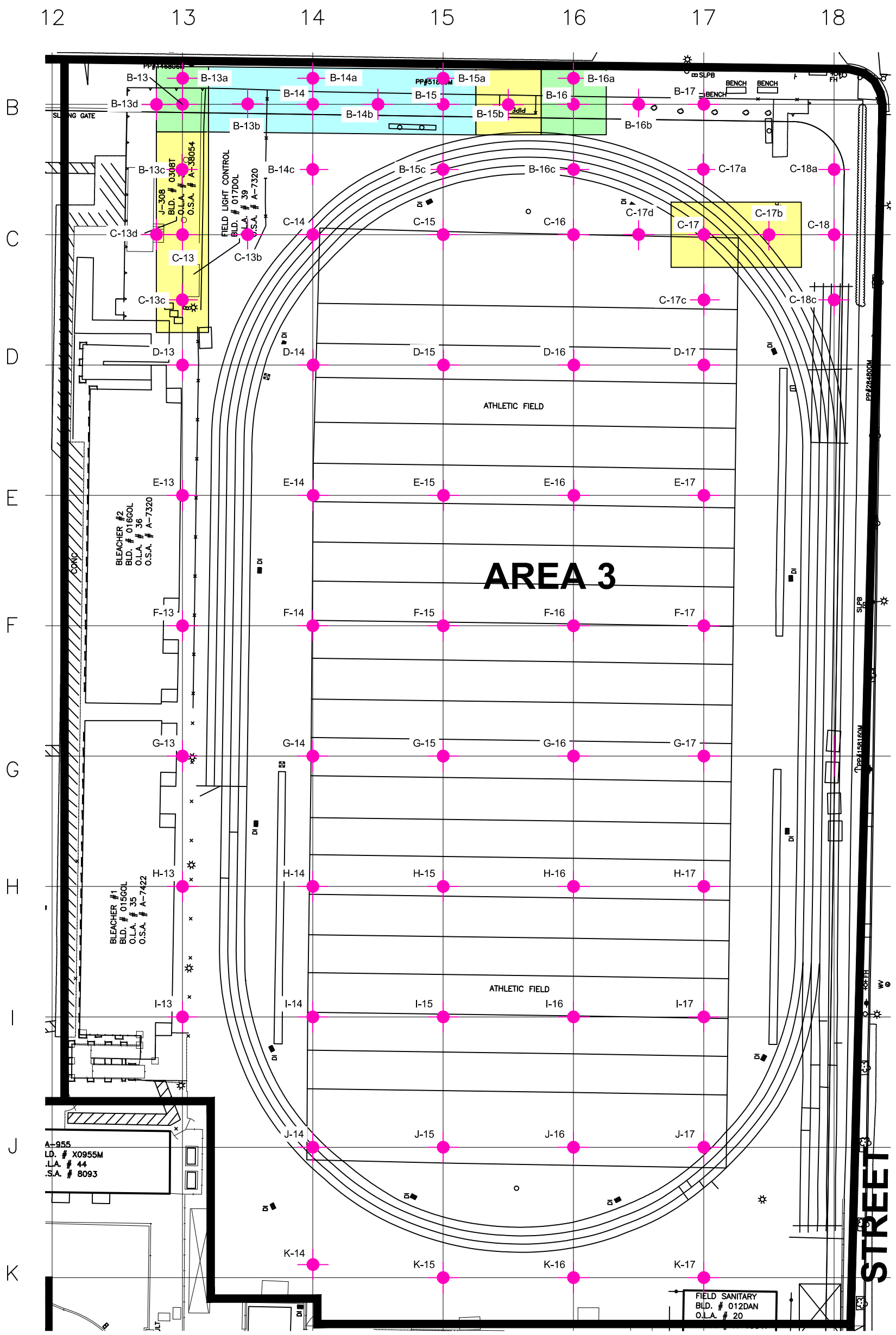
Source: Base map provided by Converse Consultants.

PROJECT:	LAUSD ROOSEVELT HIGH SCHOOL 456 S. MATHEWS STREET LOS ANGELES, CALIFORNIA
TITLE:	AREA 3 SAMPLING LOCATIONS
DRAWN BY: RMC	PROJ NO.: 265642.0000.0000
CHECKED BY: JM	FIGURE 4
APPROVED BY: JM	
DATE: November 2017	

TRC
17911 Von Karman Avenue
Suite 400
Irvine, CA 92614
Phone: 949.727.9336

FILE NO.: LAUSD-Roosevelt-Sampling.dwg

11x17 --- ATTACHED XREF'S: --- ATTACHED IMAGES: farmersmarket; TCG Logo;
DRAWING NAME: L:\Graphics\ProjectsbyName\LAUSD - Roosevelt HS\265642.0000.0000\ LAUSD-Roosevelt-Sampling.dwg --- PLOT DATE: December 01, 2017 - 12:34PM --- LAYOUT: AREA3-Excav



LEGEND

B-13 Sample Location

Proposed Excavation Area for Lead

Proposed Excavation Area for Arsenic

Proposed Excavation Area for Lead and Arsenic

N

APPROXIMATE SCALE (FEET)

0 40 80

Source: Base map provided by Converse Consultants.

PROJECT:	LAUSD ROOSEVELT HIGH SCHOOL 456 S. MATHEWS STREET LOS ANGELES, CALIFORNIA
TITLE:	AREA 3 PROPOSED EXCAVATION LOCATIONS
DRAWN BY:	RMC
CHECKED BY:	JM
APPROVED BY:	JM
DATE:	November 2017
PROJ NO.:	265642.0000.0000
	FIGURE 4A

TRC
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Suite 400
Irvine, CA 92614
Phone: 949.727.9336

FILE NO.: LAUSD-Roosevelt-Sampling.dwg

11x17 --- ATTACHED XREF'S: --- ATTACHED IMAGES: farmersmarket; TCG Logo;
DRAWING NAME: L:\Graphics\ProjectsbyName\LAUSD - Roosevelt HS\265642.0000.0000\ LAUSD-Roosevelt-Sampling.dwg --- PLOT DATE: December 01, 2017 - 12:35PM --- LAYOUT: AREA5-Sampling

AREA 5

MB-1 MB-2 MB-3 MB-4 MB-5 MB-6 MB-6a MB-6c MB-6d
P-6 P-7
Q-4 Q-6 Q-7
R-4 R-7
S-4 S-7
T-4 T-7
AUD-1 AUD-2 AUD-3 AUD-3a AUD-3a1 AUD-3b AUD-3b1 AUD-3c AUD-3c1 AUD-4 AUD-4b AUD-4c AUD-4c1 AUD-5 AUD-5b AUD-5c AUD-6 AUD-6b AUD-6c AUD-7 AUD-8 AUD-9 AUD-10 AUD-11 AUD-12
AA-653-1 AA-653-2 AA-653-3 AA-653-4 AA653
AA-652-1 AA-652-2 AA-652-3 AA-652-4 AA652
AA2543-8 AA2543-7 AA2038-9 AA2038-8 AA2038-7 AA2038-6
HVAC-1 HVAC-2 HVAC-3
UB-1 UB-2 UB-3 UB-4 UB-5 UB-6

LIBRARY/CLASSROOM BUILDING BLD. # 025CEX O.L.A. # 4 O.S.A. # A-46733
MUSIC BUILDING BLD. # 004DAT O.L.A. # 29 O.S.A. # A-38340
ADMINISTRATION AND CLASSROOM BUILDING BLD. # 005BFS O.L.A. # 1 O.S.A. # A-31314
CLASSROOM BUILDING #3 BLD. # 002DAT O.L.A. # 2 O.S.A. # A-38340
CAFETERIA BUILDING BLD. # 002DAT O.L.A. # 3 O.S.A. # A-38340
AUDITORIUM/CLASSROOM BUILDING BLD. # 001CFF O.L.A. # 9 O.S.A. # A-1613
UTILITY BLD. # 021DAR
LUNCH PAVILION

LEGEND

MB-1 Sample Location

N

APPROXIMATE SCALE (FEET)

0 50 100

Source: Base map provided by Converse Consultants.

PROJECT:	LAUSD ROOSEVELT HIGH SCHOOL 456 S. MATHEWS STREET LOS ANGELES, CALIFORNIA
TITLE:	AREA 5 SAMPLING LOCATIONS
DRAWN BY:	RMC
CHECKED BY:	JM
APPROVED BY:	JM
DATE:	November 2017
PROJ NO.:	265642.0000.0000
	FIGURE 5

TRC
17911 Von Karman Avenue
Suite 400
Irvine, CA 92614
Phone: 949.727.9336

FILE NO.: LAUSD-Roosevelt-Sampling.dwg

11x17 --- ATTACHED XREF'S: --- ATTACHED IMAGES: farmersmarket; TCG Logo;
DRAWING NAME: L:\Graphics\ProjectsbyName\LAUSD - Roosevelt HS\265642.0000.0000\ LAUSD-Roosevelt-Sampling.dwg --- PLOT DATE: December 01, 2017 - 12:36PM --- LAYOUT: AREA5-Excav

AREA 5

MB-1 MB-2 MB-3 MB-4 MB-5 MB-6 MB-6a MB-6c MB-6d
P-6 P-7
Q-4 Q-6 Q-7
R-4 R-7
S-4 S-7
T-4 T-7
AUD-1 AUD-2 AUD-3 AUD-3a AUD-3a1 AUD-3b AUD-3b1 AUD-3c AUD-3c1 AUD-4 AUD-4b AUD-4c AUD-4c1 AUD-5 AUD-5b AUD-5c AUD-6 AUD-6b AUD-6c AUD-7 AUD-8 AUD-9 AUD-10 AUD-11 AUD-12
AA-653-1 AA-653-2 AA-653-3 AA-653-4 AA653
AA-652-1 AA-652-2 AA-652-3 AA-652-4 AA652
AA2543-8 AA2543-7 AA2038-9 AA2038-8 AA2038-7 AA2038-6
HVAC-1 HVAC-2 HVAC-3
UB-1 UB-2 UB-3 UB-4 UB-5 UB-6

LIBRARY/CLASSROOM BUILDING
BLD. # 025CEX
O.L.A. # 4
O.S.A. # A-46733

MUSIC BUILDING
BLD. # 004DAT
O.L.A. # 29
O.S.A. # A-38340

ADMINISTRATION AND CLASSROOM BUILDING
BLD. # 005BFS
O.L.A. # 1
O.S.A. # A-31314

CLASSROOM BUILDING #3
BLD. # 002DAT
O.L.A. # 2
O.S.A. # A-38340

CAFETERIA BUILDING
BLD. # 002DAT
O.L.A. # 3
O.S.A. # A-38340

AUDITORIUM/CLASSROOM BUILDING
BLD. # 001CFF
O.L.A. # 9
O.S.A. # A-1613

UTILITY
BLD. # 021DAR

LUNCH PAVILION

gas riser not located/ale

ASPH

LEGEND

MB-1 Sample Location

Proposed Excavation Area for Lead

N

APPROXIMATE SCALE (FEET)

0 50 100

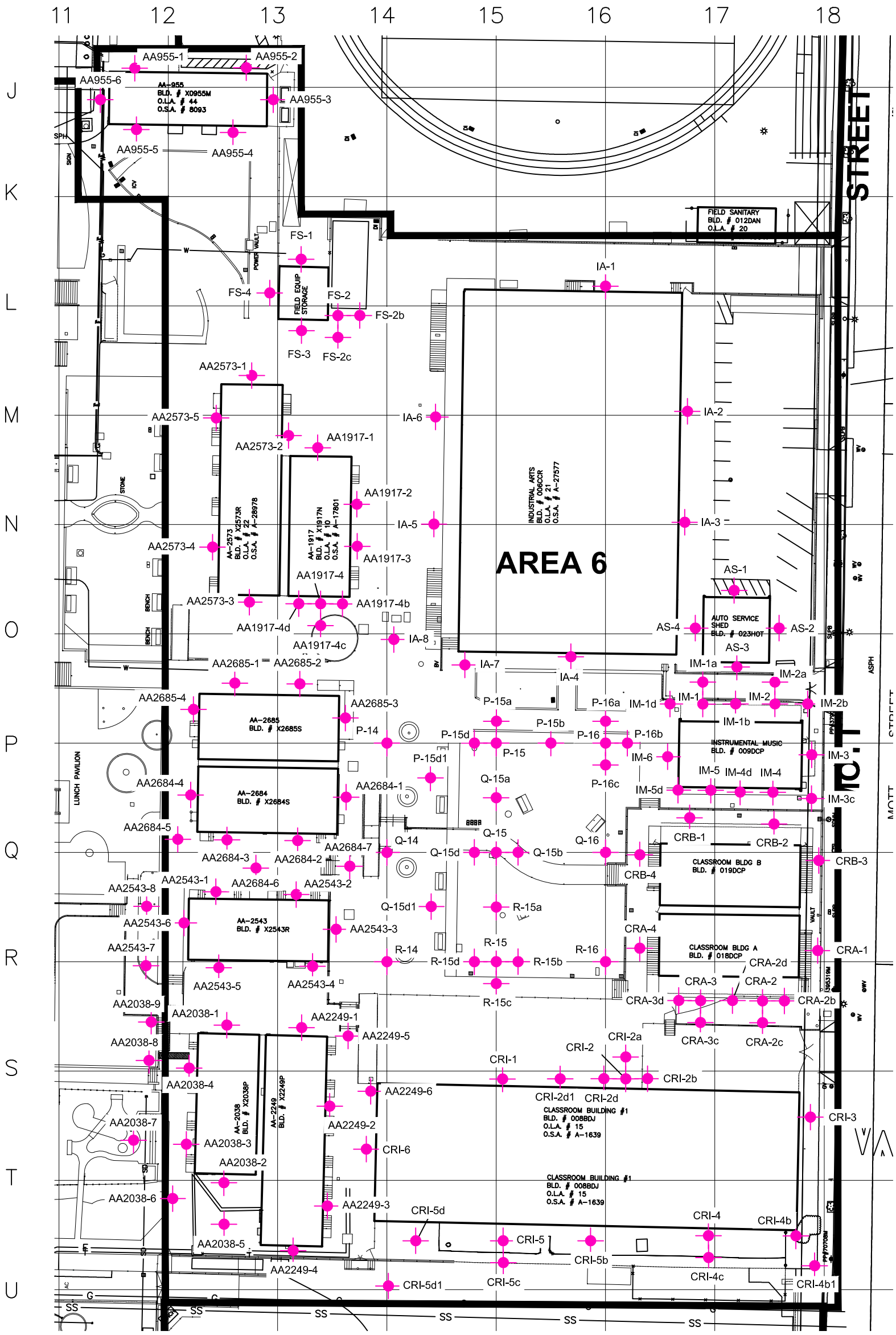
Source: Base map provided by Converse Consultants.

PROJECT:	LAUSD ROOSEVELT HIGH SCHOOL 456 S. MATHEWS STREET LOS ANGELES, CALIFORNIA
TITLE:	AREA 5 PROPOSED EXCAVATION LOCATIONS
DRAWN BY:	RMC
CHECKED BY:	JM
APPROVED BY:	JM
DATE:	November 2017
PROJ NO.:	265642.0000.0000
	FIGURE 5A

TRC
17911 Von Karman Avenue
Suite 400
Irvine, CA 92614
Phone: 949.727.9336

FILE NO.: LAUSD-Roosevelt-Sampling.dwg

11x17 --- ATTACHED XREF'S: --- ATTACHED IMAGES: farmersmarket; TCG Logo;
DRAWING NAME: L:\Graphics\ProjectsbyName\LAUSD - Roosevelt HS\265642.0000.0000\ LAUSD-Roosevelt-Sampling.dwg --- PLOT DATE: December 01, 2017 - 12:37PM --- LAYOUT: AREA6-Sampling



LEGEND

FS-1 — Sample Location

N

APPROXIMATE SCALE (FEET)

0 50 100

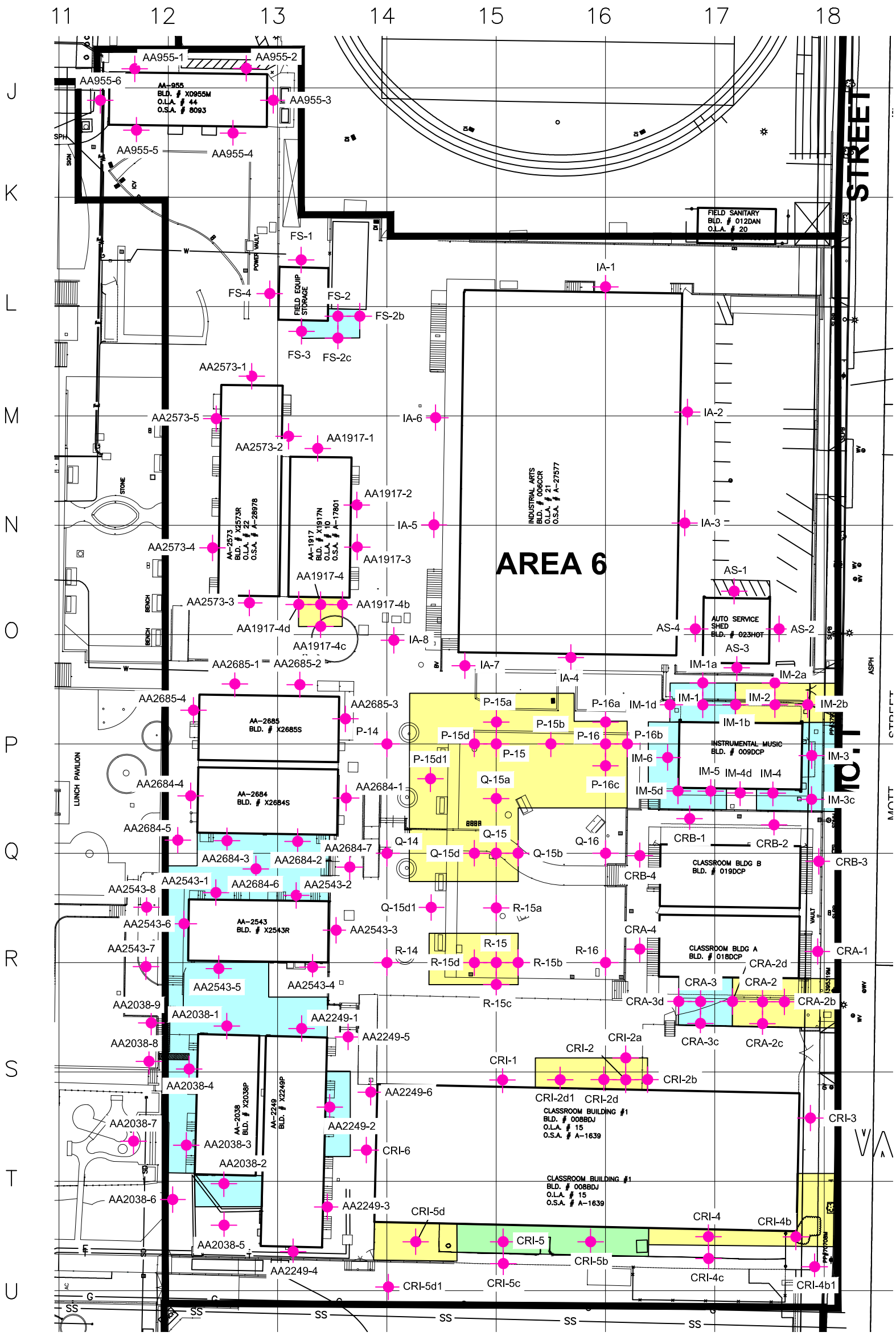
Source: Base map provided by Converse Consultants.

PROJECT:	LAUSD ROOSEVELT HIGH SCHOOL 456 S. MATHEWS STREET LOS ANGELES, CALIFORNIA
TITLE:	AREA 6 SAMPLING LOCATIONS
DRAWN BY:	RMC
CHECKED BY:	JM
APPROVED BY:	JM
DATE:	November 2017
PROJ NO.:	265642.0000.0000
	FIGURE 6

TRC
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Phone: 949.727.9336

FILE NO.: LAUSD-Roosevelt-Sampling.dwg

11x17 --- ATTACHED XREF'S: --- ATTACHED IMAGES: farmersmarket; TCG Logo;
DRAWING NAME: L:\Graphics\ProjectsbyName\LAUSD - Roosevelt HS\265642.0000.0000\ LAUSD-Roosevelt-Sampling.dwg --- PLOT DATE: December 01, 2017 - 12:37PM --- LAYOUT: AREA6-Excav



LEGEND

FS-1 — Sample Location

Proposed Excavation Area for Lead

Proposed Excavation Area for Arsenic

Proposed Excavation Area for Lead and Arsenic

N

APPROXIMATE SCALE (FEET)

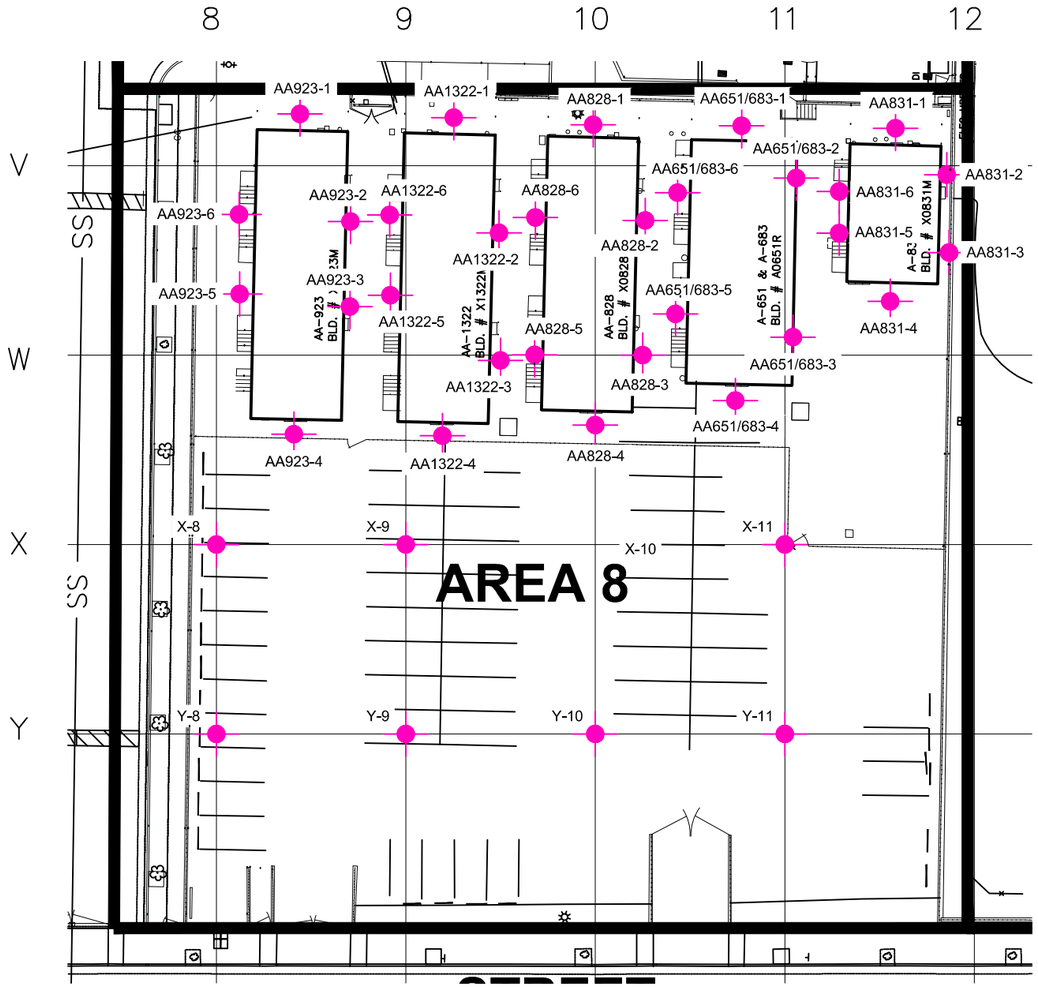
0 50 100

Source: Base map provided by Converse Consultants.

PROJECT:	LAUSD ROOSEVELT HIGH SCHOOL 456 S. MATHEWS STREET LOS ANGELES, CALIFORNIA
TITLE:	AREA 6 PROPOSED EXCAVATION LOCATIONS
DRAWN BY: RMC	PROJ NO.: 265642.0000.0000
CHECKED BY: JM	FIGURE 6A
APPROVED BY: JM	
DATE: November 2017	

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Irvine, CA 92614
Phone: 949.727.9336

FILE NO.: LAUSD-Roosevelt-Sampling.dwg



LEGEND

Y-11 Sample Location

Undocumented Fill Sampling Location

N

APPROXIMATE SCALE (FEET)

0 40 80

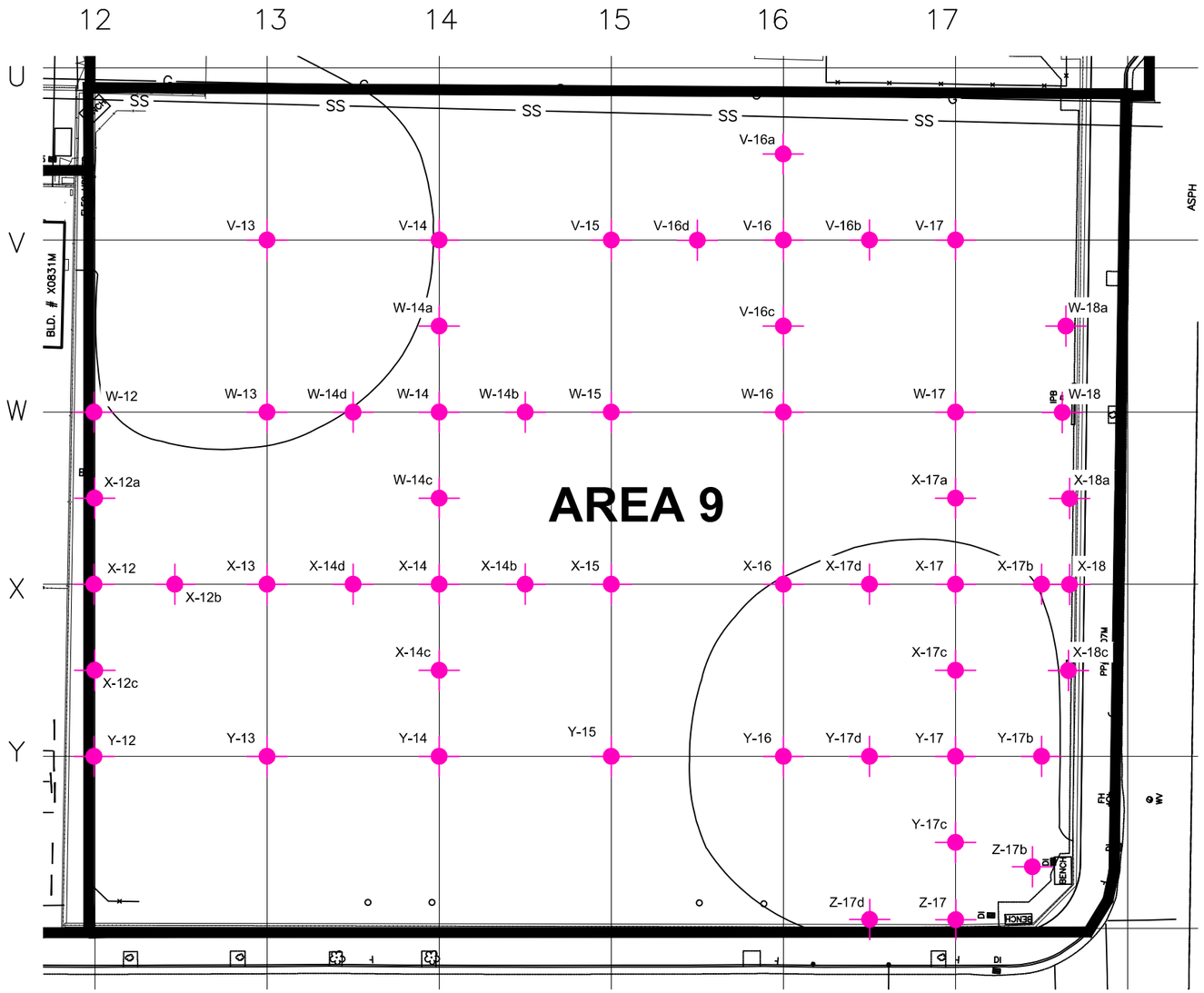
Source: Base map provided by Converse Consultants.

PROJECT:	**LAUSD** **ROOSEVELT HIGH SCHOOL** **456 S. MATHEWS STREET** **LOS ANGELES, CALIFORNIA**
TITLE:	**AREA 8 SAMPLING LOCATIONS**
DRAWN BY:	RMC
CHECKED BY:	JM
APPROVED BY:	JM
DATE:	November 2017
PROJ NO.:	265642.0000.0000
	FIGURE 7

TRC
17911 Von Karman Avenue
Suite 400
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Phone: 949.727.9336

FILE NO.: LAUSD-Roosevelt-Sampling.dwg

1:417 -- ATTACHED XREFS -- ATTACHED IMAGES: tblmasmarker; TCSLogo
DRAWING NAME: L:\Graphics\Projects\byName\LAUSD - Roosevelt HS\265642.0000.0000\ LAUSD-Roosevelt-Sampling.dwg -- PLOT DATE: December 01, 2017 - 12:38PM



LEGEND

Y-17 Sample Location

N

APPROXIMATE SCALE (FEET)

0 40 80

Source: Base map provided by Converse Consultants.

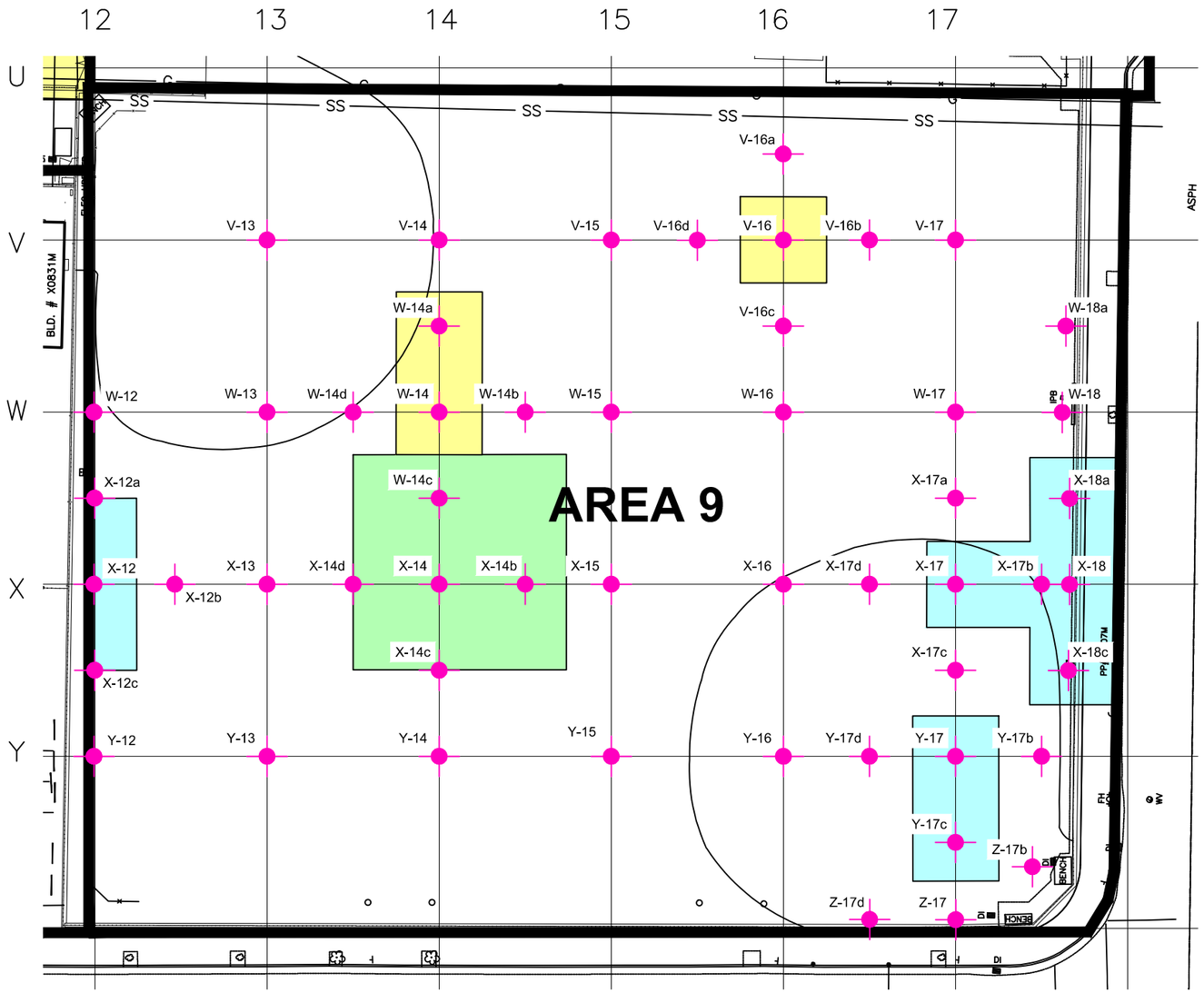
PROJECT:	**LAUSD** **ROOSEVELT HIGH SCHOOL** **456 S. MATHEWS STREET** **LOS ANGELES, CALIFORNIA**
TITLE:	**AREA 9 SAMPLING LOCATIONS**

DRAWN BY:	RMC	PROJ NO.:	265642.0000.0000
CHECKED BY:	JM		
APPROVED BY:	JM		**FIGURE 8**
DATE:	November 2017		

TRC
17911 Von Karman Avenue
Suite 400
Irvine, CA 92614
Phone: 949.727.9336

FILE NO.: LAUSD-Roosevelt-Sampling.dwg

11x17 - ATTACHED WEB FILES -- ATTACHED IMAGES: Ilemsemarket, TC61.cgp
DRAWING NAME: L:\Graphics\Projects\byName\LAUSD - Roosevelt HS\265642.0000.0000\LAUSD-Roosevelt-Sampling.dwg -- PLOT DATE: December 01, 2017 - 12:38PM



LEGEND

Y-17 Sample Location

Proposed Excavation Area for Lead

Proposed Excavation Area for Arsenic

Proposed Excavation Area for Lead and Arsenic

N

APPROXIMATE SCALE (FEET)

0 40 80

Source: Base map provided by Converse Consultants.

PROJECT:	**LAUSD** **ROOSEVELT HIGH SCHOOL** **456 S. MATHEWS STREET** **LOS ANGELES, CALIFORNIA**
TITLE:	**AREA 9** **PROPOSED EXCAVATION LOCATIONS**

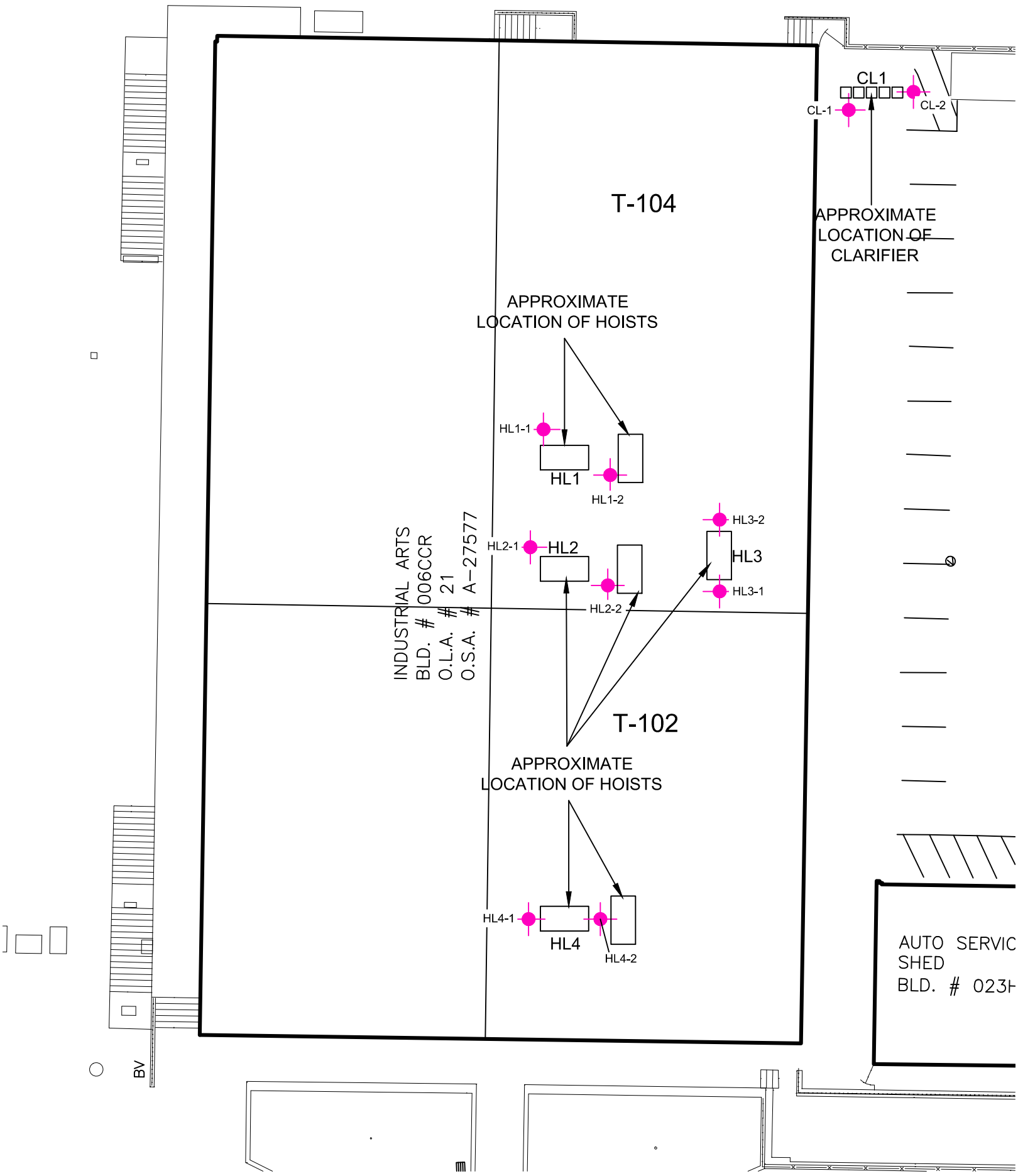
DRAWN BY:	RMC	PROJ NO.:	265642.0000.0000
CHECKED BY:	JM		
APPROVED BY:	JM		**FIGURE 8A**
DATE:	June 2017		

TRC
17911 Von Karman Avenue
Suite 400
Irvine, CA 92614
Phone: 949.727.9336

FILE NO.: LAUSD-Roosevelt-Sampling.dwg

1:1 / -- ATTACHED XREFS -- ATTACHED IMAGES: Ilemsemarked, TC01.dgn
DRAWING NAME: L:\Graphics\Projects\byName\LAUSD - Roosevelt HS\265642.0000.0000\ LAUSD-Roosevelt-Sampling.dwg -- PLOT DATE: December 01, 2017 - 12:39PM -- LAYOUT: AREA9-Excav

11x17 --- ATTACHED XREF'S: --- ATTACHED IMAGES: farmersmarket; TCG Logo;
DRAWING NAME: L:\Graphics\ProjectsbyName\LAUSD - Roosevelt HS\265642.0000.0000\ LAUSD-Roosevelt-Sampling-Hoist.dwg --- PLOT DATE: December 01, 2017 - 12:41PM --- LAYOUT: Samples



LEGEND

CL-1 ⊕ Sample Location

N

APPROXIMATE SCALE (FEET)

0 20 40

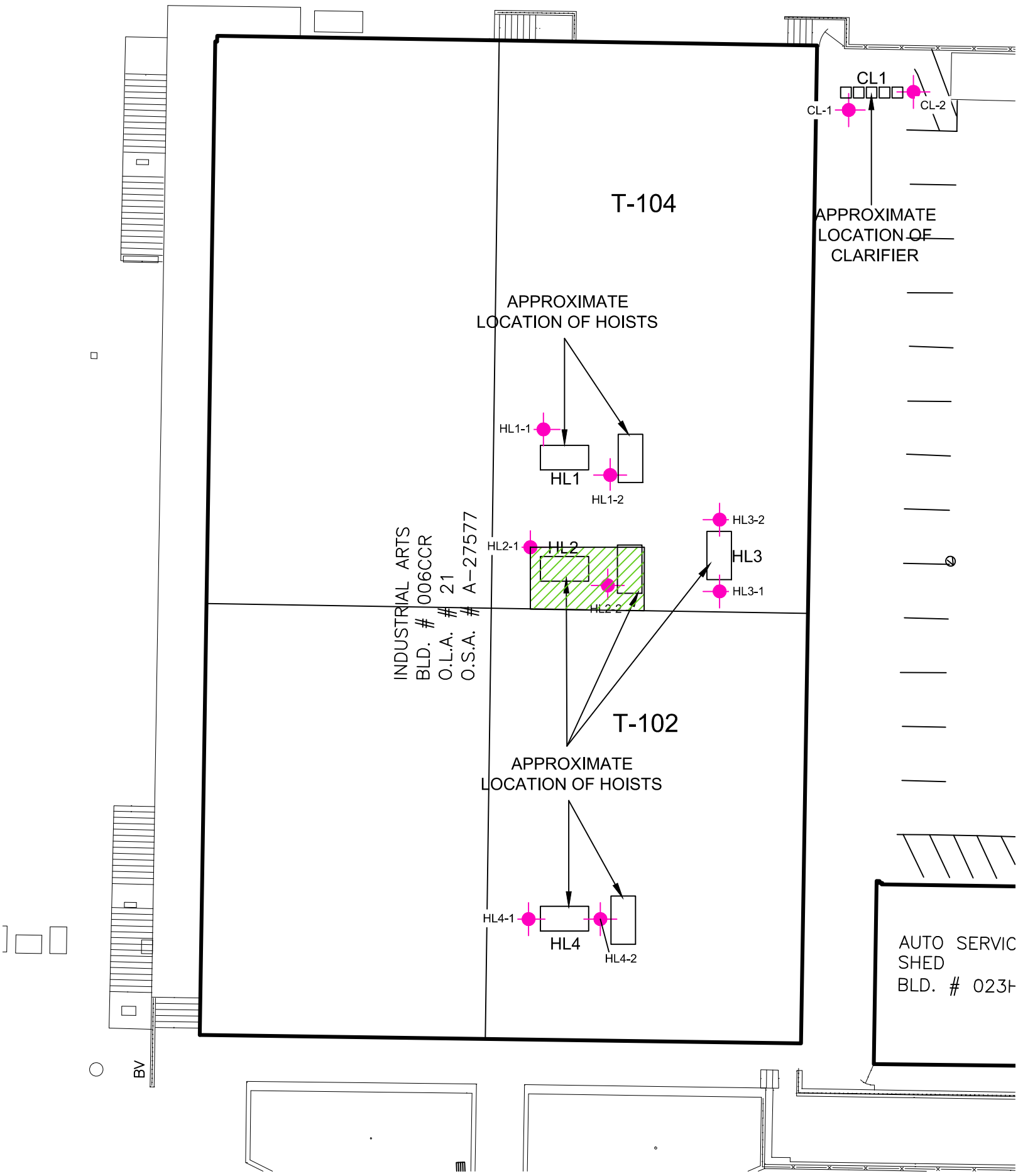
Source: Base map provided by Converse Consultants.

PROJECT:	LAUSD ROOSEVELT HIGH SCHOOL 456 S. MATHEWS STREET LOS ANGELES, CALIFORNIA
TITLE:	HYDRAULIC HOIST AND CLARIFIER SAMPLING LOCATIONS
DRAWN BY: RMC	PROJ NO.: 265642.0000.0000
CHECKED BY: JM	FIGURE 9
APPROVED BY: JM	
DATE: 11/03/2016	

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17911 Von Karman Avenue
Suite 400
Irvine, CA 92614
Phone: 949.727.9336

FILE NO.: LAUSD-Roosevelt-Sampling-Hoist.dwg

11x17 --- ATTACHED XREF'S: --- ATTACHED IMAGES: farmersmarket; TCG Logo;
DRAWING NAME: L:\Graphics\ProjectsbyName\LAUSD - Roosevelt HS\265642.0000.0000\ LAUSD-Roosevelt-Sampling-Hoist.dwg --- PLOT DATE: December 01, 2017 - 2:42PM --- LAYOUT: Excavation



LEGEND

CL-1 — Sample Location

Proposed Excavation Area for Hydrocarbons

N

APPROXIMATE SCALE (FEET)

0 20 40

Source: Base map provided by Converse Consultants.

PROJECT:	LAUSD ROOSEVELT HIGH SCHOOL 456 S. MATHEWS STREET LOS ANGELES, CALIFORNIA
TITLE:	HYDRAULIC HOIST AND CLARIFIER PROPOSED EXCAVATION LOCATIONS
DRAWN BY: RMC	PROJ NO.: 265642.0000.0000
CHECKED BY: JM	FIGURE 9A
APPROVED BY: JM	
DATE: 11/03/2016	

TRC
17911 Von Karman Avenue
Suite 400
Irvine, CA 92614
Phone: 949.727.9336

FILE NO.: LAUSD-Roosevelt-Sampling-Hoist.dwg

APPENDIX A

QUALITY ASSURANCE PROJECT PLAN

APPENDIX A

QUALITY ASSURANCE PROJECT PLAN

November 2017

THEODORE ROOSEVELT SENIOR HIGH SCHOOL
456 South Mathews Street
Los Angeles, California 90033

Prepared for

LOS ANGELES UNIFIED SCHOOL DISTRICT
Office of Environmental Health and Safety
333 S. Beaudry Avenue, 21st Floor
Los Angeles, California 90017

Prepared by



17911 Von Karman Avenue, Suite 400
Irvine, California 92614

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(Continued)

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Figure 1 Project Organizational Chart

ABBREVIATIONS AND ACRONYMS

BS	Blank Spike
COC	Chain of Custody Record
COPC	Chemical of Potential Concern
DQO	Data Quality Objectives
HAZWOPER	Hazardous Waste Operations and Emergency Response
HSP	Health and Safety Plan
IDW	Investigation-Derived Waste
JSA	Job Safety Analysis
LAUSD	Los Angeles Unified School District
LCS	Laboratory Control Sample
MS	Matrix Spike
OSHA	Occupational Safety and Health Administration
QA	Quality Assurance
QAPP	Quality Assurance Project Plan
QA/QC	Quality Assurance/Quality Control
QC	Quality Control
RAW	Removal Action Workplan
RPD	Relative Percent Difference
EPA	Environmental Protection Agency

1.0 PROJECT MANAGEMENT

This Quality Assurance Project Plan (QAPP) has been prepared on behalf of the Los Angeles Unified School District (LAUSD) to provide specific guidance and quality assurance (QA) requirements for activities associated with sampling, laboratory analyses, field measurements, and reporting to be conducted by the Environmental Consultant at Roosevelt High School (Site). This QAPP presents the purpose, organization, and technical procedures necessary to conduct the activities outlined in the Removal Action Workplan (RAW) in such a manner that data quality objectives with respect to the precision, accuracy, completeness, representativeness, and comparability are met.

This QAPP document is organized as follows:

1.0 Project Management – includes elements that cover project management, including project organization and responsibility, data quality objectives, documentation, and recordkeeping.

2.0 Data Generation and Acquisition – includes elements that cover all aspects of measurement design and implementation, including methods for sampling, analysis, data handling, and quality control requirements.

3.0 Assessment and Oversight – includes activities for assessing the effectiveness of sample collection and analysis, and quality assurance and quality control (QA/QC).

4.0 Data Validation and Usability – includes elements that cover the quality assurance activities that occur after data collection in order for the data to conform to specified criteria.

1.1 PROBLEM DEFINITION AND BACKGROUND

The project data quality objectives are discussed below in Section 1.4. Detailed descriptions of the Site, its history, and previous investigation results are provided in Section 3.0 of the RAW.

1.1.1 General Overview

Roosevelt High School is currently an operational LAUSD school scheduled for a comprehensive modernization project involving removal and/or renovation of multiple Site structures. The Site is a rectangular-shaped property consisting of approximately 23.70 acres. The current campus facilities consist of 16 structures, including an administration/classroom building, a lunch pavilion, a cafeteria, a library/classroom, a music building, a gymnasium, an auditorium/classroom building, an industrial arts building, a former auto shop building, and seven classroom buildings. The property also includes multiple portable classroom buildings. Athletic fields and facilities are located along the northeast portion of the property, as well as in the southeast corner of the property. New buildings proposed for construction will include a general classroom building, a science and specialty classroom building, a gymnasium, an auditorium, a lunch shelter, and a health/wellness clinic.

1.1.2 Project Objectives

The principal objective of this removal action is the mitigation of impacted soil from the Site to a level necessary to protect human health and the environment. This involves the removal or reduction of contaminants to prevent human exposure to chemicals of concern above applicable removal action goals.

Based on an analysis of the nature and extent of impact, and on the removal action goals for the Site, the RAW evaluated multiple alternatives appropriate for addressing the removal action objectives. The selected removal action alternative includes the excavation, transportation, and disposal of soil impacted with arsenic, lead, and/or petroleum hydrocarbons at concentrations above removal action goals. The estimated volume of soil to be remediated from six separate areas across the Site (Areas 2, 3, 5, 6, 9, and at the hydraulic hoists in Area 6) is approximately 7,019 cubic yards (10,528 tons; estimate includes 3,966 cubic yards of non-hazardous soil and up to 3,053 cubic yards of California hazardous lead-impacted soil). Confirmation soil samples will be collected at the excavation limits and from the excavation bottom to verify completion of soil removal. Upon completion, backfill and compaction of the excavation areas will be coordinated with a licensed soils engineer to assure that the backfilled areas meet minimum compaction requirements.

1.1.3 Schedule

The schedule of field activities and deliverables will be determined by the LAUSD following selection of an Environmental Consultant and Remediation Contractor.

1.2 PROJECT ORGANIZATION AND RESPONSIBILITY

Figure 1 illustrates the relationships and the lines of communication among all project participants, including project and quality control managers, quality assurance officers, and subcontractors (excavation subcontractor, analytical laboratory for soil analyses, excavation surveyor, and waste disposal services). The structure defined in this QAPP has been developed to enhance project control and obtain proper QA for the Site field activities.

1.2.1 Environmental Consultant

The LAUSD will select the Environmental Consultant for this project. The Environmental Consultant develops and manages the overall excavation activities, sampling and analysis effort, and implements the RAW. Specific activities that will be conducted by the Environmental Consultant include development and implementation of all project removal action plans, data acquisition, data interpretation, and preparation of the remediation reporting (Remedial Action Completion Report summarizing soil excavation, confirmation sampling, etc.). The Environmental Consultant will designate a Project Manager, Task Manager, QA/QC Officer, Project Health and Safety Officer, Site Coordinator, project staff, and Data Validation Officer for the field sampling activities.

1.2.2 Project Manager

The Project Manager has overall responsibility to LAUSD for the activities conducted on this project. Monitoring the Task Manager's activities and overseeing the preparation and implementation of the RAW are also the responsibility of the Project Manager.

1.2.3 Task Manager

The Task Manager has the responsibility for the completion of all project activities and deliverables associated with those activities. The Task Manager is responsible for the day to day control of planning, scheduling, cost control, and implementation of the scope of services. Additionally, the Task Manager monitors all project personnel including subcontractors' activities and project team coordination.

1.2.4 Project QA/QC Officer

The QA/QC Officer reports to the Task Manager. The QA/QC Officer is responsible for monitoring and verifying that the activities conducted on the Site are in accordance with the provisions of the RAW. The QA/QC Officer also has the responsibility for assessing the effectiveness of the field QA/QC procedures at the Site and shall recommend any modifications to the Task Manager.

1.2.5 Project Health and Safety Officer

The Project Health and Safety Officer reports to the Site Coordinator and coordinates with the Task Manager and project staff. The Project Health and Safety Officer has the responsibility of monitoring the implementation of the Site-Specific Health and Safety Plan (HSP) and Job Safety Analysis (JSA) and verifying that the activities conducted at this Site are in accordance with the provisions of the HSP. The Project Health and Safety Officer also has the responsibility of advising the Task Manager with regard to health and safety issues.

1.2.6 Task Leader/Site Coordinator

The Task Leader and Site Coordinator are jointly responsible for planning, scheduling, controlling, and completing assigned project tasks. The Site Coordinator is also responsible for implementing this QAPP and the RAW, including operations management and management of subcontractors.

1.2.7 Project Staff

Each member of the project staff is responsible for completion of assigned project activities. The project staff are responsible for understanding and implementing this QAPP as it relates to their respective assignment. Project staff also have the responsibility of ensuring that all subcontractors, staff, and visitors to the Site follow health and safety protocol according to the HSP.

1.2.8 Data Validation Officer

The Data Validation Officer is responsible for providing the Project Manager with a report on data reduction and data validation associated with field and laboratory activities.

1.2.9 Qualifications of Personnel

Individuals following this RAW (including the QAPP) must receive, at a minimum, orientation to the project's purpose, scope, and methods of implementation and must do so prior to commencing any field activities. The Project Manager will perform this orientation. All personnel must have documented experience or direct training in all procedures performed during all phases of the project, unless on-the-job training is provided by experienced personnel qualified to conduct each trainee's assignment and the results of that training are documented.

Field technicians will be trained in all Site-related field activities and safety protocols outlined in the RAW. Field activities include excavation oversight, air/dust monitoring, Site safety monitoring, soil sample collection and handling, and the handling of investigation-derived waste (IDW). Subcontractors are responsible for their own training, but will be reviewed by the Environmental Consultant personnel

prior to commencing work. The Environmental Consultant field technicians will monitor all field activities.

All field technicians, including subcontractor personnel, must be trained in the 40-hour Hazardous Waste Operations and Emergency Response (HAZWOPER) course (including annual updates with 8-hour refresher courses), that are designed to meet the Occupational Safety and Health Administration (OSHA) training requirements for hazardous waste operations for general Site workers as required by 29 CFR 1910.120(e)(3). Proof that all required training has been completed must be maintained on the Site/project at all times, including:

- OSHA 40-Hour HAZWOPER Card
- OSHA 8-Hour Annual HAZWOPER Refresher Card

Verification of all cards will be determined during daily safety meetings prior to field activities.

1.2.10 Laboratory and Certifications

All laboratory technicians and analysts must be trained in processing and analyzing samples. All environmental soil samples will be analyzed by a State-certified analytical laboratory selected by the Environmental Consultant.

1.3 PROJECT/TASK DESCRIPTION

The project and task descriptions are presented in the RAW.

1.4 QUALITY OBJECTIVES AND CRITERIA FOR MEASUREMENT DATA

This section presents the Data Quality Objectives (DQOs) for the project and the performance criteria necessary to meet these DQOs. Five DQOs for the assurance of quality data – precision, accuracy, completeness, representativeness, and comparability - are defined, and the procedures to be followed to support and assess these objectives are presented. Taken together, the quality assurance objectives provide both quantitative and qualitative assessments of data collection and analytical procedures at the field and laboratory levels. The quality assurance goals for laboratory analysis will be provided by the Environmental Consultant following selection of the analytical laboratory.

1.4.1 Quantitative Objectives: Precision, Accuracy, and Completeness

Precision

Precision (reproducibility) is estimated by comparing the analytical results of duplicate samples. Precision is determined at both the field and laboratory levels. Duplicate samples will be collected in the field at the rate of one per 10 samples, excluding quality control samples, and analyzed for the same suite of analyses as their corresponding sample. Field duplicates will be submitted as blind samples (samples identified by increasing whole numbers, without reference to well locations or QC samples) to the analytical laboratory.

Precision is also measured as an internal laboratory batch QC check for all analytical methods. As described below (accuracy), matrix spikes (MS) and/or blank spikes (BS) are analyzed in duplicate. The analytical results are compared and reported by the laboratory as the relative percent difference (RPD):

$$RPD = \frac{2|C_1 - C_2|}{C_1 + C_2} x100$$

where C_1 and C_2 are the concentrations in the duplicate samples.

In addition to the MS and BS, the analytical laboratory may split an environmental sample from a single container to create a laboratory duplicate.

Precision goals (upper limits for the RPD) are established by the analytical laboratory for each method and detailed in the analytical reports. Precision goals vary by MS, BS, and laboratory duplicates, and they are updated annually. Out-of-range precisions are summarized by the laboratory in a case narrative for each analytical report. This information is used for data validation as described in Section 4.0.

The Environmental Consultant will calculate precision values for the field duplicates upon receipt of the analytical data. The precision goals established by the laboratory for the BS will be adopted for the field duplicates. Precision will only be calculated for analyte concentration at or above ten times the reporting limit. Out-of-range precision values for field duplicates will be used for data validation as described in Section 4.0.

Accuracy

Accuracy quantifies the extent to which a measurement agrees with a known reference or true value. It is determined in the analytical laboratory by "spiking" samples with a known concentration of analyte and comparing the measured concentration with the spiked value. Accuracy is expressed as a percentage, known as the recovery (R) of the measured concentration (C_m) less the sample or "background" concentration (C_b) to the spike concentration (C_s):

$$R = \frac{(C_m - C_b)}{C_s} x100$$

Accuracy is measured on both an individual sample basis with the use of surrogate spikes (organic analyses only) and for each group of samples analyzed together as a "batch". Surrogates are organic compounds that are similar to organic analytes of environmental interest in their behavior in the analytical process, but are rarely found in environmental samples. They are spiked into each laboratory sample, including quality control (QC) samples, and percent recoveries are calculated and reported for each surrogate.

For the batch QC, one or more of the following types of spiked samples are used to assess the accuracy of the method for the batch:

- Matrix or Sample Spike (MS): One sample in the batch is spiked and analyzed to determine R (usually analyzed with a matrix or sample spike duplicate; see Precision)

- Blank Spike (BS): A laboratory-prepared blank sample is spiked (C_b=0) and analyzed to determine R (usually analyzed with a blank spike duplicate; see Precision)

- Laboratory Control Sample (LCS): A laboratory-prepared blank sample is spiked (C_b=0) and analyzed to determine R (usually not analyzed with a duplicate)

Accuracy goals (acceptance limits for R) are established by the analytical laboratory for each method and detailed in the analytical reports. Accuracy goals vary by surrogate, MS, BS, and LCS, and they are updated annually. Out-of-range recoveries are summarized by the laboratory in a case narrative for the analytical report. This information is used for data validation as described in Section 4.0.

Completeness

Completeness (C) is the percentage of measurements planned (N_p) that are actually obtained and validated (N_v):

$$C = \frac{N_v}{N_p} x100$$

Each of the QC sample types (field duplicates, equipment rinse blanks, temperature blanks, method blanks, sample surrogates, and spiked samples/spiked sample duplicates) is used in the data validation process; consequently, each plays a role in assessing completeness. Completeness provides a final, overall measure of data quality for each monitoring event.

Completeness will be calculated for each analyte. A realistic project goal of 90 percent for each analyte is established.

1.4.2 Qualitative Objectives: Comparability and Representativeness

Comparability

Comparability describes the extent to which valid comparisons between measurements taken at different locations and different times can be made. Like representativeness, comparability can only be ensured in a qualitative fashion. Consistency in sampling methods, measurement devices, calibration practices, and reporting limits and units will help to ensure comparability. Deviations from protocols will be noted in field records and used for data validation as described in Section 4.0.

Representativeness

An important goal of the field sampling is to collect data that are representative of conditions at the Site. Since the true conditions, i.e., chemical concentrations, are not known in an absolute sense, they cannot be compared to the measured values in a quantitative fashion. Instead, quality control samples and other procedures are used to qualitatively assess data representativeness.

Field procedures, such as equipment decontamination before sampling and adherence to established practices for sample collection, help ensure that the data collected represent subsurface conditions at the Site and are not compromised by sampling methods or cross-contamination. As a check on cross-contamination from sampling equipment, equipment rinse blanks will be collected at a rate of one sample per field sampling crew per day of sampling. Rinse blanks will be submitted to the laboratory as blind samples. Analytical data from the rinse blanks will be used for data validation as described in Section 4.0.

Sample preservation and custody procedures, and adherence to method preservation and holding time requirements help ensure that subsurface analyte concentrations have not been altered in the storage and shipping process.

At the laboratory level, a QC check on cross-contamination from laboratory equipment is accomplished with a method blank, a laboratory-prepared blank sample analyzed with each sample batch. Positive results in a method blank are discussed in the laboratory analytical reports and are used for Environmental Consultant data validation as discussed in Section 4.0. Finally, analysis by a laboratory certified by the California Department of Health Services helps to ensure quality analytical results.

1.5 DOCUMENTATION AND RECORDS

The following general types of documents and records will be maintained for this project:

- RAW
- QAPP
- HSP and JSA
- Project field data sheets
- General field procedures
- Chain of custody (COC) forms
- General project correspondence
- Laboratory data reports
- Sampling and analysis reports

The Project Manager is responsible for maintaining the above records for QC reports, corrective actions, and other associated documentation. Documentation will be maintained for a minimum of 6 years following completion of the project.

2.0 DATA GENERATION AND ACQUISITION

This section describes the general procedures that are to be followed by all personnel involved in measurement systems design and implementation. Further details are provided in the RAW. Trained personnel are to be used during all investigation activities and must be familiar with the RAW and QAPP prior to initiation of the activities.

2.1 SAMPLING SUMMARY AND PROCEDURES

The following samples will be collected during removal action activities: 1) confirmation soil samples from individual excavations following removal of impacted soil; 2) stockpile soil samples from areas identified with potential elevated lead impacts to characterize potential California-hazardous, lead-impacted soil; and 3) import soil to be used for excavation backfill material. The soil samples will be analyzed as outlined in the RAW. QA/QC samples will be collected/submitted during removal action activities at an appropriate frequency.

2.2 SAMPLE HANDLING AND CUSTODY

2.2.1 Sample Containers, Preservation, and Holding Time

Sample containers for the soil samples will consist of 4-ounce glass sample jars. Holding time and preservation methods for analytical samples will conform to the specific EPA requirements for the analytical method. Where no requirements have been specified, EPA requirements for the method will be followed in conformance with EPA SW-846.

2.2.2 Sample Numbering and Labeling

All samples submitted for analysis, including quality control samples, will be assigned a consecutive and increasing whole number as the sample identification. The project number, sample depth (if soil), field staff's initials, and the date of collection will also be included on the sample label. Sample tracking will be accomplished via field notes and on the COC.

2.2.3 Sample Custody

All samples submitted to the analytical laboratory, including quality control samples, will be accompanied by a COC. COCs allow for the tracing of possession and handling of the samples from the time of field collection through laboratory analysis.

The person accepting custody of samples at the analytical laboratory will break the custody seals on the coolers and will check the samples against the COC. The receiving personnel will enter all arriving samples into a laboratory logbook and note any problems or discrepancies between the samples, the COCs, sample containers, and seal conditions and report them immediately. If no problems or discrepancies are apparent, the receiving personnel will sign the COCs. The samples will be assigned a unique lab number for analysis which will be cross-referenced to the original field sample number, recorded in the laboratory notebook, and reported in the laboratory report. The analytical laboratory retains one copy of the COC, and returns one copy of the COC to the Project Manager.

Chain of custody protocol is followed for all soil samples selected for laboratory analysis. The COC form(s) accompanies the samples from the sampling locality to the laboratory, providing a continuous record of possession prior to analysis.

2.2.4 Sample Packing & Shipment

After the samples have been labeled and documented in the COC, they are placed in a cooler with ice at approximately 4 degrees Celsius (ºC) prior to and during transport to a State-certified laboratory for analysis. Samples not selected for immediate analysis may be transported in a cooler with ice and archived in a frostless refrigerator at approximately 4ºC for possible future testing. It is anticipated that sample shipments may be picked up at the Site every day samples are collected for immediate transport to the laboratory.

2.2.5 Field Documents and Records

Field personnel will document all field activities during remediation activities. Documents to be retained on Site at all times include the Site HSP and JSA, daily field records, field record forms, and COCs.

Site HSP and JSA

A Site HSP must be on Site at all times. Every day, prior to commencement of the field activities, field staff will provide a Site health and safety briefing to all personnel involved (including Environmental Consultant staff, visitors, agency leaders, and subcontractors). Following the meeting, all personnel will sign and date that they have attended the meeting and they understand the scope of work and safety protocol involved in the field activities.

Daily Field Records

Field representatives will fill out a Daily Field Report sheet every day and include the job name, Project Number, date/day, location, weather conditions, list of personnel and visitors, and a reason for the Site visit. Other information to be recorded on this data sheet will include:

- Chronological record of activities and events
- Comments and variances from the RAW
- Telephone conversations
- Measurements (sample locations, air monitoring readings, distances, etc.)
- Equipment cleaning and calibration

Field Record Forms

Field record forms that will be used during field activities include (depending on the type of field activities):

- Field Logs of Soil Samples (Hand Auger or Grab Sample)
- Waste Inventory
- Field Monitoring Sheets
- Meter Calibration Log

Chain of Custody Record

All soil samples, including quality control samples, that will be transported and analyzed by the analytical laboratory will be accompanied by a COC.

2.3 ANALYTICAL METHODS

Based on the findings of previous investigations, the chemicals of potential concern (COPCs) for the Roosevelt High School removal action include arsenic, lead, and petroleum hydrocarons (diesel and oil range). The analytical methods to be employed to verify removal of these COPCs from the individual excavation areas include the following: 1) EPA Method 6020B for arsenic; 2) EPA Method 6010B for lead; and/or 3) EPA Method 8015B(M) for diesel- and oil-range petroleum hydrocarbons. Refer to the RAW for additional details regarding the proposed analyses for confirmation soil samples, stockpile soil samples, and borrow fill soil samples.

2.4 QUALITY CONTROL

Field duplicates and rinsate (equipment) blanks will be obtained and submitted to the analytical laboratory to provide a means to assess the quality of the data resulting from the field sampling program. Field duplicate samples will be analyzed to check for sampling and laboratory reproducibility. Rinsate samples will be analyzed to check for procedural contamination and cross-contamination. Matrix spike and laboratory control samples will be analyzed to assess if recoveries falling outside acceptance windows are attributable to sample matrix interferences and not to laboratory analytical errors. The matrix spike and laboratory control samples will also measure the accuracy of the analysis. Laboratory duplicates for inorganic analysis and matrix spike duplicates for organic analytes will be analyzed to evaluate laboratory reproducibility or precision.

2.5 INSTRUMENT/EQUIPMENT TESTING, INSPECTION, AND MAINTENANCE

Various field instruments will be used during field activities at the Site including a dust/particulate monitor, a noise dosimeter, and a wind speed indicator. Field instrument maintenance will be documented in the field data sheet for each field instrument used during field activities. Field equipment will be maintained when routine inspections indicate the need for maintenance. In the event that a piece of equipment needs repair, a list of the field equipment manufacturers' addresses, telephone numbers, and points of contact will be maintained on Site during field activities. Field equipment routine maintenance may include:

- Calibrating equipment according to manufacturer's directions
- Removing surface dirt and debris
- Replacing/cleaning filters when needed
- Ensuring proper storage of equipment
- Inspecting instruments prior to use
- Charging battery packs when not in use
- Maintaining spare and replacement parts in the field to minimize downtime

The primary objective of a preventive maintenance program is to help ensure the timely and effective completion of a measurement effort by minimizing the downtime of crucial equipment due to expected or unexpected component failure. Laboratory instrument maintenance including standard preventive maintenance procedures and schedules are contained in, and will be performed in accordance with, the analytical laboratory's QA/QC Manual. Instruments will be constantly monitored by the use of daily standards, sensitivity, and response checks to determine if maintenance is required.

2.6 INSTRUMENT/EQUIPMENT CALIBRATION AND FREQUENCY

Methods for calibration of field instruments will follow the specific instrument manufacturer's recommendations. All field instruments will be calibrated before each day of use and a calibration check at the end of the day will be performed to verify that the instrument remained in good working condition throughout the day. If the calibration check at the end of the day does not meet acceptance criteria, then the day's data will be flagged and the instrument calibration checks will increase to the operator's satisfaction that the instrument remains true to the initial calibration.

Laboratory instrument calibration will be performed as specified in the method documentation. Specific laboratory calibration techniques are established for the EPA methods to demonstrate that the analytical

instrument is operating within the design specifications and that the quality of the data generated can be replicated (see EPA SW-846 for applicable EPA standard methods).

2.7 INSPECTION/ACCEPTANCE FOR SUPPLIES AND CONSUMMABLES

Supplies and consumables used during field sampling activities will be inspected prior to use. At a minimum, the Project Manager or field staff will inspect the materials for damage or broken seals.

2.8 DATA ACQUISITION REQUIREMENTS (NON-DIRECT MEASUREMENTS)

Data needed for project implementation or decision making that are obtained from non-direct measurements include databases, spreadsheets, programs, and literature files. Data from previous investigations/reports (i.e., lithology, soil analytical data, etc.) may be used as a reference for field implementation or field decision-making aspects of this project. The Project Manager will review all previous reports.

2.9 DATA MANAGEMENT

All technical data generated for the Site, including soil and groundwater quality data from both the field and analytical laboratory, will be preserved in Microsoft Excel databases. The database includes all Site historical data, and it is updated with each sampling event or field event in which new technical data are generated. The following data reduction and management procedure ensures that the data are not compromised by transcriptional errors, that invalid data are flagged, and that original field and laboratory reports are properly preserved:

1. Data from field notes and laboratory reports are entered into the database.

2. The data are organized logically into tables, usually grouped by media and analyte type (e.g., soil, arsenic, lead, petroleum hydrocarbons, etc.) and printed along with historical data.

3. A person other than the originator of the tables reviews the printed data, comparing present and historical values to identify anomalies that may indicate transcriptional errors. Additionally, a percentage of the data is compared with the field notes and laboratory reports as a check on data entry. Transcriptional errors, if any, are corrected in the database.

4. The data are validated as described in Section 4.0. Invalid data, if any, are flagged in the database.

5. The field notes, laboratory reports, and data validation notes are stored in the project file.

3.0 ASSESSMENT AND OVERSIGHT

Performance assessments of laboratory and field operations may be conducted to assess the effectiveness of the QAPP, identify any nonconformances, and verify correction of identified deficiencies. Assessments include, but are not limited to, technical systems audit (i.e., laboratory audits), field operations audits, and audits/assessment of data quality. The Site Coordinator is responsible for supervising and checking that samples are collected and handled in accordance with the approved RAW, and that documentation of activities is adequate and complete. The Task Manager is responsible for

overseeing that project efforts satisfy the QAPP. Reports and technical correspondence will be peer reviewed by an assigned, qualified individual before being finalized.

3.1 ASSESSMENTS AND RESPONSE ACTIONS

The QA/QC Officer, or QA/QC Officer designee, will evaluate the need for a performance audit of the laboratory with due consideration given to the recommendations of the Task Manager. Performance audits are utilized to quantitatively assess the accuracy of measurement data through the use of performance evaluation and blank samples.

System Audits may be conducted at the discretion of the QA/QC Officer or QA/QC Officer designee. The audits may be conducted of field operations to review the data generation process. The system audits may include review of the field operations, sampling activities, equipment, calibration procedures, or any other procedures described in this QAPP.

3.2 REPORTS TO MANAGEMENT

All audit/assessment reports will be prepared and submitted to the Project Manager, to inform management of the following:

- Status of the project
- Results of performance evaluations and system audits
- Results of periodic data quality assessments
- Significant quality assurance problems and recommended solutions

4.0 DATA VALIDATION AND USABILITY

This section of the QAPP addresses the final project QA to determine if the data collected during Site removal action activities conform to the specified criteria discussed in the RAW, and estimate the effects of any deviations. Field and laboratory data will be evaluated with respect to the DQOs discussed in Section 1.4 of this QAPP. In addition, the following quality control measures will be evaluated during data validation: holding times, instrument performance, calibration, blanks, surrogate recovery, matrix spike/matrix spike duplicate, field duplicates, internal standards performance, compound identification, compound quantitation, detection limits, and overall data assessment. The process presented below will invalidate data determined to be inaccurate, imprecise, unrepresentative, or incomparable. Completeness will be calculated for each analyte as the last step in the validation process.

Step 1 – Laboratory Evaluation
A laboratory evaluation will be completed for each final laboratory data package. Usually, one data package is returned for each COC submitted to the laboratory and includes all analyses requested on the COC.

First, the data package will be checked to ensure that the samples arrived intact and cold (temperature blank measure of 4±2°C). For each analyte, the sample collection dates and times will be compared to the dates of analysis to ensure that required hold times were not exceeded. Any non-conformances will be discussed with the laboratory to determine the effects on the validity of the analytical results. This discussion, along with a comparison of affected data with historical results, will be used to determine, on a case-by-case basis, if the data are unrepresentative and should be invalidated.

Second, each laboratory report will be reviewed for non-conformances in internal laboratory QC samples – positive detects in method blanks, surrogate or spiked sample recoveries that are out of the accepted accuracy range, and relative percent differences between spiked sample duplicates that may indicate an unacceptable method precision. Usually, any non-conformances will be noted in the laboratory report case narrative along with an assessment, based on internal laboratory procedures, of whether the batch data are acceptable. Any data deemed invalid by the laboratory will also be invalidated by the Environmental Consultant's validation process; conversely, data deemed acceptable by the laboratory will also be accepted by the Environmental Consultant.

Step 2 – Rinsate Blank Evaluation
Rinsate blanks collected during soil sampling activities will be assessed for detectable results. Rinsate blank detects may invalidate analytical results if similar concentration levels are detected in associated samples. However, if similar concentration levels have also been detected historically at the associated well locations, the sample data may still be valid. Rinsate blank detects may be much lower in concentration than associated samples; in this case, the analytical sample results are likely valid. The decision to invalidate data based on rinsate blank results is made on a case-by-case basis. Rinsate blanks will not be evaluated if they were determined to be invalid in Step 1.

Step 3 –Evaluation of Field Duplicates
To assess method precision, the RPD will be calculated for field duplicates as discussed in Section 1.4.1. Out-of-range precision values for field duplicates will invalidate the data for both samples.

Step 4 – Historical Data Review
All field and analytical data will be carefully compared with historical values. Anomalies not determined to be transcriptional errors (Section 2.9) will be discussed with field and/or laboratory personnel, as appropriate, to determine possible sources of error (e.g. improperly functioning field equipment, deviations from field protocols, laboratory sample container contamination). Data will be invalidated as appropriate. Field data values that were adjusted due to instrumentation calibration problems will be flagged. Data will be invalidated as appropriate.

Step 5 – Completeness
Completeness will be calculated for each analyte as outlined in Section 1.4.1 to provide a final, overall measure of data quality for each sampling event.

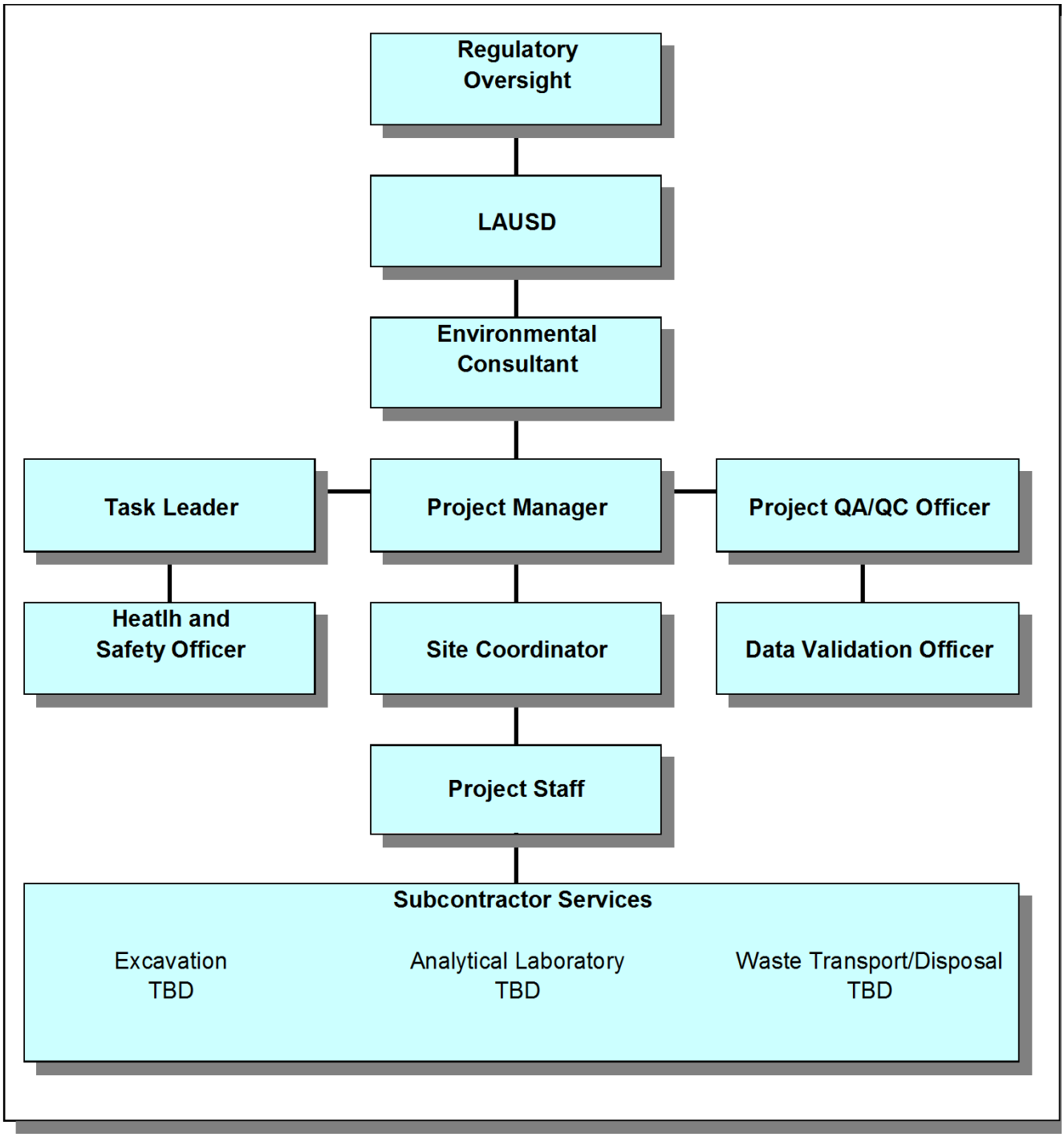


FIGURE 1
PROJECT ORGANIZATIONAL CHART

APPENDIX B

HEALTH AND SAFETY PLAN



SITE-SPECIFIC HEALTH & SAFETY PLAN

LAUSD Roosevelt High School
465 South Mathews Street
Los Angeles, California

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SITE-SPECIFIC HEALTH AND SAFETY PLAN (HSP)

LAUSD Roosevelt High School
465 South Mathews Street
Los Angeles, California

1.0 INTRODUCTION

The purpose of this Health & Safety Plan (HSP) is to establish responsibilities, procedures and contingencies for the protection of TRC employees, contractors, visitors and the public while performing activities at the Los Angeles Unified School District (LAUSD) Legacy High School site. This site-specific HSP is to be implemented in conjunction with the TRC Companies, Inc. (TRC) Health and Safety Management System (HSMS) and the Injury and Illness Prevention Program (IIPP).

The use of proper health and safety procedures in accordance with applicable OSHA regulations shall be required during site work. The procedures presented in this HSP are intended to serve as guidelines. They are not a substitute for sound judgment by site personnel.

1.1 Key Companies Involved In Project

CUSTOMER OR CLIENT:	LAUSD
CONTRACTOR:	TBD
SUBCONTRACTOR:	TBD

1.2 Scope of Work

The proposed work will be performed by TRC and will include but may not be limited to:

- Excavation, transportation, and disposal of soil impacted with arsenic, lead, and/or petroleum hydrocarbons. The estimated volume of soil to be remediated is approximately 7,019 cubic yards (10,528 tons; estimate includes 3,966 cubic yards of non-hazardous soil and up to 3,053 cubic yards of California hazardous lead-impacted soil).
- Collection and analysis of confirmation soil samples.
- Backfilling, compaction, and grading of excavation areas.

2.0 SITE INFORMATION

This HSP considers the physical, chemical, and biological hazards that may be encountered during work activities at the site. Operations associated with this HSP will be conducted in accordance with the scope of work and approved design drawings/specifications.

Summary information for this project is provided in the following table:

Table 1: Site Information

Anticipated Work Period: Site description (see Attachment A for site map):	Fall 2017 through Winter 2018 A Preliminary Environmental Assessment (PEA) Equivalent investigation conducted at the site has identified the following environmental conditions: - Arsenic was detected in soil at 48 boring locations across the Site (maximum 66 mg/kg). - Lead was detected in soil at 66 boring locations across the Site (maximum 6,300 mg/kg). - TPH-D and TPH-O were detected in soil in one sample collected at one of the four hydraulic hoists (maximum 1,900 mg/kg TPH-D and 4,700 mg/kg TPH-O). - The maximum concentrations of methane and hydrogen sulfide in soil gas measured in the field included 24,500 parts per million by volume (ppmv) and 34.5 ppmv, respectively. The maximum concentrations of methane and hydrogen sulfide in soil gas detected in the laboratory samples included 11,000 ppmv methane and no detectable hydrogen sulfide. Detectable VOCs were also reported at low concentrations in the soil gas samples collected for analysis.
Approximate depth to groundwater:	NA
Contaminants of concern:	Arsenic, lead, hydrocarbons, and methane. SDS's are available in **Attachment B**.

3.0 ROLES & RESPONSIBILITIES

Contact information and names of key project personnel are listed below. A description of their responsibilities follows.

Table 2: Key Project Personnel and Contact Information

Role	Name	Contact Information
TRC Personnel		
TRC Project Manager/Supervisor		
TRC Site Safety Officer (SSO)		
Customer/Client Contact		
Contractor/Subcontractor Personnel ☐ NA		
☐ Contractor / ☐ Subcontractor Company Name:		
Site Safety Officer (SSO)		
Assistant Site Safety Officer (SSO)		
☐ Contractor / ☐ Subcontractor Company Name:		
Site Safety Officer (SSO)		
Assistant Site Safety Officer (SSO)		

TRC Site Safety Officer or Assistant Safety Officer must report all site incidents immediately to the TRC Project Manager or their Supervisor

TRC PM/Supervisor must report all incidents/ significant near misses within 24 hours to:		
Safety Manager		
Safety Director		

3.1 TRC Project Manager/Supervisor

- Overall responsibility for development of a complete and accurate HSP. The HSP shall account for all foreseeable hazards.
- Responsible for the management and technical direction of all aspects of the project.
- Ensure the completion of periodic site inspections.
- Conduct incident investigations.
- Delegate responsibility for field implementation of the HSP to TRC Site Safety Officer.

3.2 Site Safety Officers (SSO) – TRC & Contractor Personnel

- Responsible for the daily implementation of the HSP.
- Ensures HSP is available onsite and that the plan is understood and signed by all personnel entering the site. (See **Attachment F** "Pre-job Safety Briefing").
- Conducts (or coordinates the completion of) Tailgate Safety Meetings and ensures documentation of these meeting is available for review.
- Uses JSAs to emphasize hazards and protective measures discussed in the HSP.
- Communicates any revisions to the scope of work or HSP to affected personnel and Project Manager/Supervisor.
- Implements emergency response procedures.

3.3 TRC Employees

- Responsible for understanding and complying with this HSP, including the JSAs.
- Are required to participate in Tailgate Safety Meetings prior to commencement of site work.
- Must acknowledge an understanding of the HSP by signing the "Pre-job Safety Briefing" (See **Attachment F**).

3.4 Contractors & Subcontractors

A copy of the HSP will be made available to each designated Contractor/Subcontractor (from now on to be referred to "Contractors") Site Health and Safety Officer (SSO) prior to coming to the site. Upon review or briefing of the HSP, each contractor and their personnel working at the site will be required to sign the "Safety Compliance Agreement" (See Appendix F) to verify their understanding and willingness to comply with the HSP.

TRC hires Contractors to apply their technical expertise to specific work tasks (i.e. construction, drilling, grading and heavy equipment operation/maintenance). Although TRC has a certain level of knowledge in these areas, the contractor is most knowledgeable of the hazards within their particular area of expertise and is in the best position to implement and monitor an effective H&S program. Contractors are required to follow and operate within their company's

health and safety program and policies. TRC will exercise reasonable care to prevent and detect safety violations on the site. However, direct supervision of contractor employee safety is the responsibility of the contractor.

Contractors are to designate a company representative as their own Site Safety Officer and, if applicable, Assistant Safety Officer. This individual shall monitor the contractor's employees and ensure that safe working procedures are being followed. The Site Safety Officer and, if applicable, Assistant Safety Officer shall be identified to the TRC in writing, either by email, letter or by having the individual sign and provide contact information on "Pre-job Safety Briefing"
(See **Attachment F**).

Contractors are to:

- Provide a copy of their HSP to the TRC SSO or Project Manager/Supervisor before work commences.
- Provide safety equipment and personal protective equipment for their employees.
- Ensure their equipment is in proper working order and their employees are trained and medically fit to complete the work assigned to them.
- Upon request, provide evidence that personnel working at the site have received the necessary training, certifications and, if applicable, medical surveillance.

The Contractor must inform the TRC SSO if the risks associated with a particular task exceed day-to-day safety requirements and necessitate additional safety precautions to protect the employees performing the particular task. In such cases, TRC may dictate that additional safety precautions be implemented. In the event a discrepancy arises between contractor safety procedures and those of TRC, the more stringent is to be implemented.

3.5 Visitors / Regulatory Agents

- Visitors / regulatory agents will be provided an overview of the basic site safety information. A copy of this HSP will be made available for review.
- All visitors / regulatory agents are required to sign-in on "Pre-job Safety Briefing" (See **Attachment F**) each time they enter the project site.
- Visitors / regulatory agents should be escorted by a TRC or designated contractor employee and should not be allowed to move about the site alone.

4.0 COMMUNICATION

Communication is an important aspect of project safety and this HSP. There are several processes incorporated in this HSP to ensure communication of health and safety hazards.

- Pre-job Project Planning meetings to discuss the scope of work, potential hazards, and Client/TRC Specific Health and Safety Programs (i.e., TRC Glove and Fixed Open Blade Knife policies).
- Site walkdowns with the TRC workgroup, subcontractors and the customer/client.
- Development of site-specific HSP and JSAs.
- Communication and acknowledgement of understanding of HSP & JSAs by signing the "Pre-job Safety Briefing" (See **Attachment F**).
- Tailgate meetings emphasizing that hazard assessment is a continuous process, and any potentially unsafe actions or condition are to be communicated immediately to the SSO.
- Communicating results of field observations/audits. Visual observations are to be conducted daily by the SSO. Periodic field observations will also be recorded on the TRC Safety Observation Form (TRC HSMS, CP015 Behavior Based Safety Program). Results from either observation will be communicated during Tailgate Safety Meetings.

5.0 REVISIONS TO HSP

If a situation arises where the HSP requires revision, the following option are available:

- Except in the case of emergency situations, no deviations from the HSP may be implemented without the prior notification and approval of the TRC Site Safety Officer (SSO).
- If HSP revisions are minor (i.e. not involving significant changes to the scope of work, associated hazards or PPE requirements), the TRC Site Safety Officer (SSO) can make hand-written revisions to the HSP in the field. HSP Revisions must then be communicated to affected personnel and the Project Manager/Supervisor.
- If HSP revisions are substantial (i.e. involving significant changes to the scope of work, associated hazards or PPE requirements), the TRC Site Safety Officer (SSO) must consult with the Project Manager/Supervisor before making revisions. The TRC Site Safety Officer (SSO) can make hand-written revisions to the HSP in the field. HSP Revisions must then be communicated to affected personnel and the Project Manager/Supervisor. It is up to the discretion of the Project Manager/Supervisor whether a revised HSP will be reissued to replace the original HSP on the work site.

6.0 HAZARD ASSESSMENT

Hazard assessment is essential for establishing hazard prevention measures. Below is a list of potential physical, chemical and biological hazards associated with various TRC project sites. Not all hazards apply to this site-specific HSP. In addition, the list is not all-inclusive and may require additional hazards associated with a particular project/site to be added.

Please check, or add applicable hazards or hazardous tasks, hazards associated with the scope of work described in this HSP (Section 1.2). A JSA shall be developed to address each of the indicated hazards or hazardous tasks. JSAs are included in **Attachment E** of this HSP.

6.1 Physical Hazards

☐ Excavation & Trenching (where personnel will be entering the excavation)
☒ Heavy Equipment (not drilling related)
☐ Drilling
☐ Overhead lines
☒ Underground utilities
☐ Energy Control – Lock out / Tag out
☐ Flammable Atmospheres (> 10% LEL)
☒ Traffic - vehicular and pedestrian
☒ Trips, Slips & Falls
☒ Head, foot, eye, and back injuries
☒ Falling objects
☐ Working from elevated surface (> 6ft); Fall Protection / Fall Arrest
☐ Ladders Use
☒ Sharp objects

Equipment

☒ Electrical equipment (including powered hand tools)
☒ Hydraulic equipment
☒ Pneumatic equipment

Non-Powered Hand Tool

☒ Cutting equipment
☐ Welding hazards
☐ Confined Spaces

6.2 Chemical Hazards

SDS are to be included with the HSP whenever a hazardous material (not waste) is stored or utilized at the work site. SDSs can be found in **Attachment B** after the Occupational Health Guidelines and Toxicological Information Table.

☒ Hydrocarbons
☒ Lead
☒ Arsenic
☐ PCBs
☐ Organochlorine Pesticides
☐ Metals
☒ Methane
☐ Environmental samples, soil cuttings, decontamination water, dust (nuisance, silica)

6.3 Biological Hazards

☒ Noise Exposure
☒ Heat Stress
☒ Cold Stress
☒ Weather - heat, cold, rain, fog
☐ Poisonous Plants
☒ Animals/Insects
☐ Misc Pathogens

7.0 GENERAL SAFETY RULES

This section presents general safety rules for all persons working at the project site. Failure to follow safety protocols and/or continued negligence of health and safety policies will result in expulsion of a worker or firm from the site and may result in termination of employment.

1. Horseplay, fighting, gambling or the possession of firearms are not permitted.
2. Work shall be well planned and supervised to prevent injuries. Supervisors shall assure that employees observe and obey safety rules and regulations.
3. An employee reporting for work who, in the opinion of his supervisor, is unable to perform his assigned duties in a safe and reasonable manner shall not be allowed on the job.
4. No employee shall be assigned a task without first having been instructed on proper methods, including safety training, of carrying out the task. Any employee who feels they have not received proper instruction shall notify their supervisor prior to carrying out the task.
5. Injuries and accidents shall be reported immediately to the immediate supervisor, who will then report it to the SSO.
6. There shall be no consumption of food or drink in operational areas of the site. Hands should be thoroughly cleansed prior to eating.

7. Smoking is not permitted on the site.
8. When personnel are conducting hazardous operations, there shall be at least one other person (buddy system) on duty in the immediate area as a backup in case of emergency.
9. Wear required personal protective equipment (PPE) in the workplace when appropriate and/or when specified in the site specific health & safety plan. Loose clothing and jewelry should not be worn when operating machinery.
10. Do not operate any machinery if you are not authorized or qualified to do so. If unsure how to operate a machine or perform any assigned task, ask the Project Manager/Supervisor before proceeding.
11. Do not operate motorized equipment until proper training and certification has been provided (e.g. forklifts, etc.)
12. No one shall knowingly be permitted or required to work while the employee's ability or alertness is so impaired by fatigue, illness or other causes that it might unnecessarily expose the employee or others to injury.
13. Alcohol and drugs are strictly prohibited on any TRC premises, customer property, and/or in Company vehicles. Employees shall not report to work under the influence of drugs or alcohol. Employees are prohibited from possessing, using, manufacturing, distributing, dispensing, selling or purchasing illegal drugs or other controlled substances (as defined under federal and state law).

8.0 PERSONAL PROTECTIVE EQUIPMENT

TRC and Contractor personnel are required to wear PPE appropriate for the task and potential physical, chemical and biological exposures. Selection of PPE is based on hazard assessment (i.e. JSAs) and air monitoring.

8.1 PPE Required by All Personnel at <u>All Times</u> on the work site

☒ Hard Hat
☒ Safety Shoes/Boots
☒ Safety Vest
☒ Eye Protection - ☒ glasses ☐ goggles ☐ face shield
☐ Hand Protection - ☐ Kevlar ☐ nitrile ☐ other _____
☐ Hearing Protection
☐ Respiratory Protection - ☐ APR Particulate ☐ APR Chemical cartridge ☐ other _____
☐ Protective Clothing - ☐ Tyvex ☐ Nomex ☐ Coveralls ☐ other _____

8.2 PPE which should be available at all times on the work site

☐ Hard Hat
☐ Safety Shoes/Boots
☐ Safety Vest
☐ Eye Protection - ☐ glasses ☐ goggles ☐ face shield
☒ Hand Protection - ☒ Kevlar ☒ nitrile ☐ other _____
☒ Hearing Protection
☒ Respiratory Protection - ☒ APR Particulate ☐ APR Chemical cartridge ☐ other _____
☐ Protective Clothing - ☐ Tyvex ☐ Nomex ☐ Coveralls ☐ other _____

8.3 PPE Required by a Specific Task

Task: Excavation Activities

☒ Hard Hat
☒ Safety Shoes/Boots
☒ Safety Vest
☒ Eye Protection - ☒ glasses ☐ goggles ☐ face shield
☒ Hand Protection - ☒ Kevlar ☐ nitrile ☐ other _____
☒ Hearing Protection
☐ Respiratory Protection - ☐ APR Particulate ☐ APR Chemical cartridge ☐ other _____
☐ Protective Clothing - ☐ Tyvex ☐ Nomex ☐ Coveralls ☐ other _____

9.0 RESPIRATORY PROTECTION

For operations that require the use of a respirator, the TRC and Contractor SSOs must verify that Field Personnel are medically approved to use respiratory equipment, fit tested, and trained in the proper use of respirators. Only respirators that are NIOSH/MSHA approved are to be used.

Respiratory protection is mandatory if workers are required to complete tasks within a hazardous atmosphere. According to OSHA, a hazardous atmosphere is defined as:

- Flammable gas, vapor, or mist in excess of 10% of LEL.
- Atmospheric oxygen is below 19.5% or above 23.5%.
- When concentration of a known contaminant is greater than the permissible exposure limit (PEL).
- Airborne combustible dust exceeds its LEL (approximated when dust obscures vision at a distance of 5 feet or less).

If conditions warrant, air monitoring may be required to verify the presence or absence of a hazardous atmosphere. Air monitoring is to be conducted whenever a situation or condition arises that could reasonably result in a hazardous atmosphere.

9.1 Air-Purifying Particulate Respirators

Employees involved in construction and earthmoving operations that result in nuisance dust and particulates may use air-purifying respirators. These are commonly referred to as "dust masks" and do not require fit testing. Particulate respirators can to be used in situations where nuisance dust and particulates are the only contaminants posing an inhalation hazard. Particulate respirators are not to be used in oxygen deficient atmosphere or if hazardous levels of gas/vapor contaminants are also present.

A high efficiency particulate air (HEPA), P100 respirator should be used in place of commercially available "dust masks".

9.2 Air-Purifying Gas/Vapor Respirators

TRC employees and Contractors are required to wear half-face, air-purifying respirators with the appropriate chemical cartridge under the following circumstances:

- When concentration of a known contaminant continuously exceeds permissible exposure limit (PEL) time-weighted average or the threshold limit value (TLV) time-weighted average.
- When volatile organic compound (VOC) vapors in the work area continuously exceed the threshold limit value- time-weighted average (TLV-TWA) for gasoline (300 parts per million [ppm]).
- When, at any time, VOC vapors in the work area exceed the threshold limit value - short-term exposure limit (TLV-STEL) for gasoline (500 ppm).

See **ATTACHMENT B** for additional information and regulatory exposure limits for chemicals of concern at this site.

Air purifying respirators (APRs) with chemical cartridges can be used under the following conditions:

- If the oxygen concentration is between 19.5% and 23.5%.
- If chemical contaminants have been identified.
- The toxic concentrations are known and the respirator cartridges are effective in removing the contaminants.
- The respirator and cartridges are NIOSH/MSHA approved.
- The contaminants have noticeable warning qualities such as odor and visibility characteristics including color.

In the event workers are required to wear air purifying respirators (APRs) with chemical cartridges, the following requirements must be met.

The TRC or Contractor SSO must verify that workers are:

  - Medically approved (within one year) to use respiratory protection.
  - Fit-tested for the specific respirator to be used.
  - Trained in the proper use and limitations of the respirator to be used.
- Contractors must provide proof of the above to the TRC SSO, upon request.
- If an employee or contractor has not cleared by the SSO to use a respirator, they will not be assigned tasks that may potentially expose them to contaminants.
- Personnel with interfering facial hair are not permitted to wear respirators and shall not be permitted in areas where respiratory protection is required.

9.3 Air-Supplied Respirators

Air-supplied respirators, such as SCBA or airline, full-face respiratory protection, are not anticipated to be required at the site. This level of respiratory protection is utilized in oxygen deficient atmospheres or atmospheres considered to be at or above immediately dangerous to life and health (IDLH) levels. These conditions will only occur in rare, if any, circumstances such as confined space entry or emergency situations. The use of air-supplied respiratory protection is not permitted without approval and guidance from the Project Manager.

10.0 AIR MONITORING

Air monitoring is required to verify the presence or absence of a hazardous gas/vapor atmosphere whenever a situation or condition arises that could reasonably result in a hazardous atmosphere.

Based on OSHA's definition of a hazardous atmosphere, there are 4 different hazards that require monitoring. The table below describes the type of hazard, what air monitoring equipment to use and what levels constitute a hazard. The information provided in the table does not take into consideration all the possible variations of hazardous atmosphere, however it will provide guidance when determining the presence of a hazardous atmosphere. Any questions or concerns should be directed to the SSO before work begins.

Table 3: Air Monitoring Guidance

Hazard	Appropriate Air Monitoring Equipment	Hazardous Levels	Comments
Flammability	Combustible gas indicators (CGI) are direct-reading instruments; measures % LEL and oxygen.	>25% of the LEL during cold work >10% of the LEL during hot work	Since many flammable vapors are heavier than air, be sure to take readings at ground level. Work be suspended if CGI readings exceed 10% of LEL.
Oxygen deficiency or abundance	Same as above or an Oxygen Meter	<19.5% and >23.5%	Concentrations >23.5% may present an increased flammability hazard.
Exceeding the permissible exposure limit (PEL)	Photoionization detector (PID) can detect organic and inorganic vapors/gases	Varies depending on chemical. See **Attachment B** for hazardous levels of common chemicals	It is impossible to differentiate the different chemicals using a PID meter. However, the PID will indicate whether chemicals are present and at what levels. Measurements taken within worker's breathing zone will be used to determine respiratory protection requirements.

Airborne combustible dust is not anticipated at the work site. When conducting, air monitoring the following actions should be considered:

- Be familiar with the proper use and limitations of the air monitoring equipment to be used.
- Ensure air-monitoring equipment (TRC's or otherwise) is in working order and has been properly calibrated. The TRC SSO is to document verification of calibration (i.e. in a field log book).
- Clearly document the results of air monitoring, including:
  - Equipment name / type and calibration data
  - Date, time and site location of air monitoring (use a site map to clarify the locations of readings.
  - Indication of what is being measured (LEL, oxygen, or ppm)
  - Results of the air monitoring
- Measurements for volatile organics should be taken at low point where vapors could accumulate.
- Measurements taken to determine the need for respiratory protection should be take within the worker's "breathing zone", keeping in mind the worker's closest proximity to the hazard source.

- An individual should never enter a confined area or excavation in order to conduct initial air monitoring. Instead, actions should be taken to lower the air monitoring equipment into the area to indicate the presence (or absence) of a hazardous atmosphere. Most air monitoring equipment has audible alarms.
- In the event that CGI readings on the site exceed 10 percent of the LEL, work will be suspended until the source can be eliminated or controlled.

11.0 SITE CONTROL

The primary objective of site control is to minimize the exposure to potentially hazardous substances and/or situations. Supervision and controlling access to the work site is necessary to protect site personnel, visitors and the public.

For the purposes of this HS, site control will be discussed under two circumstances; (1) work involving Physical Hazards and (2) work involving Chemical Hazards. In either case, site control areas are to be clearly identified and communicated by the SSO. Prior to beginning work, fencing will be installed around individual excavation areas to prevent unauthorized entry to the work areas and to minimize fugitive dust emissions during work activities. Per South Coast Air Quality Management District (SCAQMD) Rule 1466 requirements, the fencing shall be 6-foot tall, chain-link with wind screen. The hot zone must be clearly identified within the fenced area and should be isolated with cones, barricades, or high visibility caution tape within the fenced area. In addition, sufficient area also must be available to conduct operations while providing a protective buffer for persons and property outside the controlled areas.

For this site, the following areas will be designated as hot, warm and cold zones:

Hot Zone: Inside exclusion zone
Warm Zone: ☒ NA
Cold Zone: Outside of exclusion zone

Check which is applicable:

☒ Work involving Physical Hazards

Work does *not* involve direct contact with hazardous substances. However, if the scope of work primarily involves physical hazards (i.e. vehicular traffic, heavy equipment operation, etc.), the establishment of a warm zone may is not necessary. Instead, a hot zone must be established to surround all the physical hazards. The hot zone area shall provide enough room and buffer to protect both workers and the public. A cold zone is established outside the hot zone to allow "support" activities to be conducted in a safe location.

☒ Work involving Chemical Hazards

The concept of site control and the establishment of hot/warm/cold work zones are intended for work involving the exposure (or potential exposure) to hazardous chemical concentrations. Under these circumstances, the purpose of work zones is two-fold: 1) minimize the exposure to potentially hazardous substances and 2) minimize the spread of hazardous substances outside the immediate work area through decontamination procedures.

A brief overview of site control work zones is provided below:

Hot Zone

- Where personnel may be subject to chemical or physical hazards.
- Where known or suspected contamination exists and may also be where equipment operation and/or environmental sampling will take place.
- To be clearly identified and should be isolated with cones, barricades, or high visibility caution tape.
- Large enough to provide sufficient room and buffer to protect both workers and the public.

Warm Zone

- Located between the hot and cold zones; beginning at the edge of the hot zone and extends to the cold zone.
- Utilized as a control point or corridor for persons entering or exiting the hot zone.
- Where personnel and equipment are decontaminated.

Cold Zone

- Located outside the hot zone where administrative and other support functions are located.
- Where adverse exposure to contaminants and physical hazards are unlikely.

11.1 Decontamination

The purpose of decontamination is to:

(1) Remove chemical containments from personnel and/or equipment; and

(2) Significantly reduce the spread of chemical contaminants beyond the hot/warm zone.

Decontamination is intended to occur within the warm zone. Depending on the project, there may be a need to decontaminate both personnel and equipment. The decontamination process should be appropriate to the chemical hazards present. For example refined petroleum contaminated soil on work boots/shoes may only require physical removal of the soil with a sturdy brush. However, decontamination of equipment (i.e. drilling augers) may require additional steps to ensure contaminants are not spread beyond the hot/warm zones. Heavy equipment (i.e. excavators, trucks used for waste transportation, etc.) may require a combination of steps, including the placement of gravel at the entrance/exit of the site.

11.1.1 Personnel Decontamination Procedures ☐ NA

Remove contaminated items (i.e. gloves, tyvex, etc.) in an "inside out" manner. Contaminated garments are to be placed in designated trash receptacles for disposal offsite.

11.1.2 Equipment Decontamination Procedures ☐ NA

All sampling equipment will be properly decontaminated using the three wash system.

11.1.3 Heavy Equipment Decontamination Procedures ☐ NA

Remove loose dirt and debris from heavy equipment (i.e. excavators, trucks used for waste transportation, etc.) in a designated area using a broom or sturdy brush.

11.2 Site Security

Appropriate security measures will be established in coordination with the site owner/operator and communicated to site personnel. The objective of these measures is to (1) protect the public from potential exposure to physical/chemical hazards; (2) avoid public interference with personnel and safe work practices; and (3) prevent theft or vandalism of equipment at the site.

Site specific security measures include: ☐ NA

- Six-foot tall, chain-link with wind screen.

12.0 WORK AREA MONITORING

Due to the presence of arsenic and lead-impacted soil at the site and the possibility that site remediation could be associated with odors, noise, and dust/particulate emissions from the work areas, it is appropriate to provide monitoring for these issues in the hot zone and at the site perimeter and to establish procedures to provide mitigation to protect on-site workers, visitors, and the surrounding community. The following air and meteorological monitoring, dust control, and noise control plans address these issues for the remediation phases of work at the site.

12.1 Air and Meteorological Monitoring

12.1.1 Air Monitoring

Results of the PEA investigation identified soil impacted with arsenic, lead, and petroleum hydrocarbons (diesel and oil range) in multiple locations across the site. No VOCs above removal action goals were detected in subsurface soil. As a result, no air monitoring for VOCs per SCAQMD Rule 1166 (Excavation of Soil Contaminated with Volatile Organic Compounds) will be necessary. However, air monitoring will be conducted in accordance with SCAQMD Rules 401 (Visible Emissions), 402 (Odor and Nuisance), 403 (Fugitive Dust) and 1466 (Control

of Particulate Emissions from Soils with Toxic Air Contaminants). Odor monitoring and mitigation and the Dust Control Plan is discussed below.

The primary odor emission source at the site will be the petroleum hydrocarbon-impacted soil near one of the hydraulic hoists at the Industrial Arts Building in Area 6 that will be exposed and excavated; there are no odors associated with the arsenic and lead impacts. Use of construction equipment may also be considered as an odor source. Potential odor emission receptors include on-Site workers, faculty and students at the school, pedestrians, local residents, and vehicle drivers adjacent to the Site. Due to public perception issues, it will be very important to monitor and control odors at the site. It is not anticipated that off-site receptors will be significantly impacted by odors from this project.

Detection of strong odors within the work area or discernible odors above background at the perimeter of the work area will be used as triggers for odor mitigation measures as required by SCAQMD Rule 402. All excavated soil will be sprayed with water for odor and dust suppression, and impacted soil stockpiles will be covered with plastic sheeting while temporarily stored on site.

The following measures will be used to minimize odors from construction equipment:

- Reduce construction equipment emissions by shutting off all equipment not in use;
- Reduce construction-related traffic;
- Minimize traffic obstructions; and
- Maintain equipment regularly.

If sustained winds are in excess of 15 miles per hour averaged over a 15-minute period, or if instantaneous wind speeds exceed 25 miles per hour, work activities will be stopped until the winds subside.

12.1.2 Meteorological Monitoring

Ambient weather conditions (wind speed and direction, temperature, relative humidity, etc.) will be monitored using a portable weather station during performance of all site work activities and recorded on the field log. Information regarding prevailing wind patterns and daily wind direction observations will be used to assist with placement of monitoring stations, and information regarding wind speed will be used to facilitate decision-making regarding site controls.

12.2 Dust Control Plan

Dust control measures will be implemented to stabilize exposed surfaces and minimize activities that suspend or track dust particles. Soil excavation and handling shall be

accomplished in a manner that includes adequate measures to minimize and control dust and spillage of soil within the site.

All work shall be in compliance with applicable SCAQMD requirements. Specifically, the excavation contractor shall be responsible to meet requirements specified in SCAQMD Rules 401 (Visible Emissions), 403 (Fugitive Dust), and 1466 (Control of Particulate Emissions from Soils with Toxic Air Contaminants) and shall implement reasonable Best Available Control Measures (BACM) in accordance with Rules 403 and 1466 to minimize dust emissions.

12.2.1 Dust Monitoring

Dust and particulate monitoring will be conducted using a combination of three continuous, direct-reading particulate monitors (e.g., E-BAM Particulate Monitor or equivalent) and an MIE Personal DataRam Model PDR 1000 aerosol monitor (or equivalent). The three continuous, direct-reading particulate monitors will be placed around the excavation area(s) as work progresses (meters will be moved as work moves from location to location), with one meter located in the upwind direction and two meters located in the downwind location. The location of the downwind aerosol monitors will be adjusted daily based upon prevailing wind direction as indicated by a weather vane installed at the Site, weather station readings, or a hand-held wind speed meter. The use of three continuous, direct-reading particulate monitors will provide a greater degree of confidence in quantifying potential fugitive dust, provide better coverage for shifting wind patterns, and supply additional data to address potential community concerns. The monitors will provide concentrations of particulate matter in the size of 10 microns or less (PM_{10}). An exceedance will be defined as a PM_{10} level of greater than 25 micrograms per cubic meter ($ug/m^{3)}$ determined by simultaneous sampling, as the difference between the upwind and downwind samples collected by the continuous, direct-reading particulate monitors. Each unit will be set to record PM_{10} readings at minimum 10-minute intervals over the course of the working day. If the PM_{10} concentration averaged over 2 hours exceeds 25 ug/m^3, soil excavation and handling operations will be discontinued and appropriate dust control measures described below will be implemented (i.e., application of water to work areas). When the PM_{10} concentration is equal to or less than 25 ug/m^3 averaged over 30 minutes, work activities can resume. A portable Model PDR 1000 (or equivalent) will be used within and around each work area/hot zone to determine if dust suppression is needed or if worker protection action levels have been exceeded. If practicable, the data stored by each unit will be downloaded to a computer at the end of the day and printed out as a daily record (or at the end of each work week). The Environmental Consultant's personnel will also record the upwind, downwind, and work area PM_{10} concentration values every hour on a standard Field Parameter Data Sheet. All dust monitoring records will be retained on Site.

12.2.2 Dust Control Measures

Dust control measures will be specified based on the results of dust monitoring, on-site activities, type and location of operations, and the prevailing wind direction. Dust control measures shall include, but not be limited to, the following:

- Provide wet suppression of exposed soil during excavation, loading, and unloading of contaminated soil.
- Haul trucks transporting contaminated soil shall be adequately tarped before leaving the Site.
- Appropriate measures shall be implemented by the contractor to control track out of soil from the site onto adjacent paved roads.
- Reduce speed on unpaved areas, and limit on-site traffic speed.
- Cover and secure stockpiles and exposed areas at the end of each workday.
- Provide LAUSD/Remediation Contractor contact information and SCAQMD Rule 1466 warning statement on signs posted at the entrances and along the fence surrounding the property in the event of dust or other Site-related issues during work activities.

12.2.3 Worker Protection Requirements

Site workers will be required to have appropriate respiratory protection at all times within the exclusion zone. It may be appropriate to wear a particulate filter (dust mask) during dust producing activities.

12.3 Noise Monitoring and Control Plan

The objectives of the Noise Control Plan are to identify noise sources and receptors, to identify monitoring methods, to provide worker hearing protection requirements, and to provide mitigation methods.

12.3.1 Noise Sources and Receptors

Any noise above 85 decibels average (dBA) at the Hot Zone perimeter for mobile equipment will be considered a noise source (County of Los Angeles Code, *Title 12 Environmental Protection, Chapter 12.08 Noise Control, Section 440, Construction Noise*, 2001). General construction equipment noise levels at 50 feet have been summarized below (Bolt, Beranek, and Newman, *Noise from Construction Equipment and Operations Building Equipment, and Home Appliances.* Prepared for the U.S. Environmental Protection Agency, Office of Noise Abatement and Control, Washington, D.C., 1971):

- Truck - 91 dBA
- Crane - 83 dBA
- Roller - 89 dBA
- Bulldozer - 80 dBA
- Pickup Truck - 60 dBA
- Backhoe - 85 dBA
- Jack Hammer - 88 dBA
- Rock Drill - 98 dBA
- Pneumatic Tool - 86 dBA

Manufacturer specifications will be reviewed for noise levels produced by any on-site equipment. If necessary, mufflers or alternative equipment may be selected to minimize noise levels.

Potential noise receptors include on-site workers and visitors, pedestrians, vehicle drivers, and residents adjacent to the site. However, other than on-site workers, receptors are not anticipated to be significantly impacted by noise from this project.

12.3.2 Noise Monitoring

Noise monitoring will be conducted with a sound level meter as discussed in County of Los Angeles Code, *Title 12 Environmental Protection, Chapter 12.08 Noise Control, Section 340, Sound Level Meter*, 2001). A Quest Micro 14 hand-held noise dosimeter or equivalent will be used and will satisfy the requirements pertinent for Type 2 meters in the American National Standards Institute (ANSI) specifications for sound level meters.

Monitoring will occur within the hot zone and at the perimeters of the hot zone, and at the site perimeter. The monitoring frequency will be determined according to the type and location of operations.

12.3.3 Worker Protection Requirements

Site workers will be required to have appropriate hearing protection at all times within the hot zone. Also, appropriate worker hearing protection will be required for any anticipated noise exposure above 85 dBA for 8 hours of exposure.

12.3.4 Noise Mitigation Measures

Noise mitigation measures will be specified based on the results of the noise monitoring. If the noise levels exceed 85 dBA outside the hot zone, mitigation measures may include one or more of the following:

- Sound barriers will be placed around the work areas.
- Alternate low-noise-generating equipment will be specified.
- Mufflers will be used on selected equipment.
- Work areas will be expanded such that noise levels will be below 85 dBA at the perimeter.
- Reduce construction vehicle speed.
- Route construction-related traffic away from noise-sensitive areas.

13.0 PERSONNEL TRAINING

TRC and Contractor personnel are required to acknowledge their understanding and willingness to comply with this HSP before admission to the site by signing the "Pre-job Safety Briefing" (See **Attachment F**).

Site specific training requirements are indicated below:

☒ Personnel shall meet the training requirements specified in the OSHA Hazardous Waste Operations and Emergency Response (HAZWOPER) Standard [29 CFR 1910.120(e) and CCR Title 8 Section 5192(e)].

14.0 MEDICAL PROGRAM

TRC has established a medical surveillance program to assess, monitor, and help protect the health of employees, in particular, employees who may be exposed to potentially hazardous substances during site work. Personnel undergo medical examinations as follows:

- **Initial:** Pre-employment / prior to any assignment involving work in a hazardous or potentially hazardous environment. The initial examination is used to establish a baseline picture of health against which future changes can be measured, and to identify any underlying illnesses or conditions that might be aggravated by chemical exposures or job activities. This exam also certifies whether an employee is medically fit to wear a respirator.
- **Periodic:** At least once every 12 to 24 months (depending on the employees involvement in field activities) to measure changes in health status. This exam certifies whether an employee is still medically fit to wear a respirator.
- **Upon notification:** As soon as possible upon notification by an employee that they have developed signs or symptoms indicating possible overexposure to hazardous substances, or in response to an injury or exposure during an emergency situation.
- **Exit**: At termination of employment.

15.0 EMERGENCY RESPONSE PLAN

The TRC SSO (depending on which is present) will have controlling authority during an emergency. In the SSO's absence, the Alternate SSO will be in charge.

15.1 Evacuation Protocol

Evacuation protocol, routes and assembly areas from the site will be established by the SSO, and communicated to Field Personnel during the Tailgate Safety Meeting(s) prior to initiating work. In the event of an evacuation, personnel will meet at a pre-established assembly areas and the TRC

SSO conduct a "head count" to see that everyone is accounted for. Contractor SSO is responsible for being able to provide an accurate head-count of contractor personnel.

Primary assembly area = TBD
Secondary assembly area= TBD

15.2 First Aid & CPR

TRC employees and Contractors with current First Aid and CPR certification and who are willing to provide First Aid and CPR will be asked to identify themselves at Tailgate Safety Meetings. Their names will be documented on the Pre-job Safety Briefing (**Attachment F**).

15.3 Emergency Medical Assistance

A list of emergency medical assistance sources has been established as part of this HSP. ATTACHMENT C lists the names, locations, and telephone numbers of emergency response organizations in the vicinity of the project site, and a map to the nearest hospital(s) with an *emergency room*.

A vehicle shall be available onsite during work activities to transport injured personnel to the identified emergency medical facilities, if necessary. Company vehicles are to be equipped with a fire extinguisher and first aid kit.

15.4 Emergency Procedures

In the event of an accident, injury, or other emergency, remember to:

- **Stop work and REMAIN CALM.**
- **Move personnel to a safe location (evacuation plan).**
- **Call 911 or notify other emergency facilities, as necessary.**
- **Address medical emergencies and apply first aid, if necessary.**
  - Move injured or exposed person(s) from immediate area only if it is safe to do so.
  - If serious injury or life-threatening condition exists, call 911. Clearly describe the location, injury and conditions to the dispatcher. Designate a person to direct emergency equipment to the injured person.
- **Contain physical hazards.**
  - Act only if hazard is minimal and you are trained to deal with the situation. Otherwise evacuate and wait for emergency services to arrive.
- **Notify SSO and initiate incident reporting procedures.**
  - See page 2 of this HSP for contact information. In the event the SSO is not available, the order of notification should be 1) Assistant SSO, 2) TRC Project Manager, 3) Office Safety Coordinator, 4) ECR Safety Manager, and 5) National Safety Director.
  - TRC SSO is to notify TRC Project Manager/Supervisor as soon as reasonably possible.

- Do not resume work until the SSO has determined it is safe to do so.

15.5 Non-Emergency Medical Assistance

If an injury does occur and it is not life threatening, then the employee or employee's supervisor/project manager should contact WorkCare within the first hour after an injury. WorkCare information is proved in **Attachment G.** This information will help assist the injured employee by connecting them with instant access to a medically qualified professional in order to provide guidance on appropriate first aid measures and medications.

16.0 INCIDENT REPORTING

In case of an accident, TRC personnel are to immediately report the incident to their Project Manager/Supervisor and follow the TRC incident reporting procedures (CP019) detailed in the TRC HSMS.

TRC's incident reporting forms are available through the Project Manager/Supervisor and include:

- TRC Incident Notification Report
- TRC Motor Vehicle Incident Report
- TRC Safe Catch Report

All incidents and near misses are investigated in accordance with TRC's HSMS. The TRC Incident Notification Report and is to be completed and submitted to the TRC ECR Safety Manager and National Safety Director within 24 hours following any incident.

Contractor personnel are to report incidents to their SSO who is then required to report the incident to the TRC SSO, TRC Alternate SSO or TRC Project Manager immediately.

Some important information to include when reporting an incident are:

1. A description of the event (including date and time)
2. Details regarding personal injury and property damage, if any.
3. Whether emergency services were notified (i.e., medical facilities, fire department, police department) and the basis for that decision. Including time and names of persons/agencies notified, and their response.
4. Clarify the need for and type of TRC support.
5. Immediate corrective action(s) taken.

17.0 HEALTH AND SAFETY PLAN (HSP) SIGNATURE PAGE

Job Safety Analysis Author	**Date:**	**HSP Author**	**Date:**
_____	_____	_____	_____

Review/Approvals:

Site Safety Officer **Facility/Field Supervisor**	**Date:**	**Project Manager/Supervisor***	**Date:**
_____	_____	_____	_____
Office Safety Coordinator* ☐ **NA**	**Date**	**Safety Professional*** ☒ **NA**	**Date**
_____	_____	_____	_____

Additional Information or Instructions:

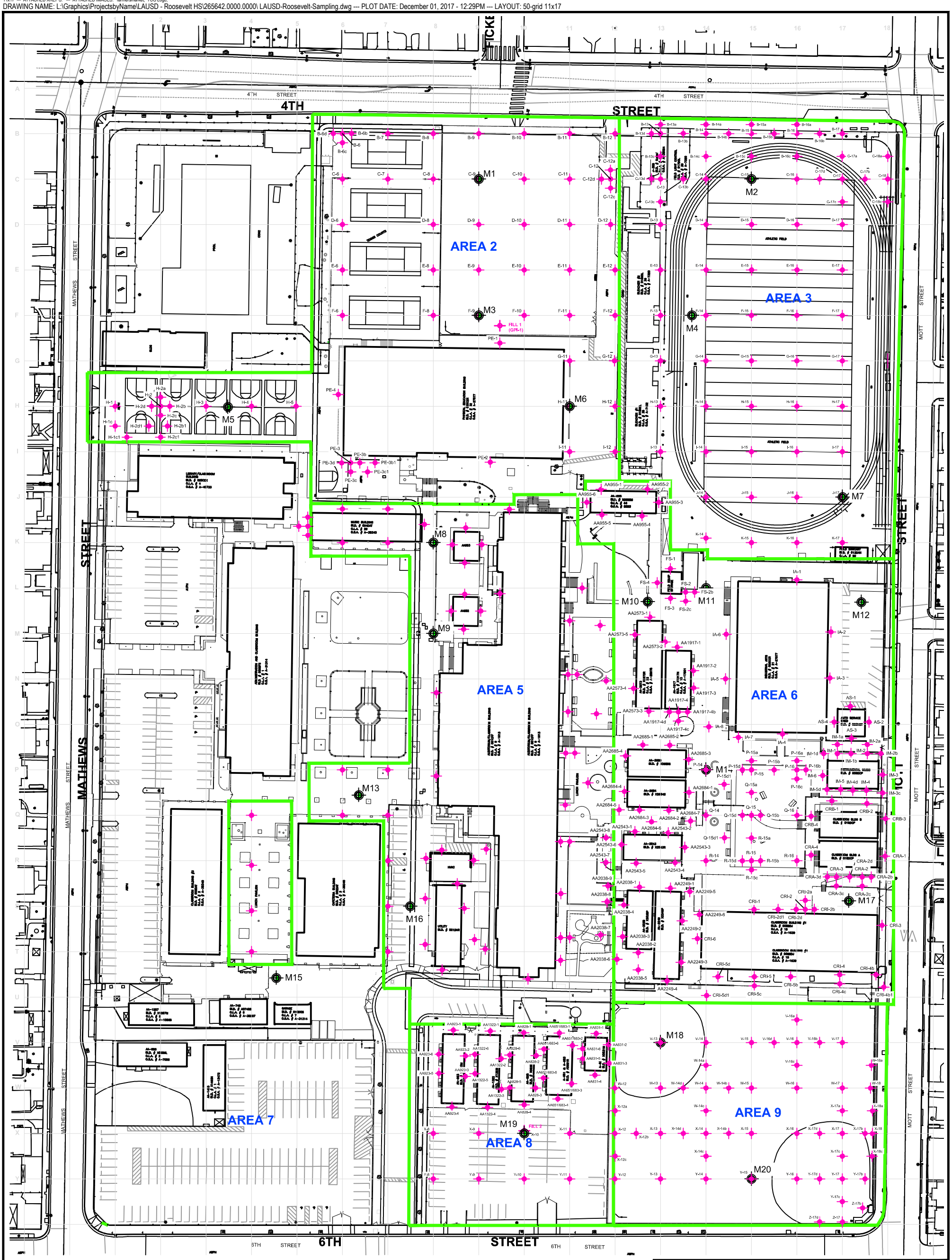
_____
_____
_____
_____

* Note: **For most projects, the Project Manager/Supervisor will review, approve and sign the HSP.** In the event the operations are beyond the normal scope of work, additional review is available upon the request from the PM/Supervisor. The Office Safety Coordinator is the first recourse for reviewing HSPs **not** involving high-risk operations. It is recommended that for HSPs involving high-risk operations (i.e. hazardous exposures to chemicals, large scale or deep excavations, confined space entry, etc.), the ECR Safety Coordinator and/or a Safety Professional [Certified Industrial Hygienist (CIH), Certified Safety Professional (CSP) or other professionally qualified person] be consulted for review of the HSP to ensure proper protective measures are being implemented.

ATTACHMENT A

SITE PLAN

11x17 --- ATTACHED XREF'S: --- ATTACHED IMAGES: farmersmarket; TCG Logo;
DRAWING NAME: L:\Graphics\ProjectsbyName\LAUSD - Roosevelt HS\265642.0000.0000\ LAUSD-Roosevelt-Sampling.dwg --- PLOT DATE: December 01, 2017 - 12:29PM --- LAYOUT: 50-grid 11x17



LEGEND

- Proposed LBP and OCP Sample Location
- Undocumented Fill Sampling Location
- Methane Probe Location

NOTES:

LBP = lead based paint.
OCP = organochlorine pesticides.

Source: Base map provided by Converse Consultants.

PROJECT:	LAUSD ROOSEVELT HIGH SCHOOL 456 S. MATHEWS STREET LOS ANGELES, CALIFORNIA
TITLE:	SITE PLAN
DRAWN BY:	RMC
CHECKED BY:	JM
APPROVED BY:	JM
DATE:	November 2017
PROJ NO.:	265642.0000.0000
	FIGURE 2

TRC
17911 Von Karman Avenue
Suite 400
Irvine, CA 92614
Phone: 949.727.9336

FILE NO.: LAUSD-Roosevelt-Sampling.dwg

ATTACHMENT B

OCCUPATIONAL HEALTH GUIDELINES AND TOXICOLOGICAL INFORMATION

SAFETY DATA SHEET

SDS ID NO.: 0298MAR019
Revision Date: 05/22/2015

1. IDENTIFICATION

Product Name: Marathon Petroleum Premium AW II Hydraulic Oil

Synonym: Premium AW II ISO 32 Hydraulic Oil; Premium AW II ISO 46 Hydraulic Oil; Premium AW II ISO 68 Hydraulic Oil; Premium AW II ISO 100 Hydraulic Oil; ISO 32 Premium AW II Hydraulic Oil; ISO 46 Premium AW II Hydraulic Oil; ISO 68 Premium AW II Hydraulic Oil; ISO 100 Premium AW II Hydraulic Oil

Chemical Family: Hydrocarbon Mixture

Recommended Use: Hydraulic Fluid.
Use Restrictions: All others.

Supplier Name and Address:

MARATHON PETROLEUM COMPANY LP
539 South Main Street
Findlay, OH 45840

SDS information: 1-419-421-3070

Emergency Telephone: 1-877-627-5463

2. HAZARD IDENTIFICATION

Classification

OSHA Regulatory Status
This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Acute aquatic toxicity	Category 3
Chronic aquatic toxicity	Category 3

Hazards Not Otherwise Classified (HNOC)
Not applicable

Label elements

EMERGENCY OVERVIEW

Harmful to aquatic life with long lasting effects

Appearance Clear Liquid **Physical State** Liquid **Odor** Petroleum

Precautionary Statements - Prevention
Avoid release to the environment

Precautionary Statements - Response
Not applicable

Precautionary Statements - Storage
Not applicable

Precautionary Statements - Disposal
Dispose of contents/container at an approved waste disposal plant

Additional Information
Read label before use. Keep out of reach of children. If medical advice is needed, have product container or label at hand.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Lube oil is a complex mixture of highly refined lubricating base stocks and additives.

Composition Information:

Name	CAS Number	Weight %
Solvent Refined, Hydrotreated Heavy Paraffinic Distillate	64742-54-7	98-99
2,6-di-tert-butylphenol	128-39-2	0.1-1

4. FIRST AID MEASURES

First Aid Measures

General advice In case of accident or if you feel unwell, seek medical advice immediately (show directions for use or safety data sheet if possible).

Inhalation: Remove to fresh air. If not breathing, institute rescue breathing. If breathing is difficult, ensure airway is clear, give oxygen and continue to monitor. If heart has stopped, immediately begin cardiopulmonary resuscitation (CPR). If symptoms occur get medical attention.

Skin Contact: Wash skin with plenty of soap and water. If irritation or other symptoms occur get medical attention. Wash contaminated clothing and clean shoes before reuse. Any injection injury from high pressure equipment should be evaluated immediately by a physician as potentially serious (See NOTES TO PHYSICIAN).

Eye Contact: Flush immediately with large amounts of water for at least 15 minutes. Eyelids should be held away from the eyeball to ensure thorough rinsing. Gently remove contacts while flushing. Get medical attention if irritation persists.

Ingestion: Rinse mouth out with water. If spontaneous vomiting occurs, keep head below hips, or if patient is lying down, turn body and head to side to prevent aspiration and monitor for breathing difficulty. Never give anything by mouth to an unconscious person. Keep affected person warm and at rest. If symptoms develop, seek medical attention.

Most important signs and symptoms, both short-term and delayed with overexposure

Adverse Effects: Preexisting skin conditions and/or respiratory disorders may be aggravated by exposure to this product.

Indication of any immediate medical attention and special treatment needed

NOTES TO PHYSICIAN: SKIN: Leaks or accidents involving high-pressure equipment may inject a stream of material through the skin and initially produce an injury that may not appear serious. Only a small puncture wound may appear on the skin surface but, without proper treatment and depending on the nature, original pressure, volume, and location of the injected material, can compromise blood supply to an affected body part. Prompt surgical debridement of the wound may be necessary to prevent irreversible loss of function and/or the affected body part. High pressure injection injuries may be SERIOUS SURGICAL EMERGENCIES.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media
For small fires, Class B fire extinguishing media such as CO2, dry chemical, foam (AFFF/ATC) or water spray can be used. For large fires, water spray, fog or foam (AFFF/ATC) can be used. Firefighting should be attempted only by those who are adequately trained and equipped with proper protective equipment.

Unsuitable extinguishing media
Do not use a solid water stream as it may scatter and spread fire.

Specific hazards arising from the chemical
The product is not combustible per the OSHA Hazard Communication Standard, but will ignite and burn at temperatures exceeding the flash point.

Hazardous combustion products
Smoke, carbon monoxide, and other products of incomplete combustion.

Explosion data
Sensitivity to Mechanical Impact No.
Sensitivity to Static Discharge No.

Special protective equipment and precautions for firefighters
Avoid using straight water streams. Water spray and foam (AFFF/ATC) must be applied carefully to avoid frothing and from as far a distance as possible. Avoid excessive water spray application. Use water spray to cool exposed surfaces from as far a distance as possible. Keep run-off water out of sewers and water sources.

NFPA:	Health 1	Flammability 1	Instability 0	Special Hazards -

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions: Keep public away. Isolate and evacuate area. Shut off source if safe to do so.

Protective Equipment: Use personal protection measures as recommended in Section 8.

Emergency Procedures: Advise authorities and National Response Center (800-424-8802) if the product has entered a water course or sewer. Notify local health and pollution control agencies, if appropriate.

Environmental precautions: Avoid release to the environment. Avoid subsoil penetration.

Methods and materials for containment: Prevent further leakage or spillage if safe to do so.

Methods and materials for cleaning up: Use suitable absorbent materials such as vermiculite, sand, or clay to clean up residual liquids. Recover and return free product to proper containers.

7. HANDLING AND STORAGE

Safe Handling Precautions: Avoid contact with skin, eyes and clothing. Do not swallow. Avoid breathing vapors or mists. Use good personal hygiene practices. Wash thoroughly after handling. Use personal protection measures as recommended in Section 8. Do not cut, drill, grind or weld on empty containers since explosive residues may remain. Refer to applicable EPA, OSHA, NFPA and consistent state and local requirements.

High-pressure injection of any material through the skin is a serious medical emergency even though the small entrance wound at the injection site may not initially appear serious. These injection injuries can occur from high-pressure equipment such as paint spray or grease or guns, fuel injectors, or pinhole leaks in hoses or hydraulic lines and should all be considered serious. High pressure injection injuries may be SERIOUS SURGICAL EMERGENCIES (See First Aid Section 4).

Storage Conditions: Store in properly closed containers that are appropriately labeled and in a cool, well-ventilated area. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Store away from incompatible materials.

Incompatible materials Strong oxidizing agents.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Name	ACGIH TLV	OSHA PELS:	OSHA - Vacated PELs	NIOSH IDLH
Solvent Refined, Hydrotreated Heavy Paraffinic Distillate 64742-54-7	Mineral oil, highly/severely refined, inhalable fraction 5 mg/m³ TWA	-	-	-
2,6-di-tert-butylphenol 128-39-2	-	-	-	-

Notes: The manufacturer has voluntarily elected to provide exposure limits contained in OSHA's 1989 air contaminants standard in its SDSs, even though certain of those exposure limits were vacated in 1992.

Engineering measures: Local or general exhaust required when using at elevated temperatures that generate vapors or mists.

Personal protective equipment

Eye protection: Use goggles or face-shield if the potential for splashing exists.

Skin and body protection: Wear neoprene, nitrile or PVA gloves to prevent skin contact. Glove suitability is based on workplace conditions and usage. Contact the glove manufacturer for specific advice on glove selection and breakthrough times. Wear appropriate protective clothing.

Respiratory protection: Use an approved organic vapor chemical cartridge or supplied air respirators when material produces vapors that exceed permissible exposure limits or excessive vapors are generated. Observe respirator assigned protection factors (APFs) criteria cited in federal OSHA 29 CFR 1910.134. Self-contained breathing apparatus should be used for fire fighting.

Hygiene measures: Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical State	Liquid
Appearance	Clear Liquid
Color	Clear
Odor	Petroleum
Odor Threshold	No available data.

Property	Values (Method)
Melting Point / Freezing Point	No available data.
Initial Boiling Point / Boiling Range	No available data.
Flash Point	> 220 °C / > 428 °F (Cleveland Open-Cup)
Evaporation Rate	No available data.
Flammability (solid, gas)	Not applicable.
Flammability Limit in Air (%)	
Upper Flammability Limit:	No available data.
Lower Flammability Limit:	No available data.
Vapor Pressure	No available data.
Vapor Density	No available data.
Specific Gravity / Relative Density	0.86-0.88
Water Solubility	No available data.
Solubility in other solvents	No available data.
Partition Coefficient	No available data.
Decomposition temperature:	No available data.
pH:	No available data.
Autoignition Temperature	No available data.
Kinematic Viscosity	≥ 28.8 mm2/s @ 40°C / 104°F (ASTM D445)
Dynamic Viscosity	No available data.
Explosive Properties	No available data.
Softening Point	No available data.
VOC Content (%)	0.12-37.7 (w/w)
Density	No available data.
Bulk Density	Not applicable.

10. STABILITY AND REACTIVITY

Reactivity The product is non-reactive under normal conditions.

Chemical stability Stable under recommended storage conditions.

Possibility of hazardous reactions None under normal processing.

Hazardous polymerization Will not occur.

Conditions to avoid Sources of heat or ignition.

Incompatible materials Strong oxidizing agents.

Hazardous decomposition products None known under normal conditions of use.

11. TOXICOLOGICAL INFORMATION

Potential short-term adverse effects from overexposures

Inhalation Overheating may produce vapors which may cause respiratory irritation, dizziness and nausea.

Eye contact Exposure to vapor or contact with liquid may cause mild eye irritation.

Skin contact Prolonged or repeated exposure may cause dermatitis, folliculitis or oil acne.

Ingestion May cause irritation of the mouth, throat and gastrointestinal tract.

Acute Toxicological data

Name	Oral LD50	Dermal LD50	Inhalation LC50

Solvent Refined, Hydrotreated Heavy Paraffinic Distillate 64742-54-7	> 5000 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	> 5.5 mg/l (Rat) 4 h
2,6-di-tert-butylphenol 128-39-2	> 5000 mg/kg (Rat)	> 10 g/kg (Rabbit)	-

Delayed and immediate effects as well as chronic effects from short and long-term exposure

This product is considered to have a low order of acute and chronic oral and dermal toxicity.

Adverse effects related to the physical, chemical and toxicological characteristics

Signs & Symptoms Repeated or prolonged skin contact may cause drying, reddening, itching and cracking.

Sensitization Not expected to be a skin or respiratory sensitizer.

Mutagenic effects None known.

Carcinogenicity Cancer designations are listed in the table below.

Name	ACGIH (Class)	IARC (Class)	NTP	OSHA
Solvent Refined, Hydrotreated Heavy Paraffinic Distillate 64742-54-7	Mineral oil, poorly/mildly refined Suspected Human Carcinogen (A2) Mineral oil, highly/severely refined, inhalable fraction Not Classifiable (A4)	Mineral oil, untreated or mildly treated Carcinogenic to humans (1) Mineral oil, highly refined Not Classifiable (3)	Mineral oil, poorly/mildly refined Known to be human carcinogen	Not Listed
2,6-di-tert-butylphenol 128-39-2	Not Listed	Not Listed	Not Listed	Not Listed

Reproductive toxicity None known.

Specific Target Organ Toxicity (STOT) - single exposure Not classified.

Specific Target Organ Toxicity (STOT) - repeated exposure Not classified.

Aspiration hazard Not classified.

12. ECOLOGICAL INFORMATION

Ecotoxicity Harmful to aquatic life with long lasting effects.

Name	Algae/aquatic plants	Fish	Toxicity to Microorganisms	Crustacea
Solvent Refined, Hydrotreated Heavy Paraffinic Distillate 64742-54-7	-	96-hr LC50 = 5000 mg/L Rainbow trout	-	48-hr EC50 = 1000 mg/L Daphnia magna
2,6-di-tert-butylphenol 128-39-2	-	-	-	48-hr EC50 = 0.45 mg/l Daphnia magna

Persistence and degradability No information available.

Bioaccummulation Contains component(s) with the potential to bioaccumulate.

Mobility in soil No information available.

Other adverse effects No information available.

13. DISPOSAL CONSIDERATIONS

Description of Waste Residues
No information available.

Safe Handling of Wastes
Handle in accordance with applicable local, state, and federal regulations. Use personal protection measures as required.

Disposal of Wastes / Methods of Disposal
The user is responsible for determining if any discarded material is a hazardous waste (40 CFR 262.11). Dispose of in accordance with federal, state and local regulations.

Methods of Contaminated Packaging Disposal
Empty containers should be completely drained and then discarded or recycled, if possible. Do not cut, drill, grind or weld on empty containers since explosive residues may be present. Dispose of in accordance with federal, state and local regulations.

14. TRANSPORT INFORMATION

DOT (49 CFR 172.101):

UN Proper shipping name:	Not Regulated
UN/Identification No:	Not applicable
Transport Hazard Class(es):	Not applicable
Packing group:	Not applicable

TDG (Canada):

UN Proper shipping name:	Not Regulated
UN/Identification No:	Not applicable
Transport Hazard Class(es):	Not applicable
Packing group:	Not applicable

15. REGULATORY INFORMATION

US Federal Regulatory Information:

US TSCA Chemical Inventory Section 8(b): This product and/or its components are listed on the TSCA Chemical Inventory.

EPA Superfund Amendment & Reauthorization Act (SARA):

SARA Section 302: This product may contain component(s) that have been listed on EPA's Extremely Hazardous Substance (EHS) List:

Name	CERCLA/SARA - Section 302 Extremely Hazardous Substances and TPQs
Solvent Refined, Hydrotreated Heavy Paraffinic Distillate	NA
2,6-di-tert-butylphenol	NA

SARA Section 304: This product may contain component(s) identified either as an EHS or a CERCLA Hazardous substance which in case of a spill or release may be subject to SARA reporting requirements:

Name	CERCLA/SARA - Hazardous Substances and their Reportable Quantities
Solvent Refined, Hydrotreated Heavy Paraffinic Distillate	NA
2,6-di-tert-butylphenol	NA

SARA: The following EPA hazard categories apply to this product:

None

SARA Section 313: This product may contain component(s), which if in exceedance of the de minimus threshold, may be subject to the reporting requirements of SARA Title III Section 313 Toxic Release Reporting (Form R).

Name	CERCLA/SARA 313 Emission reporting:
Solvent Refined, Hydrotreated Heavy Paraffinic Distillate	None
2,6-di-tert-butylphenol	None

State and Community Right-To-Know Regulations:
The following component(s) of this material are identified on the regulatory lists below:

Solvent Refined, Hydrotreated Heavy Paraffinic Distillate

Louisiana Right-To-Know:	Not Listed.
California Proposition 65:	Not Listed.
New Jersey Right-To-Know:	Not Listed.
Pennsylvania Right-To-Know:	Not Listed.
Massachusetts Right-To Know:	Not Listed.
Florida Substance List:	Not Listed.
Rhode Island Right-To-Know:	Not Listed.
Michigan Critical Materials Register List:	Not Listed.
Massachusetts Extraordinarily Hazardous Substances:	Not Listed.
California - Regulated Carcinogens:	Not Listed.
Pennsylvania RTK - Special Hazardous Substances:	Not Listed.
New Jersey - Special Hazardous Substances:	Carcinogen
New Jersey - Environmental Hazardous Substances List:	Not Listed.
Illinois - Toxic Air Contaminants	Present
New York - Reporting of Releases Part 597 - List of Hazardous Substances:	Not Listed.

2,6-di-tert-butylphenol

Louisiana Right-To-Know:	Not Listed.
California Proposition 65:	Not Listed.
New Jersey Right-To-Know:	Not Listed.
Pennsylvania Right-To-Know:	Not Listed.
Massachusetts Right-To Know:	Not Listed.
Florida Substance List:	Not Listed.
Rhode Island Right-To-Know:	Not Listed.
Michigan Critical Materials Register List:	Not Listed.
Massachusetts Extraordinarily Hazardous Substances:	Not Listed.
California - Regulated Carcinogens:	Not Listed.
Pennsylvania RTK - Special Hazardous Substances:	Not Listed.
New Jersey - Special Hazardous Substances:	Not Listed.
New Jersey - Environmental Hazardous Substances List:	Not Listed.
Illinois - Toxic Air Contaminants	Not Listed.
New York - Reporting of Releases Part 597 - List of Hazardous Substances:	Not Listed.

Canada DSL/NDSL Inventory: This product and/or its components are listed either on the Domestic Substances List (DSL) or are exempt.

Canadian Regulatory Information: "This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the (M)SDS contains all the information required by the Controlled Products Regulations."

Name	Canada - WHMIS: Classifications of Substances:	Canada - WHMIS: Ingredient Disclosure:
2,6-di-tert-butylphenol	D2B	1%

NOTE: Uncontrolled product according to WHMIS classification criteria.

16. OTHER INFORMATION

Prepared By Toxicology and Product Safety
Revision Date: 05/22/2015

Revision Note:

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information is intended as guidance for safe handling, use, processing, storage, transportation, accidental release, clean-up and disposal and is not considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

SAFETY DATA SHEET

Methane

Section 1. Identification

GHS product identifier : Methane

Chemical name : methane

Other means of identification : Methane or natural gas; Marsh gas; Methyl hydride; CH4; Fire Damp;

Product use : Synthetic/Analytical chemistry.

Synonym : Methane or natural gas; Marsh gas; Methyl hydride; CH4; Fire Damp;

SDS # : 001033

Supplier's details : Airgas USA, LLC and its affiliates
259 North Radnor-Chester Road
Suite 100
Radnor, PA 19087-5283
1-610-687-5253

24-hour telephone : 1-866-734-3438

Section 2. Hazards identification

OSHA/HCS status : This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Classification of the substance or mixture : FLAMMABLE GASES - Category 1
GASES UNDER PRESSURE - Compressed gas

GHS label elements

Hazard pictograms :



Signal word : Danger

Hazard statements : Extremely flammable gas.
May form explosive mixtures with air.
Contains gas under pressure; may explode if heated.
May displace oxygen and cause rapid suffocation.

Precautionary statements

General : Read and follow all Safety Data Sheets (SDS'S) before use. Read label before use. Keep out of reach of children. If medical advice is needed, have product container or label at hand. Close valve after each use and when empty. Use equipment rated for cylinder pressure. Do not open valve until connected to equipment prepared for use. Use a back flow preventative device in the piping. Use only equipment of compatible materials of construction. Approach suspected leak area with caution.

Prevention : Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Response : Leaking gas fire: Do not extinguish, unless leak can be stopped safely. Eliminate all ignition sources if safe to do so.

Storage : Protect from sunlight when ambient temperature exceeds 52°C/125°F. Store in a well-ventilated place.

Disposal : Not applicable.

Hazards not otherwise classified : In addition to any other important health or physical hazards, this product may displace oxygen and cause rapid suffocation.

Section 3. Composition/information on ingredients

Substance/mixture : Substance

Chemical name : methane

Other means of identification : Methane or natural gas; Marsh gas; Methyl hydride; CH4; Fire Damp;

CAS number/other identifiers

CAS number : 74-82-8

Product code : 001033

Ingredient name	%	CAS number
methane	100	74-82-8

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

Eye contact : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention if irritation occurs.

Inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Skin contact : Wash contaminated skin with soap and water. Remove contaminated clothing and shoes. To avoid the risk of static discharges and gas ignition, soak contaminated clothing thoroughly with water before removing it. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Ingestion : As this product is a gas, refer to the inhalation section.

Most important symptoms/effects, acute and delayed

Potential acute health effects

Eye contact : Contact with rapidly expanding gas may cause burns or frostbite.

Inhalation : No known significant effects or critical hazards.

Skin contact : Contact with rapidly expanding gas may cause burns or frostbite.

Frostbite : Try to warm up the frozen tissues and seek medical attention.

Ingestion : As this product is a gas, refer to the inhalation section.

Over-exposure signs/symptoms

Eye contact : No specific data.

Inhalation : No specific data.

Skin contact : No specific data.

Ingestion : No specific data.

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

Specific treatments : No specific treatment.

Section 4. First aid measures

Protection of first-aiders : No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media : Use an extinguishing agent suitable for the surrounding fire.

Unsuitable extinguishing media : None known.

Specific hazards arising from the chemical : Contains gas under pressure. Extremely flammable gas. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion.

Hazardous thermal decomposition products : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide

Special protective actions for fire-fighters : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Contact supplier immediately for specialist advice. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool. If involved in fire, shut off flow immediately if it can be done without risk. If this is impossible, withdraw from area and allow fire to burn. Fight fire from protected location or maximum possible distance. Eliminate all ignition sources if safe to do so.

Special protective equipment for fire-fighters : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel : Accidental releases pose a serious fire or explosion hazard. No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing gas. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders : If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

Environmental precautions : Ensure emergency procedures to deal with accidental gas releases are in place to avoid contamination of the environment. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and materials for containment and cleaning up

Small spill : Immediately contact emergency personnel. Stop leak if without risk. Use spark-proof tools and explosion-proof equipment.

Large spill : Immediately contact emergency personnel. Stop leak if without risk. Use spark-proof tools and explosion-proof equipment. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling

Protective measures : Put on appropriate personal protective equipment (see Section 8). Contains gas under pressure. Avoid contact with eyes, skin and clothing. Avoid breathing gas. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Empty containers retain product residue and can be hazardous. Do not puncture or incinerate container. Use equipment rated for cylinder pressure. Close valve after each use and when empty. Protect cylinders from physical damage; do not drag, roll, slide, or drop. Use a suitable hand truck for cylinder movement.

Advice on general occupational hygiene : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Conditions for safe storage, including any incompatibilities : Store in accordance with local regulations. Store in a segregated and approved area. Store away from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10). Eliminate all ignition sources. Keep container tightly closed and sealed until ready for use. Cylinders should be stored upright, with valve protection cap in place, and firmly secured to prevent falling or being knocked over. Cylinder temperatures should not exceed 52 °C (125 °F).

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
methane	Oxygen Depletion [Asphyxiant]

Appropriate engineering controls : Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

Environmental exposure controls : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

Hygiene measures : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.

Skin protection

Section 8. Exposure controls/personal protection

Hand protection : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

Body protection : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.

Other skin protection : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection : Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Section 9. Physical and chemical properties

Appearance

Physical state : Gas. [Compressed gas.]

Color : Colorless.

Molecular weight : 16.05 g/mole

Molecular formula : C-H4

Boiling/condensation point : -161.48°C (-258.7°F)

Melting/freezing point : -187.6°C (-305.7°F)

Critical temperature : -82.45°C (-116.4°F)

Odor : Odorless.

Odor threshold : Not available.

pH : Not available.

Flash point : Closed cup: -188.15°C (-306.7°F)

Burning time : Not applicable.

Burning rate : Not applicable.

Evaporation rate : Not available.

Flammability (solid, gas) : Extremely flammable in the presence of the following materials or conditions: open flames, sparks and static discharge and oxidizing materials.

Lower and upper explosive (flammable) limits : Lower: 5%
Upper: 15%

Vapor pressure : Not available.

Vapor density : 0.55 (Air = 1) Liquid Density@BP: 26.5 lb/ft3 (424.5 kg/m3)

Specific Volume (ft ^{3}/lb) : 24.3956

Gas Density (lb/ft ^{3}) : 0.040991 (25°C / 77 to °F)

Relative density : Not applicable.

Solubility : Not available.

Solubility in water : 0.0244 g/l

Partition coefficient: n-octanol/water : 1.09

Auto-ignition temperature : 287°C (548.6°F)

Decomposition temperature : Not available.

SADT : Not available.

Section 9. Physical and chemical properties

Viscosity : Not applicable.

Section 10. Stability and reactivity

Reactivity : No specific test data related to reactivity available for this product or its ingredients.

Chemical stability : The product is stable.

Possibility of hazardous reactions : Under normal conditions of storage and use, hazardous reactions will not occur.

Conditions to avoid : Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.

Incompatible materials : Oxidizers

Hazardous decomposition products : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Hazardous polymerization : Under normal conditions of storage and use, hazardous polymerization will not occur.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Not available.

Irritation/Corrosion

Not available.

Sensitization

Not available.

Mutagenicity

Not available.

Carcinogenicity

Not available.

Reproductive toxicity

Not available.

Teratogenicity

Not available.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

Information on the likely routes of exposure : Not available.

Potential acute health effects

Section 11. Toxicological information

Eye contact : Contact with rapidly expanding gas may cause burns or frostbite.

Inhalation : No known significant effects or critical hazards.

Skin contact : Contact with rapidly expanding gas may cause burns or frostbite.

Ingestion : As this product is a gas, refer to the inhalation section.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : No specific data.

Inhalation : No specific data.

Skin contact : No specific data.

Ingestion : No specific data.

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Long term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Potential chronic health effects

Not available.

General : No known significant effects or critical hazards.

Carcinogenicity : No known significant effects or critical hazards.

Mutagenicity : No known significant effects or critical hazards.

Teratogenicity : No known significant effects or critical hazards.

Developmental effects : No known significant effects or critical hazards.

Fertility effects : No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Not available.

Section 12. Ecological information

Toxicity

Not available.

Persistence and degradability

Not available.

Bioaccumulative potential

Product/ingredient name	$LogP_{ow}$	BCF	Potential
methane	1.09	-	low

Mobility in soil

Section 12. Ecological information

Soil/water partition coefficient (K_{OC}) : Not available.

Other adverse effects : No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Empty Airgas-owned pressure vessels should be returned to Airgas. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Do not puncture or incinerate container.

Section 14. Transport information

	DOT	TDG	Mexico	IMDG	IATA
UN number	UN1971	UN1971	UN1971	UN1971	UN1971
UN proper shipping name	Methane, compressed	Methane, compressed or Methane or Natural gas, compressed (with high methane content)	Methane, compressed	Methane, compressed	Methane, compressed
Transport hazard class(es)	2.1 	2.1 	2.1 	2.1 	2.1 
Packing group	-	-	-	-	-
Environment	No.	No.	No.	No.	No.
Additional information	-	Product classified as per the following sections of the Transportation of Dangerous Goods Regulations: 2.13-2.17 (Class 2). **Explosive Limit and Limited Quantity Index** 0.125 **ERAP Index** 3000 **Passenger Carrying Ship Index** Forbidden **Passenger Carrying Road or Rail Index** Forbidden	-	-	**Passenger and Cargo Aircraft**Quantity limitation: 0 Forbidden **Cargo Aircraft Only** Quantity limitation: 150 kg

"Refer to CFR 49 (or authority having jurisdiction) to determine the information required for shipment of the product."

Special precautions for user : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Section 14. Transport information

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code : Not available.

Section 15. Regulatory information

U.S. Federal regulations : **TSCA 8(a) CDR Exempt/Partial exemption**: Not determined

United States inventory (TSCA 8b): This material is listed or exempted.

Clean Air Act (CAA) 112 regulated flammable substances: methane

Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs) : Not listed

Clean Air Act Section 602 Class I Substances : Not listed

Clean Air Act Section 602 Class II Substances : Not listed

DEA List I Chemicals (Precursor Chemicals) : Not listed

DEA List II Chemicals (Essential Chemicals) : Not listed

SARA 302/304

Composition/information on ingredients

No products were found.

SARA 304 RQ : Not applicable.

SARA 311/312

Classification : Fire hazard
Sudden release of pressure

Composition/information on ingredients

Name	%	Fire hazard	Sudden release of pressure	Reactive	Immediate (acute) health hazard	Delayed (chronic) health hazard
methane	100	Yes.	Yes.	No.	No.	No.

State regulations

Massachusetts : This material is listed.

New York : This material is not listed.

New Jersey : This material is listed.

Pennsylvania : This material is listed.

International regulations

International lists

National inventory

Australia : This material is listed or exempted.

Canada : This material is listed or exempted.

China : This material is listed or exempted.

Europe : This material is listed or exempted.

Japan : This material is listed or exempted.

Malaysia : This material is listed or exempted.

New Zealand : This material is listed or exempted.

Philippines : This material is listed or exempted.

Republic of Korea : This material is listed or exempted.

Section 15. Regulatory information

Taiwan : This material is listed or exempted.

Canada

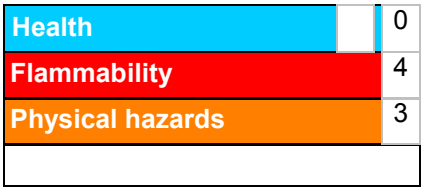
WHMIS (Canada) : Class A: Compressed gas.
Class B-1: Flammable gas.

CEPA Toxic substances: This material is listed.
Canadian ARET: This material is not listed.
Canadian NPRI: This material is listed.
Alberta Designated Substances: This material is not listed.
Ontario Designated Substances: This material is not listed.
Quebec Designated Substances: This material is not listed.

Section 16. Other information

Canada Label requirements : Class A: Compressed gas.
Class B-1: Flammable gas.

Hazardous Material Information System (U.S.A.)



Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks Although HMIS® ratings are not required on SDSs under 29 CFR 1910. 1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.

The customer is responsible for determining the PPE code for this material.

National Fire Protection Association (U.S.A.)



Reprinted with permission from NFPA 704-2001, Identification of the Hazards of Materials for Emergency Response Copyright ©1997, National Fire Protection Association, Quincy, MA 02269. This reprinted material is not the complete and official position of the National Fire Protection Association, on the referenced subject which is represented only by the standard in its entirety.

Copyright ©2001, National Fire Protection Association, Quincy, MA 02269. This warning system is intended to be interpreted and applied only by properly trained individuals to identify fire, health and reactivity hazards of chemicals. The user is referred to certain limited number of chemicals with recommended classifications in NFPA 49 and NFPA 325, which would be used as a guideline only. Whether the chemicals are classified by NFPA or not, anyone using the 704 systems to classify chemicals does so at their own risk.

Procedure used to derive the classification

Classification	Justification
Flam. Gas 1, H220 Press. Gas Comp. Gas, H280	Expert judgment According to package

History

Date of printing : 5/9/2016

Date of issue/Date of revision : 5/9/2016

Date of previous issue : No previous validation

Version : 0.01

Section 16. Other information

Key to abbreviations : ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IATA = International Air Transport Association
IBC = Intermediate Bulk Container
IMDG = International Maritime Dangerous Goods
LogPow = logarithm of the octanol/water partition coefficient
MARPOL 73/78 = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
UN = United Nations

References : Not available.

Indicates information that has changed from previously issued version.

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.
Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

Fisher Scientific

Part of Thermo Fisher Scientific

SAFETY DATA SHEET

Creation Date 22-Sep-2009 **Revision Date** 10-Dec-2015 **Revision Number** 2

1. Identification

Product Name **Arsenic, reference standard solution 1000 ppm in 7% nitric acid**

Cat No. : **SA449-100, SA449-500**

Synonyms None.

Recommended Use Laboratory chemicals.

Uses advised against No Information available

Details of the supplier of the safety data sheet

Company
Fisher Scientific
One Reagent Lane
Fair Lawn, NJ 07410
Tel: (201) 796-7100

Emergency Telephone Number
CHEMTREC®, Inside the USA: 800-424-9300
CHEMTREC®, Outside the USA: 001-703-527-3887

2. Hazard(s) identification

Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Corrosive to metals	Category 1
Skin Corrosion/irritation	Category 1 A
Serious Eye Damage/Eye Irritation	Category 1
Carcinogenicity	Category 1A
Specific target organ toxicity (single exposure)	Category 3
Target Organs - Respiratory system.	

Label Elements

Signal Word
Danger

Hazard Statements
May be corrosive to metals
Causes severe skin burns and eye damage
May cause respiratory irritation
May cause cancer



Precautionary Statements
Prevention
Obtain special instructions before use
Do not handle until all safety precautions have been read and understood
Use personal protective equipment as required
Do not breathe dust/fume/gas/mist/vapors/spray
Wash face, hands and any exposed skin thoroughly after handling
Use only outdoors or in a well-ventilated area
Keep only in original container
Response
Immediately call a POISON CENTER or doctor/physician
Inhalation
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
Skin
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower
Wash contaminated clothing before reuse
Eyes
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
Ingestion
IF SWALLOWED: Rinse mouth. DO NOT induce vomiting
Spills
Absorb spillage to prevent material damage
Storage
Store locked up
Store in a well-ventilated place. Keep container tightly closed
Store in corrosive resistant polypropylene container with a resistant inliner
Store in a dry place
Disposal
Dispose of contents/container to an approved waste disposal plant
Hazards not otherwise classified (HNOC)
Harmful to aquatic life with long lasting effects
WARNING! This product contains a chemical known in the State of California to cause cancer, birth defects or other reproductive harm.
Unknown Acute Toxicity
.? percent of the mixture consists of ingredient(s) of unknown acute toxicity

3. Composition / information on ingredients

Component	CAS-No	Weight %
Water	7732-18-5	92 - 93
Nitric acid	7697-37-2	7
Arsenic trioxide	1327-53-3	< 0.5

4. First-aid measures

General Advice Immediate medical attention is required. Show this safety data sheet to the doctor in attendance.

Eye Contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.

Immediate medical attention is required.

Skin Contact Wash off immediately with plenty of water for at least 15 minutes. Remove and wash contaminated clothing before re-use. Call a physician immediately.

Inhalation If breathing is difficult, give oxygen. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Remove from exposure, lie down. Call a physician immediately.

Ingestion Do not induce vomiting. Never give anything by mouth to an unconscious person. Clean mouth with water. Call a physician immediately.

Most important symptoms/effects Causes burns by all exposure routes. . Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated: Ingestion causes severe swelling, severe damage to the delicate tissue and danger of perforation

Notes to Physician Treat symptomatically

5. Fire-fighting measures

Suitable Extinguishing Media CO_2, dry chemical, dry sand, alcohol-resistant foam.

Unsuitable Extinguishing Media No information available

Flash Point Not applicable
Method - No information available

Autoignition Temperature No information available
Explosion Limits
Upper No data available
Lower No data available
Sensitivity to Mechanical Impact No information available
Sensitivity to Static Discharge No information available

Specific Hazards Arising from the Chemical
Thermal decomposition can lead to release of irritating gases and vapors. The product causes burns of eyes, skin and mucous membranes.

Hazardous Combustion Products
Nitrogen oxides (NOx) Thermal decomposition can lead to release of irritating gases and vapors
Protective Equipment and Precautions for Firefighters
Thermal decomposition can lead to release of irritating gases and vapors. As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

NFPA

Health	Flammability	Instability	Physical hazards
4	0	0	N/A

6. Accidental release measures

Personal Precautions Use personal protective equipment. Ensure adequate ventilation. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.

Environmental Precautions Should not be released into the environment. Do not flush into surface water or sanitary sewer system. See Section 12 for additional ecological information. Avoid release to the environment. Collect spillage.

Methods for Containment and Clean Up Soak up with inert absorbent material. Keep in suitable, closed containers for disposal.

7. Handling and storage

Handling Use only under a chemical fume hood. Wear personal protective equipment. Do not get in eyes, on skin, or on clothing. Do not breathe vapors or spray mist. Do not ingest.

Storage Corrosives area. Keep containers tightly closed in a dry, cool and well-ventilated place. Keep in properly labeled containers.

8. Exposure controls / personal protection

Exposure Guidelines

Component	ACGIH TLV	OSHA PEL	NIOSH IDLH
Nitric acid	TWA: 2 ppm STEL: 4 ppm	(Vacated) TWA: 2 ppm (Vacated) TWA: 5 mg/m³ (Vacated) STEL: 4 ppm (Vacated) STEL: 10 mg/m³ TWA: 2 ppm TWA: 5 mg/m³	IDLH: 25 ppm TWA: 2 ppm TWA: 5 mg/m³ STEL: 4 ppm STEL: 10 mg/m³
Arsenic trioxide	TWA: 0.01 mg/m³		IDLH: 5 mg/m³ Ceiling: 0.002 mg/m³

Component	Quebec	Mexico OEL (TWA)	Ontario TWAEV
Nitric acid	TWA: 2 ppm TWA: 5.2 mg/m³ STEL: 4 ppm STEL: 10 mg/m³	TWA: 2 ppm TWA: 5 mg/m³ STEL: 4 ppm STEL: 10 mg/m³	TWA: 2 ppm STEL: 4 ppm
Arsenic trioxide	TWA: 0.1 mg/m³	TWA: 0.5 mg/m³	TWA: 0.01 mg/m³ STEL: 0.05 mg/m³

Legend

ACGIH - American Conference of Governmental Industrial Hygienists
OSHA - Occupational Safety and Health Administration
NIOSH IDLH: The National Institute for Occupational Safety and Health Immediately Dangerous to Life or Health

Engineering Measures Use only under a chemical fume hood. Ensure that eyewash stations and safety showers are close to the workstation location. Ensure adequate ventilation, especially in confined areas.

Personal Protective Equipment

Eye/face Protection Tightly fitting safety goggles. Face-shield.

Skin and body protection Long sleeved clothing.

Respiratory Protection Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Hygiene Measures Keep away from food, drink and animal feeding stuffs. When using, do not eat, drink or smoke. Contaminated work clothing should not be allowed out of the workplace. Provide regular cleaning of equipment, work area and clothing. Avoid contact with skin, eyes and clothing. For environmental protection remove and wash all contaminated protective equipment before re-use. Wear suitable gloves and eye/face protection.

9. Physical and chemical properties

Physical State	Liquid
Appearance	Colorless
Odor	Odorless
Odor Threshold	No information available

pH	2.0
Melting Point/Range	0 °C / 32 °F
Boiling Point/Range	100 °C / 212 °F
Flash Point	Not applicable
Evaporation Rate	> 1 (ether = 1)
Flammability (solid,gas)	Not applicable
Flammability or explosive limits	
Upper	No data available
Lower	No data available
Vapor Pressure	14 mmHg @ 20 °C
Vapor Density	0.7 (Air = 1.0)
Specific Gravity	No information available
Solubility	miscible
Partition coefficient; n-octanol/water	No data available
Autoignition Temperature	No information available
Decomposition Temperature	No information available
Viscosity	No information available

10. Stability and reactivity

Reactive Hazard None known, based on information available

Stability Stable under normal conditions.

Conditions to Avoid Excess heat. Exposure to air or moisture over prolonged periods.

Incompatible Materials Strong bases, Amines, Strong reducing agents

Hazardous Decomposition Products Nitrogen oxides (NOx), Thermal decomposition can lead to release of irritating gases and vapors

Hazardous Polymerization Hazardous polymerization does not occur.

Hazardous Reactions None under normal processing.

11. Toxicological information

Acute Toxicity

Product Information

Oral LD50 Category 4. ATE = 300 - 2000 mg/kg. Based on ATE data, the classification criteria are not met. ATE > 2000 mg/kg.

Dermal LD50 Based on ATE data, the classification criteria are not met. ATE > 2000 mg/kg.

Vapor LC50 Category 2. ATE = 0.5 - 2 mg/l. Based on ATE data, the classification criteria are not met. ATE > 20 mg/l.

Component Information

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Water	-	Not listed	Not listed
Nitric acid	Not listed	Not listed	LC50 = 2500 ppm. (Rat) 1h
Arsenic trioxide	LD50 = 20 mg/kg (Rat)	Not listed	Not listed

Toxicologically Synergistic Products No information available

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Irritation Causes burns by all exposure routes

Sensitization No information available

Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen.

Component	CAS-No	IARC	NTP	ACGIH	OSHA	Mexico
Water	7732-18-5	Not listed	Not listed	Not listed	Not listed	Not listed
Nitric acid	7697-37-2	Not listed	Not listed	Not listed	Not listed	Not listed
Arsenic trioxide	1327-53-3	Group 1	Known	A1	X	A1

IARC: (International Agency for Research on Cancer)

NTP: (National Toxicity Program)

ACGIH: (American Conference of Governmental Industrial Hygienists)

Mexico - Occupational Exposure Limits - Carcinogens

IARC: (International Agency for Research on Cancer)
Group 1 - Carcinogenic to Humans
Group 2A - Probably Carcinogenic to Humans
Group 2B - Possibly Carcinogenic to Humans
NTP: (National Toxicity Program)
Known - Known Carcinogen
Reasonably Anticipated - Reasonably Anticipated to be a Human Carcinogen
A1 - Known Human Carcinogen
A2 - Suspected Human Carcinogen
A3 - Animal Carcinogen
ACGIH: (American Conference of Governmental Industrial Hygienists)
Mexico - Occupational Exposure Limits - Carcinogens
A1 - Confirmed Human Carcinogen
A2 - Suspected Human Carcinogen
A3 - Confirmed Animal Carcinogen
A4 - Not Classifiable as a Human Carcinogen
A5 - Not Suspected as a Human Carcinogen

Mutagenic Effects No information available

Reproductive Effects No information available.

Developmental Effects No information available.

Teratogenicity No information available.

STOT - single exposure Respiratory system
STOT - repeated exposure None known

Aspiration hazard No information available

Symptoms / effects,both acute and delayed Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated: Ingestion causes severe swelling, severe damage to the delicate tissue and danger of perforation

Endocrine Disruptor Information No information available

Other Adverse Effects The toxicological properties have not been fully investigated.

12. Ecological information

Ecotoxicity

Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment. The product contains following substances which are hazardous for the environment.

Component	Freshwater Algae	Freshwater Fish	Microtox	Water Flea
Nitric acid	Not listed	LC50: = 72 mg/L, 96h (Gambusia affinis)	Not listed	Not listed
Arsenic trioxide	Not listed	LC50: > 1000 mg/L, 96h static (Oncorhynchus mykiss) LC50: 18.8 - 21.4 mg/L, 96h flow-through (Oncorhynchus mykiss) LC50: = 135 mg/L, 96h (Pimephales promelas)	EC50 = 31.43 mg/L 60 min EC50 = 33.39 mg/L 30 min EC50 = 43.56 mg/L 15 min EC50 = 73.73 mg/L 5 min	EC50 = 0.038 mg/L 24h EC50 = 0.96 mg/L 96h EC50 = 0.038 mg/L 24h

Persistence and Degradability Miscible with water Persistence is unlikely based on information available.

Bioaccumulation/ Accumulation No information available.

Mobility Will likely be mobile in the environment due to its water solubility.

Component	log Pow
Nitric acid	-2.3
Arsenic trioxide	18.1

13. Disposal considerations

Waste Disposal Methods Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

14. Transport information

DOT

UN-No UN2031
Proper Shipping Name NITRIC ACID
Hazard Class 8
Subsidiary Hazard Class 5.1
Packing Group II

TDG

UN-No UN2031
Proper Shipping Name NITRIC ACID
Hazard Class 8
Packing Group II

IATA

UN-No UN2031
Proper Shipping Name NITRIC ACID
Hazard Class 8
Packing Group II

IMDG/IMO

UN-No UN2031
Proper Shipping Name NITRIC ACID
Hazard Class 8
Packing Group II

15. Regulatory information

All of the components in the product are on the following Inventory lists: X = listed

International Inventories

Component	TSCA	DSL	NDSL	EINECS	ELINCS	NLP	PICCS	ENCS	AICS	IECSC	KECL
Water	X	X	-	231-791-2	-		X	-	X	X	X
Nitric acid	X	X	-	231-714-2	-		X	X	X	X	X
Arsenic trioxide	X	X	-	215-481-4	-		X	X	X	X	X

Legend:
X - Listed
E - Indicates a substance that is the subject of a Section 5(e) Consent order under TSCA.
F - Indicates a substance that is the subject of a Section 5(f) Rule under TSCA.
N - Indicates a polymeric substance containing no free-radical initiator in its inventory name but is considered to cover the designated polymer made with any free-radical initiator regardless of the amount used.
P - Indicates a commenced PMN substance
R - Indicates a substance that is the subject of a Section 6 risk management rule under TSCA.
S - Indicates a substance that is identified in a proposed or final Significant New Use Rule
T - Indicates a substance that is the subject of a Section 4 test rule under TSCA.
XU - Indicates a substance exempt from reporting under the Inventory Update Rule, i.e. Partial Updating of the TSCA Inventory Data Base Production and Site Reports (40 CFR 710(B).
Y1 - Indicates an exempt polymer that has a number-average molecular weight of 1,000 or greater.
Y2 - Indicates an exempt polymer that is a polyester and is made only from reactants included in a specified list of low concern reactants

that comprises one of the eligibility criteria for the exemption rule.

U.S. Federal Regulations

TSCA 12(b) Not applicable

SARA 313

Component	CAS-No	Weight %	SARA 313 - Threshold Values %
Nitric acid	7697-37-2	7	1.0
Arsenic trioxide	1327-53-3	< 0.5	0.1

SARA 311/312 Hazard Categories

Acute Health Hazard	Yes
Chronic Health Hazard	Yes
Fire Hazard	No
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

CWA (Clean Water Act)

Component	CWA - Hazardous Substances	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants
Nitric acid	X	1000 lb	-	-
Arsenic trioxide	X	1 lb	X	-

Clean Air Act

Component	HAPS Data	Class 1 Ozone Depletors	Class 2 Ozone Depletors
Arsenic trioxide	X		-

OSHA Occupational Safety and Health Administration
Not applicable

Component	Specifically Regulated Chemicals	Highly Hazardous Chemicals
Nitric acid	-	TQ: 500 lb
Arsenic trioxide	10 µg/m³ TWA 5 µg/m³ Action Level	-

CERCLA
Not applicable

Component	Hazardous Substances RQs	CERCLA EHS RQs
Nitric acid	1000 lb	1000 lb
Arsenic trioxide	1 lb	1 lb

California Proposition 65 This product does not contain any Proposition 65 chemicals

Component	CAS-No	California Prop. 65	Prop 65 NSRL	Category
Arsenic trioxide	1327-53-3	Carcinogen Developmental	0.06 µg/day 10 µg/day	Developmental Carcinogen

U.S. State Right-to-Know Regulations

Component	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Water	-	-	X	-	-
Nitric acid	X	X	X	X	X
Arsenic trioxide	X	X	X	X	X

U.S. Department of Transportation

Reportable Quantity (RQ): N
DOT Marine Pollutant N
DOT Severe Marine Pollutant N

U.S. Department of Homeland Security
This product does not contain any DHS chemicals.

Component	DHS Chemical Facility Anti-Terrorism Standard
Nitric acid	2000 lb STQ

Other International Regulations

Mexico - Grade No information available

Canada
This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR

WHMIS Hazard Class
E Corrosive material
D2A Very toxic materials
D1A Very toxic materials



16. Other information

Prepared By
Regulatory Affairs
Thermo Fisher Scientific
Email: EMSDS.RA@thermofisher.com

Creation Date 22-Sep-2009
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Print Date 10-Dec-2015
Revision Summary This document has been updated to comply with the US OSHA HazCom 2012 Standard replacing the current legislation under 29 CFR 1910.1200 to align with the Globally Harmonized System of Classification and Labeling of Chemicals (GHS)

Disclaimer
The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text

End of SDS

US – OSHA SAFETY DATA SHEET

Issue Date: 29-May-2015 **Revision Date:**

1. IDENTIFICATION

Product Name: Lead Products

Synonyms: Sheet lead, Strip lead, Lead plate, Lead flashings, Plumbing lead, Lead ingot, Lead pigs, Lead pipe, Lead bends, Lead wire, Came lead, Lead extrusions, Lead bricks, Lead wool, Lead anodes, Bullet lead, Lead bullets, Lead billets, Lead castings, Machined lead, Ballast lead, Other miscellaneous lead products. Powder-coated lead products and Painted lead products.

Recommended Uses: Roofing, non-potable plumbing, radiation shielding, ballast, nuclear shielding, etc.

Uses Advised Against: Jewelry, toys, potable plumbing

Manufacturer:

Mayco Manufacturing, LLC (d.b.a. Mayco Industries)
18 West Oxmoor Road
Birmingham, AL 35209
Ph: 205-942-4242

2. HAZARDS IDENTIFICATION

Classification

This product is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Carcinogenicity	Category 1B
Reproductive toxicity	Category 1A
Specific target organ toxicity (repeated exposure)	Category 1

Label elements

Danger

Hazard statements

Lead - May cause cancer.
May damage fertility or the unborn child.
May cause harm to breast-fed children.
Cause damage to central nervous system, blood formation and kidneys and cardiovascular system through prolonged or repeated exposure.

Antimony – Dust or fume will be irritant.
Antimony causes nasal septal ulceration and stomach lining irritation.



Appearance: Gray with bluish or silvery cast depending on alloy

Physical state: Solid
Odor: Odorless

Precautionary Statements – Prevention
Obtain special instructions before use
Do not handle until all safety precautions have been read and understood
Use personal protective equipment as required
Wash face, hands and any exposed skin thoroughly after handling
Do not eat, drink or smoke when using this product
Use only outdoors or in a well-ventilated area
Do not breathe dust/fume/gas/mist/vapors/spray

Precautionary Statements – Response
IF exposed or concerned: Get medical advice/attention
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
Rinse mouth

Precautionary Statements – Storage
Store locked up

Precautionary Statements – Disposal
Dispose of contents/container to an approved waste disposal plant

Other information

- Very toxic to aquatic life with long lasting effects

3. COMPOSITION/INFORMATION ON INGREDIENTS

Material	% by Wt.	CAS #	OSHA EXPOSURE LIMIT
Lead	90 – 99.99	7439-92-1	0.05 mg/cubic meter
Antimony	0 – 9	7440-36-0	0.50 mg/cubic meter
Tin	0 – 2	7440-31-5	2.00 mg/m³

4. FIRST AID MEASURES

First aid measures

Eye Contact In case of eye contact, immediately flush eyes with fresh water for at least 15 minutes while holding the eyelids open. Remove contact lenses if worn. Get medical attention if irritation persists. Do not rub affected area.

Skin Contact Wash off immediately with soap and plenty of water. If skin irritation persists, call a Physician.

Inhalation Remove to fresh air. If breathing has stopped, give artificial respiration. Get medical Attention immediately. If conscious, have victim clear nasal passages.

Ingestion Seek immediate medical attention. Rinse mouth. Drink plenty of water. Induce Vomiting, but only if victim is fully conscious.

Most important symptoms and effects, both acute and delayed

Symptoms **Acute (short term) exposure:** Lead is a potent, systemic poison; taken in large enough Doses, lead can kill in a matter of days. Acute encephalopathy may arise which develops

Quickly to seizures, coma and death from cardiorespiratory arrest.
Chronic (long term) exposure: Chronic overexposure to lead may result in severe damage To blood forming. Nervous, urinary and reproductive systems. Some common symptoms Of chronic overexposure include loss of appetite, metallic taste in mouth, anxiety, Constipation, nausea, pallor, excessive tiredness, weakness, insomnia, headache, Nervous irritability, muscle and joint pain, fine tremors, numbness, dizziness, Hyperactivity, colic.

Indication of any immediate medical attention and special treatment needed

Note to physicians Treat symptomatically.

5. FIRE – FIGHTING MEASURES

Suitable extinguishing media: Dry chemical, foam or CO2

Specific hazards arising from the chemical: May give off toxic fumes in a fire, including lead fumes.

Explosion data:

Sensitivity to Mechanical Impact: None known.

Sensitivity to Static Discharge: None known.

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Lead is not considered to be a fire hazard. Powder/dust is flammable when heated or exposed to flame.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions Evaluate personnel to safe areas. Avoid contact with skin, eyes and inhalation of dusts. Use personal protection recommended in Section 8.

For emergency responders Wear respiratory protection. Wear proper personal protective equipment (gloves and goggles). Wear appropriate outer garment to protect clothing.

Environmental precautions

Environmental precautions Prevent entry into waterways, sewers, surface drainage systems and poorly ventilated areas.

Methods and material for containment and cleaning up

Methods for containment Avoid creating dust. Safely stop source of spill. Restrict non-essential personnel from area. All personnel involved in spill cleanup should avoid skin and eye contact by wearing appropriate personal protection equipment. Do not breathe dust.

Methods for cleaning up Avoid dust formation. Clean up dusts with high efficiency particulate air (HEPA) filtered vacuum equipment or by wet cleaning.

Prevention of secondary hazards Clean contaminated objects and area thoroughly observing environmental regulations.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling Use personal protection recommended in Section 8. Avoid generation of dust. Be familiar with the requirements set forth in the OSHA Lead Standard, 29 CGR 1910.1025.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place.

Incompatible materials Strong oxidizing agents.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Lead 7439-92-1	TWA: 0.15 mg/m³Pb	TWA: 0.05 mg/m³Pb	IDLH: 100mg/m³Pb TWA: 0.050 mg/m³Pb
Antimony 7440-36-0	TWA: 0.5 mg/m³Sb	TWA: 0.5 mg/m³Sb	IDLH: 0.50 mg/m³Sb TWA: 0.5 mg/m³Sb
Tin 7440-31-5	TWA: 2.0 mg/m³Sn	TWA: 2.0 mg/m³Sn	IDLH: 100 mg/m³Sn TWA: 2.0 mg/m³Sn

Appropriate engineering controls

Engineering Controls Use contained process enclosures, local exhaust ventilation or other engineering controls to maintain aerosols below the exposure limit. If user operations generate dust, fume or mist use ventilation to keep exposure to airborne contaminates below the exposure limit.

Individual protection measures, such as personal protective equipment

Eye/face protection Use safety glasses with side shields or chemical goggles.

Skin and body protection Protective clothing is required if exposure exceeds the PEL or TLV or where possibility of skin or eye irritation exists. Full body cotton or disposable coveralls and disposable gloves should be worn during use and handling. Clothing should be left at work site and be properly disposed of or laundered after use. The wash water should be disposed of in accordance with local, state and federal regulations. Personal clothing should be protected from contamination.

Respiratory protection If engineering controls cannot maintain airborne concentrations below exposure limits, use appropriate, approved respiratory protection (a 42 CFR 84 class N, R, or P-100 particulate filter cartridge). When exposure levels are unknown, a self-contained breathing apparatus which supplies a positive air pressure within a full face-piece mask should be worn. Utilization of respiratory equipment should be in accordance with 29 CFR 1910.1025 and 29 CFR 1910.134.

General Hygiene Considerations	Do not eat, drink or smoke when using this product. Contaminated work clothing should not be allowed out of the workplace. Wear disposable gloves and eye/face protection. Wash face, hands and any exposed skin thoroughly after handling.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state	Solid
Appearance	Gray with bluish or silvery cast depending on alloy
Color	Odorless

Property	**Values**	**Remarks *Method**
pH	Not available	
Melting point/freezing point	>600°C	
Boiling point/boiling range	>600°C	
Flash Point	Not applicable (high-melting point solid)	
Evaporation rate	Not applicable (high-melting point solid)	
Flammability (solid, gas)	Not combustible	
Flammability Limit in Air		
Upper flammability limit:	Not combustible	
Lower flammability limit:	Not combustible	
Vapor pressure	Negligible	
Vapor density	Not applicable (high-melting point solid)	
Specific Gravity	9.96	
Water solubility	70.2 mg/L at 20°C	
Solubility in other solvents	Lead compounds, soluble in 0.07 M hydrochloric acid	
Partition coefficient	Not applicable (inorganic)	
Auto ignition temperature	Not combustible	
Decomposition temperature	>600°C	
Kinematic viscosity	Not applicable (solid)	
Dynamic viscosity	Not applicable (solid)	
Explosive properties	Not considered to be explosive	
Oxidizing properties	Not considered to be oxidizing	

Other information

Softening point	Not available
Molecular weight	Not available
VOC Content (%)	Not available
Bulk density	Not available

10. STABILITY AND REACTIVITY

Reactivity

Stable under normal conditions.

Chemical stability

Stable under normal conditions.

Possibility of Hazardous Reactions

None under normal processing.
Hazardous polymerization does not occur.

Conditions to avoid

Avoid excessive exposure to heat.

Incompatible materials

Strong oxidizing agents.

Hazardous Decomposition Products

Lead oxide fumes.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Hazardous exposure to lead compounds can occur only when product is heated, oxidized or otherwise processed or damaged to create dust, vapor or fume.

Inhalation	Inhalation of lead dust or fumes may cause irritation of upper respiratory tract and lungs
Eye contact	Lead compounds may cause eye irritation
Skin contact	Lead compounds are poorly absorbed through the skin
Ingestion	Acute ingestion of lead compounds may cause abdominal pain, nausea, vomiting, diarrhea and severe cramping. This may lead to rapidly systemic toxicity and must be treated by a physician.
Component information	Lead is slowly absorbed by ingestion and inhalation and poorly absorbed through the skin. If absorbed, lead will accumulate in the body with low rates of excretion, leading to long-term build up. Part of risk management is to take blood samples from workers for analysis to ensure that exposure levels are acceptable.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Lead 7439-92-1	56 mg/m³ Rat	Not available	100 mg/m³Rat
Antimony 7440-36-0	7500mg Sb/kg Rat	Not available	720 mg Cu/m³ Rat
Tin 7440-31-5	2207mg Sn/kg Rat	Not available	Not available

Information on toxicological effects

Symptoms Not available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation Lead metal granules or dust: May cause skin irritation by mechanical action. Lead metal foil, shot or sheets: Not likely to cause skin irritation.

Serious eye damage/eye irritation

Lead metal granules or dust: Can irritate eyes by mechanical action. Lead metal foil, shot or sheets: No hazard. Will not cause eye irritation.

Inhalation

In an industrial setting, exposure to lead mainly occurs from inhalation of dust or fumes. Lead dust or fumes: Can irritate the upper respiratory tract (nose, throat) as well as the bronchi and lungs by mechanical action. Lead dust can be absorbed through the respiratory system. However, inhaled lead does not accumulate in the lungs. All of an inhaled dose is eventually absorbed or transferred to the gastrointestinal tract. Inhalation effects of exposure to fumes or dust or inorganic lead may not develop quickly. Symptoms may include metallic taste, chest pain, decreased physical fitness, fatigue, sleep disturbance, headache, and irritability, reduces memory, mood and personality changes, aching bones and muscles, constipation, abdominal pains, decreasing appetite. Inhalation of large amounts may lead to ataxia, delirium, convulsions/seizures, coma, and death. Lead metal foil, shot, or sheets: Not an inhalation hazard unless metal is heated. If metal is heated, fumes will be released. Inhalation of these fumes may cause “fume metal fever”, which is characterized by flu-like symptoms. Symptoms may include metallic taste, fever, nausea, vomiting, chills, cough, weakness, chest pain, generalized muscle pain/aches, and increased white blood cell count.

Ingestion

Lead metal granules or dust: The Symptoms of lead poisoning include abdominal pain or cramps (lead colic), spasms, nausea, vomiting, headache, muscle weakness, hallucinations, distorted perceptions, “lead line” on the gums, metallic taste, loss of appetite, insomnia, dizziness and other symptoms similar to that of inhalation. Acute poisoning may result in high lead levels in the blood and urine, shock, coma and death in extreme cases. Lead metal foil, shot or sheets: Not an ingestion hazard for usual industrial handling.

Carcinogenic effects

Epidemiology studies or workers exposed to inorganic lead compounds have found a limited association with stomach cancer. This has led to the classification by IARC that inorganic lead compounds are probably carcinogenic to humans.

Chemical Name	ACGIH	IARC	NTP	OSHA
Lead 7439-92-1	A3	2B	Reasonably Anticipated	Category 1B
Antimony 7440-36-0	A2	2B	Not Listed	Category 2
Tin 7440-31-5	Not Listed	Not Listed	Not Listed	Not Listed

Reproductive toxicity

Exposure to high levels of lead may cause adverse effects on male and female, including adverse effects on sperm quality. Prenatal exposure to lead and its compounds is also associated with adverse effects on fetal development.

STOT – single exposure Lead has been found to be of relatively low acute toxicity by ingestion, in contact with skin, and by inhalation, with no evidence of any local or systemic toxicity from such exposures.

STOT – repeated exposure Lead is a cumulative poison and may be absorbed into the body through ingestion or inhalation. Inorganic lead compounds have been documented in observational human studies to produce toxicity in multiple organ systems and body function including the hematopoietic (blood) system, kidney function, reproductive function and the central nervous system. Postnatal exposure to lead compounds is associated with impacts on neurobehavioral development in children.

Chronic toxicity Lead is a cumulative poison. Increasing amounts of lead can build up in the body and may reach a point where symptoms and disabilities occur. Continuous exposure may result in decreased fertility. Lead is a teratogen. Overexposure of lead by either parent before pregnancy may increase the chances of miscarriage or birth defects. May cause cancer. Contains a known or suspected reproductive toxin. May cause adverse kidney effects.

Target Organ Effects Lead is a cumulative poison and may be absorbed into the body through ingestion or inhalation. Inorganic lead compounds have been documented in observational human studies to produce toxicity in multiple organ systems and body function including the hematopoietic (blood) system, kidney function, reproductive function and the central nervous system. Postnatal exposure to lead compounds is associated with impacts on neurobehavioral development in children.

Aspiration hazard Not available.

Numerical measures of toxicity – Product Information

The following values are calculated based on chapter 3.1 of the GHS document.

Inhalation LC50 850 mg/m³ Rat

12. ECOLOGICAL INFORMATION

Environmental Fate Lead is very persistent in soil and sediments. No data on environmental degradation. Mobility of metallic lead between ecological compartments is slow. Bioaccumulation of lead occurs in aquatic and terrestrial animals and plants, but little bioaccumulation occurs through the food chain. Most studies include lead compounds and not elemental lead.

Environmental Toxicity Soluble lead compounds are listed as a marine pollution according to DOT.

Chemical Name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacean
Lead 7439-92-1	0.072-0.388: 72h Pseudokirchneriella subcapitatia, Chlorella kessierii mg/L ErC50 (pH 5.5-6.5)	0.298: 96h Pimephales promelas mg/L LC50 static 0.041-1.810: 96h Pimephales promelas, Oncorhynchus mykiss		0.074-0.656: 48h Daphnia magna, Ceriodaphnia dubia mg/L LC50 (pH 5.5-6.5)

	0.026-0.080: 72h Pseudokirchneriella subcapitatia, Chlorella kessierii mg/L ErC50 (pH >6.5-7.5) 0.021-0.050: 72h Pseudokirchneriella subcapitatia, Chlorella kessierii mg/L ErC50 (pH <7.5-8.5)	mg/L LC50 (pH 5.5-6.5)0.052-3.60: 96h Pimephales promelas, Oncorhynchus mykiss mg/L LC50 (pH >6.5-7.5) 0.114-3.25: 96h Pimephales promelas, Oncorhynchus mykiss mg/L LC50 (pH >7.5-8.5) 56000: 96h Gambusia affinis mg/L LC50 static		0.029-1.18: 48h Daphnia magna, Ceriodaphnia dubia mg/L LC50 (pH >6.5-7.5) 0.026-3.12: 48h Daphnia magna, Ceriodaphnia dubia mg/L LC50 (pH >7.5-8.5)
Antimony 7440-36-0	None listed	Cyprinodont variegates: LC50 = 6.2-8.3 mg/L/96h	None listed	None listed
Tin 7440-31-5	None listed	None listed	None listed	None listed

Bioaccumulation

While lead metal and its compounds are generally insoluble, its processing or extended exposure in aquatic and terrestrial environments may lead to the release of lead in bioavailable forms. Lead compounds are not particularly mobile in the aquatic environments, but can be toxic for organisms, especially fish, at low concentrations. Water hardness, pH and dissolved organic carbon content are factors which regulate the degree of toxicity. In soil, lead compounds are generally not very bioavailable.

Mobility

Lead and lead compounds will partially settle out due to their fairly low solubility and partially dissolve. In soil, lead and lead compounds are generally not very mobile or bioavailable, as they can be strongly absorbed on soil particles, increasingly over time. It also forms complexes with organic matter and clay minerals that limit its mobility. When released into the soil, this material is not expected to leach into groundwater.

Other adverse effects Not available.

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal of wastes Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated packaging Disposal should be in accordance with applicable regional, national and local laws and regulations.

14. TRANSPORT INFORMATION

Note: This product is not regulated for domestic transport by land, air or rail.

- Under 49 CFR 171.8, individual packages that contain lead metal (<100 micrometers) below the reportable quantity (RQ) are not regulated.
- Under 49 CFR 171.4, except when transporting aboard a vessel, the requirements of this subchapter specific to marine pollutants do not apply to non-bulk packaging transported by motor vehicles, rail cars and aircrafts.

DOT

Proper shipping name	Not applicable
Hazard Class	Not applicable
Packing Group	Not applicable
Reportable Quantity (RQ)	Not applicable
Marine pollutant	Soluble lead compounds are listed as a marine pollutant according to DOT.
Emergency Response Guide	Not applicable

15. REGULATORY INFORMATION

International Inventories

TSCA	Complies
DSL/NDSL	Complies
EINECS/ELINCS	Complies
ENCS	Complies
IECSC	Complies
KECL	Complies
PICCS	Complies
AICS	Complies

Legend:

TSCA – United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL – Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS – European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS – Japan Existing and New Chemical Substances

IECSC – China Inventory of Existing Chemical Substances

KECL – Korean Existing and Evaluated Chemical Substances

PICCS – Philippines Inventory of Chemicals and Chemical Substances

AICS – Australian Inventory of Chemical Substances

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

Chemical Name	CAS No.	Weight - %	SARA 313 – Threshold Values %
Lead	7439-92-1	90 – 99.99	0.1
Antimony	7440-36-0	0 – 9	1.0
Tin	7440-31-5	0 – 2	Not Listed

SARA 311/312 Hazard Categories

Acute Health Hazard	Yes
Chronic Health Hazard	Yes
Fire Hazard	No
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

CWA (Clean Water Act)

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

Chemical Name	CWA – Reportable Quantities	CWA – Toxic Pollutants	CWA – Priority Pollutants	CWA – Hazardous Substances
Lead 7439-92-1	10 lb.	X	X	X
Antimony 7440-36-0	5000 lb.	X	X	X
Tin 7440-31-5	-	-	-	-

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302).

US State Regulations

California Proposition 65

This product contains a chemical known to the state of California to cause birth defects or other reproductive harm.

Chemical Name	California Proposition 65
Lead – 7439-92-1	Cancer
Antimony – 7440-36-0	Cancer
Tin – 7440-31-5	Not Listed

US State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Lead – 7439-92-1	X	X	X
Antimony – 7440-36-0	X	X	X
Tin – 7440-31-5	X	-	X

US EPA Label Information

EPA Pesticide Registration Number Not available

16. OTHER INFORMATION

Issue Date 29-May-2015

Revision Date

Revision Note None

Disclaimer

This information provided in this Safety Data Sheet is correct to the best of our knowledge, information and Belief at the date of its publication. The information given is designed only as guidance for safe handling, use, Processing, storage, transportation, disposal and release and is not to be considered a warranty or quality Specification. The information materials or in any process, unless specified in the text.

ATTACHMENT C

EMERGENCY SERVICES
PHONE NUMBERS, DIRECTIONS, AND LOCAL AREA MAP

EMERGENCY SERVICES

FACILITY / LOCATION	**TELEPHONE**
Emergency Situation	**911**

White Memorial Medical Center
1720 East Cesar E Chavez Avenue
Los Angeles, CA 90033
(323) 268-5000

Poison Control Center	(800) 222-1222
Office of Emergency Services (Spill Prevention and Response)	(800) 852-7550
USA Dig Alert of Southern California	(800) 422-4133
WorkCare (Non-emergency)	(888) 449-7787

ATTACHMENT D

LOCAL AREA MAP
with routes to hospital

Google Maps

465 South Mathews Street to White Memorial Medical Center

Drive 1.1 miles, 6 min



Imagery ©2016 Google, Map data ©2016 Google 500 ft

465 South Mathews Street

Los Angeles, CA 90033

1. Head northeast on S Mathews St toward E 4th St — 0.4 mi
2. Turn left onto E 1st St — 0.6 mi
3. Turn right onto Bailey St — 0.1 mi

White Memorial Medical Center

1720 East Cesar E Chavez Avenue, Los Angeles, CA 90033

These directions are for planning purposes only. You may find that construction projects, traffic, weather, or other events may cause conditions to differ from the map results, and you should plan your route accordingly. You must obey all signs or notices regarding your route.

ATTACHMENT E

JOB SAFETY ANALYSIS

Mob-Demob Job Safety Analysis (JSA)

COMPANY/ PROJECT NAME or ID/ LOCATION (City, State)	DATE PREPARED FOR HASP:	☐ NEW ☐ REVISED
TRC/ LAUSD Roosevelt High School (Los Angeles, CA)		
JSA WORK ACTIVITY (Description): **Mob-Demob**	List of Contractor(s) and key work activity:	

SITE SPECIFIC JSA AUTHOR	POSITION / TITLE	DEPT	SIGNATURE

TRC HEALTH AND SAFETY MANAGEMENT	POSITION / TITLE	APPROVAL DATE

PERSONAL PROTECTION EQUIPMENT (PPE) QUICK SUMMARY
Required PPE (indicate with "R") vs. Must Have Available On-site (indicate "A")

__R__ REFLECTIVE VEST __A__HARD HAT __R__GLOVES: **ANSI Cut Level 4** __A__SAFETY GLASSES _____GOGGLES _____FACE SHIELD	__A__ HEARING PROTECTION __R__SAFETY SHOES: Protective Toe _____ 5pt.HARNESS / LANYARD PPE CLOTHING: ____Coveralls ____Tyvek Suit ____Nomex ____Other (specify):	RESPIRATORY PROTECTION: ☒ NA _____Dust Mask ____½ face Air Purifying Respirator (APR) _____Particulate Mask: ☐ PM100 ☐ PM95 _____ Cartridge: ☐ P100-Multigas ☐ _____ _____Full face ARP; specify cartridge type: _____ Air Supplied Respirator ____SCBA _____Air-line	Additional PPE/Notes: As per defined in the job/site specific Health and Safety Plan (HASP) wear PPE at all times when performing site work.

Always perform a Safety Assessment (Hazard Hunt): 1) prior to starting work; 2) when changing tasks; and 3) throughout the day. Focus on each new task, procedures, and skill sets to be used.

[1] JOB TASKS	[2] POTENTIAL HAZARDS	[3] HAZARD CONTROLS (beyond wearing "Required" PPE)
1) Inspect vehicle and equipment prior to mobilizing to and from site	a. Vehicle failures.	a1. Inspect tires and lights regularly. a2. Inspect gas tank level. a3. Walk around vehicle and note any hazards with vehicle and report to the appropriate employee/supervisor.
2) Loading/ unloading at office or jobsite	a. Cut/pinched fingers or toes; and strained muscles. b. Vehicle parked in high traffic area.	a1. See PPE Quick Summary. a2. Use proper lifting techniques and 2-man rule when moving heavy objects (>40 lbs). b1. Make sure vehicle is parked in an area that limits the employee from crossing roads or intersections. b2. Use high-visibility cones around vehicle if need.

Always perform a Safety Assessment (Hazard Hunt): 1) prior to starting work; 2) when changing tasks; and 3) throughout the day. Focus on each new task, procedures, and skill sets to be used.		
[1] JOB TASKS	**[2] POTENTIAL HAZARDS**	**[3] HAZARD CONTROLS (beyond wearing "Required" PPE)**
3) Driving	a. Incidents.	a1. Adjust mirrors and be familiar with controls before driving vehicle. a2. Pay attention to the task at hand. a3. Avoid/defer cell phone until destination is reached (or while not driving). Take note of jurisdictional laws pertaining to cell phone usage. a4. Obey traffic laws and drive defensively.
	b. Flat tire/engine trouble.	b1. If the problem requires you to stop the vehicle, make sure the vehicle is in a safe spot on the shoulder of the road. b2. Use flashers to alert other vehicles. b3. Only make repairs to the vehicle if the work can be done in a safe manner and away from traffic.
4) Arrival at site	a. Site conditions changed from plan.	a1. Observe traffic flow. a2. Modify traffic control plan if necessary. a3. Back into parking spots whenever possible. Employee spotter if available.
5) Inspect vehicle equipment	a. Vehicle failures.	a1. Inspect fluids, tires, connections and safety equipment regularly. a2. Inspect gas tank level. a3. Note any hazards with vehicle and report to the appropriate employee.
	LOCATION(S) WHERE HAZARD IS TO BE EXPECTED	**[3] HAZARD CONTROLS (beyond wearing "Required" PPE)**
1. Vehicle rolling: unattended.	a. When parked on slope or with engine idling.	a1. When parking on a hill or stopping with the engine idling, use parking brakes, parking gear if available, and use chocks immediately upon leaving the driver's compartment. If other personnel are available ask them do the chocking before the driver exits the vehicle, then the driver should double-check the chocks.

PID—photoionization detector; LEL—lower explosive limit; PPE—Personal Protective Equipment; ANSI—American National Standards Institute

Field Notes:

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Driving Company Vehicle Job Safety Analysis (JSA)

COMPANY/ PROJECT NAME or ID/ LOCATION (City, State)	DATE PREPARED FOR HASP:	☐ NEW ☒ REVISED
TRC/LAUSD Roosevelt HS (Los Angeles, CA)		
JSA WORK ACTIVITY (Description): **Driving Company Vehicle**	List of Contractor(s) and key work activity:	

SITE SPECIFIC JSA AUTHOR	POSITION / TITLE	DEPT	SIGNATURE

TRC HEALTH AND SAFETY MANAGEMENT	POSITION / TITLE	APPROVAL DATE
	OSC	

PERSONAL PROTECTION EQUIPMENT (PPE) QUICK SUMMARY
Required PPE (indicate with "R") vs. Must Have Available On-site (indicate "A")

___ REFLECTIVE VEST ____HARD HAT _____GLOVES: **ANSI Cut Level 4 & 5 Kevlar** ____SAFETY GLASSES _____GOGGLES _____FACE SHIELD	____ HEARING PROTECTION ____SAFETY SHOES: Protective Toe _____ 5pt.HARNESS / LANYARD PPE CLOTHING: ____Coveralls ____Tyvek Suit ____Nomex ____Other (specify):	RESPIRATORY PROTECTION: ☐ NA _____Dust Mask ____½ face Air Purifying Respirator (APR) ____X_Particulate Mask: ☒ PM100 ☐ PM95 ____X_ Cartridge: ☒ P100-Multigas ☐ _____ _____Full face ARP; specify cartridge type: _____ Air Supplied Respirator ____SCBA _____Air-line	Additional PPE: .

Always perform a Safety Assessment (Hazard Hunt): 1) prior to starting work; 2) when changing tasks; and 3) throughout the day. Focus on each new task, procedures, and skill sets to be used.

[1] JOB TASKS	[2] POTENTIAL HAZARDS	[3] HAZARD CONTROLS (beyond wearing "Required" PPE)
1) Have correct directions and know best route of travel to make it safely to intended destination.	a. Getting lost in a bad area or showing up at the wrong location. Having doubt about where you are exactly supposed to be could cause undo stress while driving.	a1. Ask questions and get safest route if destination is not known, use map quest or other online locators to assist with travel plans. Give other people your travel plans with addresses and phone numbers so you can be contacted.
2) Knowing what TRC's driving rules and policies are before getting behind the wheel on company time.	a. Driver using excuse that they didn't know the rules or policies and following common bad practices while driving.	a1. Strong Driver Training and Driving Safety Stewardship prior to personnel driving company owned vehicles or driving personal vehicles on company time. Certification of understanding through training documentations and TRC's CP016 Vehicle Safety Program.
3) Vehicle walk around and perimeter check.	a. Trip, slip, fall and possible human contact from unknown assailants. Also be aware of other vehicle activity in surrounding areas.	a1. Visual verification that vehicle tires are in safe working condition and that there are no sharp objects or foreign debris under the tires. Check for possible unsafe human interaction in the surrounding area and be conscious of other vehicle activity close by.

Always perform a Safety Assessment (Hazard Hunt): 1) prior to starting work; 2) when changing tasks; and 3) throughout the day. Focus on each new task, procedures, and skill sets to be used.		
[1] JOB TASKS	[2] POTENTIAL HAZARDS	[3] HAZARD CONTROLS (beyond wearing "Required" PPE)
4) Unlock and open vehicle door, enter the vehicle and secure seatbelts.	a. This activity leaves driver open for a pinch or crush hazard if hand or fingers are not secured inside the vehicle before shutting vehicle door.	a1. Ensure driver's seatbelt is functioning properly and verify that passenger's seatbelt is also in good working condition then buckle up. If assessed lock vehicle doors once inside as added protection factor.
5) Interior visual inspection, rearview mirror, and visual checks of both side mirrors.	a. In areas of high crime, be sure to lock vehicle doors after entering besides that there aren't many other hazards during this activity.	a1. Ensuring that mirrors are properly adjusted to maximize visual indications of approaching vehicles from the rear, and checking for identified blind spots. Lock doors in areas of identified questionable areas for safety reasons.
6) Ensure mobile phone has been deactivated.	a. Drivers are easily distracted by mobile phones, either by answering or making calls.	a1. It is TRC's company policy, CP016 TRC Vehicle Safety Program, that all mobile phones be turned off prior to any vehicle trips, no exceptions.
7) If driving a company vehicle or personal vehicle on company time the headlamps will be turned on at all times. Also headlamps are required by CA Law to be activated if foul weather conditions warrant their use.	a. If driving in foul weather conditions such as heavy rain, fog or dusk, vehicles without headlamps on are more difficult to see.	a1. TRC's company policy, CP016 TRC Vehicle Safety Program, requires all employees driving company vehicles or personal vehicles on company time to have their headlamps on. No exceptions. This activity gives an extra line of defensive visual identification by allowing other vehicles to better see oncoming traffic that might otherwise blend into the poor weathered gray backgrounds.
8) Traveling safely at posted speed limits and following all road rules while driving on roadways or freeways.	a. Not obeying posted speed limits and following road rules can result in traffic violations and vehicle accidents involving all motor vehicle maneuvers. Watch for slower moving and fast approaching vehicles in roadway.	a1. Driver must maintain TRC policy, CP016 TRC Vehicle Safety Program, of allowing a 4 second gap between vehicles while driving, this supersedes California's DMV Best Practice of following a 3 second gap. Keep good visual contact of all lanes and identifying an out in case of emergency maneuver due to other vehicle hazards and poor driving.
9) Merging while entering multi-lane freeways and making lane changes while traveling on multi-lane freeways.	a. Struck from side, rear contact with other vehicles, struck from behind.	a1. Use vehicle signals, look over shoulder, check mirrors, be aware of fast approaching or slower moving vehicles and maintain speed while initiating merge, maintain speed and repeat same steps with all lane changes.

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[1] JOB TASKS	[2] POTENTIAL HAZARDS	[3] HAZARD CONTROLS (beyond wearing "Required" PPE)
10) Exiting off of multi-lane freeways.	a. Changing the flow of traffic speed, slowing down to exit off ramps.	a1. Use vehicle signals, look over shoulder, check mirrors, be aware of fast approaching or slower moving vehicles and maintain speed while initiating merge. Slow at a gradual pace and maintain enough space between the vehicles in front of you to mitigate the necessity of braking quickly.
11) Stopping at posted stop signs, signal controlled intersections and cross walks while yielding right away to all oncoming traffic.	a. By not allowing enough space, a vehicle can be struck and pushed into an intersection or crosswalk, striking other vehicles or pedestrians.	a1. Keeping a full vehicle length away from intersections, crosswalks and stop signs gives a driver that extra cushion needed in case there is a strike from behind, pushing the vehicle forward.
12) Proceeding through marked or signal controlled intersections or crosswalks after coming to a full stop.	a. Driver should use good visual eye contact of all directions to the left and right and allow another vehicle to proceed first before accelerating forward. Watching for other vehicles crossing into other lanes.	a1. The driver carefully looking left and right should maintain lane selection through the intersection and proceed forward remaining in the same lane they stopped in. This prevents rear-end striking and side striking accidents and allows for better adjustments if a possible hazard is identified.
13) Staying aware of oversized and wide vehicles making wide and slow turns through intersections and regular turning maneuvers.	a. There are numerous blind spots that the driver of a loaded Semi has to deal with. They can occur at the beginning or the finishing of the turning maneuver.	a1. Using a 4 second rule while following a Semi is a must and leaving enough extra space to the sides and rear of the Semi when stopping behind it will prevent an avoidable strike from the trailer due to blind spots created by wide and large loaded vehicles.
14) Staying constantly aware of all surroundings and keeping identified routes of escape open when traffic conditions warrant added attention.	a. When driving a vehicle on roadways or freeways, we do not have control over all the other drivers in vehicles around us, therefore we must keep constant attention elevated to the poor driving skills of others.	a1. Understanding TRC's company policy, CP016 TRC Vehicle Safety Program, follow identified driving best practices and keep full attention of driving safely without rushing to get to destinations.
15) Reaching final destination in vehicle and coming to a complete stop while parking.	a. Striking other parked vehicles or striking a pedestrian walking, or the vehicle engine not completely stopping causing the vehicle to lunge forward.	a1. Pay full attention to the new surrounding areas where you'll park, ensure vehicle's engine has completely stopped and the parking break has been set. Look outside vehicle before jumping out into street traffic or parking lot traffic.

Always perform a Safety Assessment (Hazard Hunt): 1) prior to starting work; 2) when changing tasks; and 3) throughout the day. Focus on each new task, procedures, and skill sets to be used.		
[1] JOB TASKS	**[2] POTENTIAL HAZARDS**	**[3] HAZARD CONTROLS (beyond wearing "Required" PPE)**
16) Opening vehicle door and exiting.	a. Struck by other vehicles stepping onto uneven surface, approached by someone unwanted.	a1. Take a good look at surrounding areas and make sure there are no signs of oncoming traffic, take a look outside at the ground before you step out making sure surface is level and object free, keep aware of unwanted approaching personnel.

LOCATION(S) WHERE HAZARD IS TO BE EXPECTED		**[3] HAZARD CONTROLS (beyond wearing "Required" PPE)**
1.	a.	a.
2.	a.	a.
3.	a.	a.

PID—photoionization detector; LEL—lower explosive limit; PPE—Personal Protective Equipment; ANSI—American National Standards Institute

Field Notes:

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COMPANY/ PROJECT NAME or ID/ LOCATION (City, State)	DATE PREPARED FOR HSP:	☐ NEW ☒ REVISED
TRC/ LAUSD Roosevelt High School (Los Angeles, CA)		
JSA WORK ACTIVITY (Description):	List of Contractor(s) and key work activity:	
Work Area and Exclusion Zone Set-up		

SITE SPECIFIC JSA AUTHOR	POSITION / TITLE	DEPT	SIGNATURE

"TRC APPROVED" JSA DEVELOPMENT TEAM	POSITION / TITLE	APPROVAL DATE

Required PPE (indicate with "R") vs. Must Have Available On-site (indicate "A")

R REFLECTIVE VEST R HARD HAT R GLOVES **ANSI Cut Level 4** R SAFETY GLASSES _____GOGGLES _____FACE SHIELD	A HEARING PROTECTION R SAFETY SHOES: Protective Toe _____ 5pt.HARNESS / LANYARD PPE CLOTHING: ____Coveralls ____Tyvek Suit ____Nomex ____Other (specify):	RESPIRATORY PROTECTION: ☐ NA _____Dust Mask _____½ face Air Purifying Respirator (APR) _____Particulate Mask: ☐ PM100 ☐ PM95 ____ Cartridge: ☐ P100-Multigas ☐ _____ _____Full face ARP; specify cartridge type: ____ Air Supplied Respirator ____SCBA _____Air-line	Additional PPE:

Always perform a Safety Assessment: 1) prior to starting work; 2) when changing tasks; and 3) throughout the day. Focus on each new task, procedures, and skill sets to be used.

[1] JOB TASKS	[2] POTENTIAL HAZARDS	[3] HAZARD CONTROLS (beyond wearing "Required" PPE)
1. Pre-start Meeting and Site Safety Analysis	a. Bad organization creating confusion and hazard	a. Arrive at site prior to planned start time to evaluate vehicle and pedestrian traffic flow in the work area and in the site vicinity. a.. Review site plan with traffic control set-up. a. Identify staging area with good access lateral and vertical for loading and unloading of trucks. a. Identify material and equipment laydown areas.
2. Exclusion Zone Set-up	a. Physical injury or equipment damage from onsite and offsite traffic flow.	a. Use the 'buddy system (one person watching traffic, one person working) when working in a high-use traffic area. a. Use of cones/delineators and caution signs to alert foot traffic moving about the site of potential trip hazards. a . Utilize snow fencing, barricades, delineators, cones and caution tape to provide exclusion zone around proposed work locations. Set-up exclusion zone in accordance with TRC's Exclusion Zone Set-up procedures.
3. Control of Work Area and Exclusion Zone	a. Delivery vehicles b. Personnel/vehicle entry onto site c. Fatigue d. Noise and flying debris	a. All vehicles moving on site shall use reverse beepers or flaggers. b. Set-up fencing around entire site with gated entry points. Limit access to staging area by keeping gate to work area closed and check documents of all vehicles entering work area. b. Use visitor check-in log and allow no-one into an exclusion area with out proper PPE as designated on this JSA. b. All person onsite must wear proper work and protective clothing (long pants, sleeved-shirt, steel-toed boots, safety vest, safety glasses, and safety helmet, ANSI cut level 4 Kevlar gloves) at all times while on jobsite. b. Limit number of times materials, equipment and debris are handled by staging as close to work area as possible. c. Watch on-site personnel for signs of fatigue (shuffling, disorientation, small mistakes, sloppiness, etc.) and have them go to a shaded, protected area where they can rest and rehydrate. c. Set up and maintain rehydrating station. d. Always wear safety glasses and hearing protection working around operating heavy equipment.

COMPANY/ PROJECT NAME or ID/ LOCATION (City, State) **TRC/ LAUSD Roosevelt High School (Los Angeles, CA)**	DATE PREPARED FOR HSP:	☐ NEW ☒ REVISED
JSA WORK ACTIVITY (Description): **Work Area and Exclusion Zone Set-up**	List of Contractor(s) and key work activity:	

4. Clean-up and overnight/over weekend storage	a. Slips, trips, and falls b. Bad organization creating confusion and hazard c. Run-off and soil cross-contamination d. Site Security and Anti-Thievery	a.Clean-up work area as you go. Maintain a clean, unobstructed work area by good house keeping and placing unused equipment away from work area. b. Delineate and block access to open pits/trenches with snow-fencing, delineators, and caution tape as a warning and prevent persons from falling into these items overnight. c. Place debris/detritus areas away from soil stockpile for future use. d. Do not leave expensive equipment in open. d. Lock all vehicles and large equipment. Do not leave keys in vehicles.

	LOCATION(S) WHERE HAZARD IS TO BE EXPECTED	**[3] HAZARD CONTROLS (beyond wearing "Required" PPE)**
1.	a.	a.
2.	a.	a.
3.	a.	a.

Field Notes:

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Cold Illness Prevention Job Safety Analysis (JSA)

COMPANY/ PROJECT NAME or ID/ LOCATION (City, State)	DATE PREPARED FOR HASP:	☐ NEW ☒ REVISED
TRC/LAUSD Roosevelt HS (Los Angeles, CA)		
JSA WORK ACTIVITY (Description): **Cold Illness Prevention**	List of Contractor(s) and key work activity:	

SITE SPECIFIC JSA AUTHOR	POSITION / TITLE	DEPT	SIGNATURE

TRC HEALTH AND SAFETY MANAGEMENT	POSITION / TITLE	APPROVAL DATE

PERSONAL PROTECTION EQUIPMENT (PPE) QUICK SUMMARY
Required PPE (indicate with "R") vs. Must Have Available On-site (indicate "A")

__R__ REFLECTIVE VEST __R__ HARD HAT __R__ GLOVES: **ANSI Cut Level 4 & 5 Kevlar** __R__ SAFETY GLASSES _____ GOGGLES _____ FACE SHIELD	__R__ HEARING PROTECTION __R__ SAFETY SHOES: Protective Toe _____ 5pt.HARNESS / LANYARD PPE CLOTHING: ____Coveralls ____Tyvek Suit ____Nomex ____Other (specify):	RESPIRATORY PROTECTION: ☐ NA __A__ Disposable Particulate Respirator (N95) __A__ ½ face Air Purifying Respirator (APR) __X__ Particulate Mask: ☒ PM100 ☐ PM95 __X__ Cartridge: ☒ P100-Multigas ☐ _____ _____ Full face ARP; specify cartridge type: _____ Air Supplied Respirator ____SCBA _____Air-line	Additional PPE/Notes:

Always perform a Safety Assessment (Hazard Hunt): 1) prior to starting work; 2) when changing tasks; and 3) throughout the day. Focus on each new task, procedures, and skill sets to be used.

[1] JOB TASKS	[2] POTENTIAL HAZARDS	[3] HAZARD CONTROLS (beyond wearing "Required" PPE)
1) Working in wind chill temperatures > 30 to < 65 degrees F	a. Trench foot.	a1. Avoid having feet immersed in cold water at temperatures above freezing for long periods. a2. Avoid continuous exposure to a wet, cold environment, or actual immersion in water. a3. Take frequent short-breaks in warm dry shelters—self paced. a4. Perform work during the warmest part of the day. a5. Keep a change of clothing available in case work clothes becomes wet. Maintain a dry environment within the shoe. a6. Rotate your shoes every other day to allow them to dry thoroughly. a7. Avoid synthetic materials like rubber or vinyl, wear leather or cloth that can absorb moisture.

Always perform a Safety Assessment (Hazard Hunt): 1) prior to starting work; 2) when changing tasks; and 3) throughout the day. Focus on each new task, procedures, and skill sets to be used.		
[1] JOB TASKS	**[2] POTENTIAL HAZARDS**	**[3] HAZARD CONTROLS (beyond wearing "Required" PPE)**
2) Working in temperatures < 30 degrees F or wind chill effects above freezing temperatures	a. Frost bite.	a1. Proper insulation (layered clothing to adjust to changing environmental temperatures). Keep clothing as dry as possible. a2. Perform work during the warmest part of the day. a3. Take frequent short-breaks in warm dry shelters-self paced. a4. Avoid exhaustion and fatigue because energy is needed to keep the muscles warm. a5. Use the "Buddy System" for working outdoors.
3) Working in temperatures above freezing > 30 degrees	a. Hypothermia.	a1. Proper insulation (layered clothing to adjust to changing environmental temperatures). Keep clothing as dry as possible. a2. Perform work during the warmest part of the day. a3. Take frequent short-breaks in warm dry shelters-self paced. a4. Pay special attention to protecting feet, hands, face, and head. Up to 40% of body heat can be lost when the head is exposed.
	LOCATION(S) WHERE HAZARD IS TO BE EXPECTED	**[3] HAZARD CONTROLS (beyond wearing "Required" PPE)**
1. Frost bite	a. Skin first turns red, then purple, later becomes pale, then waxy-white and is cold to the touch. b. Skin of body part affected becomes hard, cold, stinging or aching followed by numbness; affecting nose, ears, cheeks, forehead, wrists, toes and fingers.	a1. Unless the frostbite was very mild, call for emergency for special instructions. a2. A worker with warm hands may help thaw other's worker hands or fingers merely by enclosing them within the palms and exerting a very gentle pressure. a3. Try to elevate worker extremity to improve blood circulation. b1. Act immediately, call for emergency. Move the worker to a warm area. Do not leave the worker alone. b2. Remove any wet or tight clothing that may cut off blood flow to the affected area and DO NOT RUB affected area.

	LOCATION(S) WHERE HAZARD IS TO BE EXPECTED	[3] HAZARD CONTROLS (beyond wearing "Required" PPE)
2. Hypothermia	a. Uncontrolled shivering.	a1. Act immediately—Call for Emergency. a2. Move the victim to a warm, dry area. Do not leave the person alone and DO NOT RUB the person's body.
	b. Cool bluish skin.	b1. Loosen and remove any wet clothing and replace with warm, dry clothing or wrap the person in blankets.
	c. Dry tongue and thirst.	c1. Administer warm, sweet drinks (sugar water or sports-type drinks) if victim is alert.
	d. Slurred speech.	d1. Have the victim move their arms and legs to create muscle heat.
	e. Clumsy movements, irritable, irrational or confused behavior.	e1. Place warm bottles or hot packs in the arm pits, groin, neck, and head areas. Encourage the person to rest. e2. Monitor closely.
3. Trench foot	a. Initially appears wet, soggy, white, shriveled.	a1. Move individual with trench foot to a warm, dry area. a2. Rewarm by exposing to warm air.
	b. Sensations of pins and needles, tingling, numbness and then pain.	b1. Rewarm by exposing to warm air. b2. Seek medical assistance as soon as possible.
	c. Skin discoloration. Affected portions of foot and toes can appear gray and blotchy.	c1. Seek medical assistance as soon as possible.
	d. Becomes cold, swollen, and waxy appearance.	d1. Seek medical assistance as soon as possible. d2. Elevate feet to reduce swelling.
	e. May develop blisters, open weeping or bleeding in more extreme cases.	e1. Seek medical assistance as soon as possible. e2. DO NOT break blisters, apply lotions, massage, expose to heat, or allow to walk on injury.

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COMPANY/ PROJECT NAME or ID/ LOCATION (City, State)	DATE PREPARED FOR HSP:	☐ NEW ☒ REVISED
TRC/ LAUSD Roosevelt High School (Los Angeles, CA)		
JSA WORK ACTIVITY (Description):	List of Contractor(s) and key work activity:	
Heat Illness Prevention		

SITE SPECIFIC JSA AUTHOR	POSITION / TITLE	DEPT	SIGNATURE

"TRC APPROVED" JSA DEVELOPMENT TEAM	POSITION / TITLE	APPROVAL DATE

Required PPE (indicate with "R") vs. Must Have Available On-site (indicate "A")

___R___ REFLECTIVE VEST ___A___HARD HAT ___R___GLOVES: **ANSI Cut Level 2,3, 4 or 5 Kevlar** ___R___SAFETY GLASSES _____GOGGLES _____FACE SHIELD	___A___ HEARING PROTECTION ___R___SAFETY SHOES: Protective Toe _____ 5pt.HARNESS / LANYARD PPE CLOTHING: ____Coveralls ____Tyvek Suit ____Nomex ____Other (specify):	RESPIRATORY PROTECTION: ☒ NA _____Disposable Particulate Respirator (N95) ____½ face Air Purifying Respirator (APR) _____Particulate Mask: ☐ PM100 ☐ PM95 ____ Cartridge: ☐ P100- Multigas ☐ _____ _____Full face ARP; specify cartridge type: ____ Air Supplied Respirator ____SCBA ____Air-line	Additional PPE:

Always perform a Safety Assessment: 1) prior to starting work; 2) when changing tasks; and 3) throughout the day. Focus on each new task, procedures, and skill sets to be used.

[1] JOB TASKS	[2] POTENTIAL HAZARDS	[3] HAZARD CONTROLS (beyond wearing "Required" PPE)
1. Working in temperatures > 80 to < 90 degrees F	a. Heat Cramps b. Heat Exhaustion c. Heat Stroke	a. Fluids mandatory every 60 minutes b. Rest breaks - self paced by time period worked c. Cool Device (bandana, headband, hardhat insert, poncho, etc.) – optional d. H.E.A.T. Kit with Heat Illness supplies.
1. Working in temperatures> 90 to < 100 degrees F	a. Heat Cramps b. Heat Exhaustion c. Heat Stroke	a. Fluids mandatory every 60 minutes b. Rest breaks - self paced c. Cool Device - optional d. H.E.A.T. Kit with Heat Illness supplies.
1. Working in temperatures > 100 degrees F	a. Heat Cramps b. Heat Exhaustion c. Heat Stroke	a. Fluids mandatory every 30 minutes b. Rest Breaks mandatory every 30 minutes c. Implement as least one of the following: • External Cool Device (AC) • Personal Cool Device (Cool Vest) • Rotate personnel, buddy system/add to work team d. Plan work at cooler time of day e. Contact supervisor frequently to give status reports. f. H.E.A.T. Kit with Heat Illness supplies.

GENERAL SAFETY HAZARDS	LOCATION(S) WHERE HAZARD IS TO BE EXPECTED	[3] HAZARD CONTROLS (beyond wearing "Required" PPE)
1. Heat Cramps	a. Muscles most often affected include calves, arms, abdomen and back	a. Start slowly b. Stretch before working out c. Rest briefly and cool down d. Do range-of-motion stretching and massage of the affected muscle group e. Drink water or sports drinks
2. Heat Exhaustion	a. Cool, clammy and pale skin b. Profuse sweating c. Dry tongue and thirst d. Severe muscle fatigue, weakness e. Mood changes (e.g., confusion or inability to think straight and rapid pulse)	a. Act immediately – May lead to heat exhaustion, stroke or death. b. Move the victim to a cool, shaded area to rest. c. Loosen and remove any heavy clothing. d. Administer cool water (about a cup every 15 minutes) unless sick to the stomach. e. If symptoms continue (e.g., dizziness or lightheadedness), lay the victim on his/her back and raise the legs 6 to 8 inches.

COMPANY/ PROJECT NAME or ID/ LOCATION (City, State) **TRC/ LAUSD Roosevelt High School (Los Angeles, CA)**		DATE PREPARED FOR HSP:	☐ NEW ☒ REVISED
JSA WORK ACTIVITY (Description): **Heat Illness Prevention**		List of Contractor(s) and key work activity:	
	f. Feeling weak, faint or dizzy with headache or nausea g. Loss of appetite h. Physical collapse and sometimes cramping i. Decreased or dark-colored urine	- If nausea or upset stomach exists, lay the person on his/her side. f. Cool the person's body by fanning, spraying with a cool mist of water, sponging with cool water and/or applying cool, wet cloths for an evaporative effect. g. Encourage the person to rest. h. Monitor closely. i. Obtain emergency medical care if condition does not improve.	
3. Heat Stroke	a. Very high temperature (104 degrees F or higher) b. Hot, dry, red skin c. Not sweating d. Deep breathing and fast pulse – Shallow breathing and weak pulse e. Dilated pupils f. Convulsions g. Loss of consciousness	a. Act immediately – inaction may lead to death or brain damage b. OBTAIN EMERGENCY MEDICAL CARE! c. Cool the individual as rapidly as possible: – Move victim to cool, shaded area. – Remove clothing – Spray with water – Fan – Apply cool, wet sheets – ice packs to groin, underarms, and neck	

Regardless of the Advisory Level, the following factors need to be considered:

Humidity
Medications that affect heat tolerance (diuretics, beta-blockers, antihistamines, antidepressants)
Lack of acclimatization (conditioning)
Obesity or other personnel medical issues (personal illnesses or disease)
History of previous heat-related disorders
Physical conditioning

Field Notes:

LIMITATION: As part of TRC's EHS Policy, a JSA is provided by TRC for its employees. The purpose of a JSA is NOT to identify all hazards associated with a task, but to identify key potential hazards to get TRC and other onsite personnel thinking about other potential safety hazards and mitigating actions for unsafe conditions and behavior during various works. TRC recognizes that JSA's may not cover every conceivable step or hazard that emerges during a job, so we've provided a "Field Change" section below to amend a JSA if required. The JSA does not supersede or replace any local, state or federal permit, regulation, statute or other entities policies and procedures but is simply a tool for enhancing the execution of safe work at a jobsite under TRC's supervision. Similarly, all subcontractors are required to provide their own JSA(s) for their specialty prior to performing any work for TRC or its customers in accordance with TRC's EHS Policy; however, any unsafe condition or hazard not covered in any JSA is ultimately the direct responsibility of the person or entity performing the work.

Heavy Equipment and/or Vehicles Job Safety Analysis (JSA)

COMPANY/ PROJECT NAME or ID/ LOCATION (City, State)	DATE PREPARED FOR HASP:	☐ NEW ☒ REVISED
TRC/ LAUSD Roosevelt HS (Los Angeles, CA)		
JSA WORK ACTIVITY (Description): **Heavy Equipment and/or Vehicles**	List of Contractor(s) and key work activity):	

SITE SPECIFIC JSA AUTHOR	POSITION / TITLE	DEPT	SIGNATURE

TRC HEALTH AND SAFETY MANAGEMENT	POSITION / TITLE	APPROVAL DATE

PERSONAL PROTECTION EQUIPMENT (PPE) QUICK SUMMARY
Required PPE (indicate with "R") vs. Must Have Available On-site (indicate "A")

__R__ REFLECTIVE VEST __R__ HARD HAT __A__ GLOVES: **ANSI Cut Level 4** __R__ SAFETY GLASSES _____ GOGGLES _____ FACE SHIELD	__A__ HEARING PROTECTION __R__ SAFETY SHOES: Protective Toe _____ 5pt.HARNESS / LANYARD PPE CLOTHING: ____ Coveralls ____ Tyvek Suit ____ Nomex ____ Other (specify):	RESPIRATORY PROTECTION: ☒ NA _____ Dust Mask _____ ½ face Air Purifying Respirator (APR) _____ Particulate Mask: ☐ PM100 ☐ PM95 _____ Cartridge: ☐ P100-Multigas ☐ _____ _____ Full face ARP; specify cartridge type: _____ Air Supplied Respirator ____ SCBA _____ Air-line	Additional PPE:

Always perform a Safety Assessment (Hazard Hunt): 1) prior to starting work; 2) when changing tasks; and 3) throughout the day. Focus on each new task, procedures, and skill sets to be used.

[1] JOB TASKS	[2] POTENTIAL HAZARDS	[3] HAZARD CONTROLS (beyond wearing "Required" PPE)
1) Set-up Activities	a. Lack of concentration or focus.	a1. Review all plans (HASP, Work, Utility, Site Plans, etc.), logs, and field notes prior to starting a new task. Identify daily tasks and required personnel actions. a2. Conduct safety tailgate meeting with contractor personnel prior to beginning work activities. Review the site safety hazards and work precautions.
	b. Fire and explosion.	b1. No smoking or open flame. Periodically monitor ambient air concentrations with PID/LEL Meters. Shut down job and move personnel and equipment upwind if hydrocarbon concentrations are HASP defined action levels.
	c. Malfunctioning heavy equipment safety devices.	c1. Inspect equipment to determine if in good condition. Perform all equipment and safety device checks prior to event startup (per operating manual).

Always perform a Safety Assessment (Hazard Hunt): 1) prior to starting work; 2) when changing tasks; and 3) throughout the day. Focus on each new task, procedures, and skill sets to be used.		
[1] JOB TASKS	[2] POTENTIAL HAZARDS	[3] HAZARD CONTROLS (beyond wearing "Required" PPE)
2) Heavy Equipment and/or Vehicles	a. Physical injury from falling or flying objects.	a1. Always conduct Safe Performance Self-Assessment (SPSA) prior to start of, or change in each work procedure or task. a2. Wear appropriate PPE including hardhats, safety glasses, and any additional PPE as directed by the SSO.
	b. Noise.	b1. All personnel will use hearing protection within work area while heavy machinery is operating at >85 dB.
	c. Being struck by moving vehicles or equipment onsite.	c1. Always wear safety vest, establish eye contact with operators utilizing flag men wear appropriate. c2. Vehicles shall use reverse beepers or flagmen.
	d. Cut/pinched fingers or toes; and strained muscles.	d1. See PPE Quick Summary.
	g. Slips, trips, and falls.	g1. Maintain a clean, unobstructed work area by good housekeeping and placing unused equipment away from work area.
	h. Materials loading/unloading.	h1. Identify truck ingress/egress lanes. Keep loading area clear of debris and obstructions (including parked cars and overhead obstructions).
	i. Unauthorized personnel in exclusion zone.	i1. Use visitor check-in log and allow no-one in exclusion area without proper PPE (as defined on this JSA) and training documentation (e.g., HAZWOPER, other as defined in the HASP).

Always perform a Safety Assessment (Hazard Hunt): 1) prior to starting work; 2) when changing tasks; and 3) throughout the day. Focus on each new task, procedures, and skill sets to be used.		
[1] JOB TASKS	**[2] POTENTIAL HAZARDS**	**[3] HAZARD CONTROLS (beyond wearing "Required" PPE)**
3) Clean-Up	a. Slips, trips, and falls.	a1. Maintain a clean, unobstructed work area by good housekeeping and placing unused equipment away from work area.
	LOCATION(S) WHERE HAZARD IS TO BE EXPECTED	**[3] HAZARD CONTROLS (beyond wearing "Required" PPE)**
1.	a.	a.
2.	a.	a.
3.	a.	a.

PID—photoionization detector; LEL—lower explosive limit; PPE—Personal Protective Equipment; ANSI—American National Standards Institute

Field Notes:

LIMITATION: As part of TRC's EHS Policy, a JSA is provided by TRC for its employees. The purpose of a JSA is NOT to identify all hazards associated with a task, but to identify key potential hazards to get TRC and other onsite personnel thinking about other potential safety hazards and mitigating actions for unsafe conditions and behavior during various works. TRC recognizes that JSA's may not cover every conceivable step or hazard that emerges during a job, so we've provided a "Field Change" section below to amend a JSA if required. The JSA does not supersede or replace any local, state or federal permit, regulation, statute or other entities policies and procedures but is simply a tool for enhancing the execution of safe work at a jobsite under TRC's supervision. Similarly, all subcontractors are required to provide their own JSA(s) for their specialty prior to performing any work for TRC or its customers in accordance with TRC's EHS Policy; however, any unsafe condition or hazard not covered in any JSA is ultimately the direct responsibility of the person or entity performing the work.

Job Safety Analysis (JSA)

COMPANY/ PROJECT NAME or ID/ LOCATION (City, State)	DATE PREPARED FOR HASP:	☐ NEW ☒ REVISED
TRC/ LAUSD Roosevelt High School (Los Angeles, CA)		
JSA WORK ACTIVITY (Description):	List of Contractor(s) and key work activity:	
Excavation and Trench		

SITE SPECIFIC JSA AUTHOR	POSITION / TITLE	DEPT	SIGNATURE

TRC HEALTH AND SAFETY MANAGEMENT	POSITION / TITLE	APPROVAL DATE

PERSONAL PROTECTION EQUIPMENT (PPE) QUICK SUMMARY

Required PPE (indicate with "R") vs. Must Have Available On-site (indicate "A")

__R__ REFLECTIVE VEST __R__ HARD HAT __R__ GLOVES: **Kevlar ANSI Cut Level 4 & 5** __R__ SAFETY GLASSES _____ GOGGLES _____ FACE SHIELD	__A__ HEARING PROTECTION __R__ SAFETY SHOES: Protective Toe _____ 5pt.HARNESS / LANYARD PPE CLOTHING: ____Coveralls ____Tyvek Suit ____Nomex ____Other (specify):	RESPIRATORY PROTECTION: ☒ NA _____½ face Air Purifying Respirator (APR) _____Particulate Mask: ☐ PM100 ☐ PM95 _____ Cartridge: ☐ P100-Multigas ☐ _____Full face ARP; specify cartridge type: ____ Air Supplied Respirator ____SCBA ____Air-line	Additional PPE: .

Always perform a Safety Assessment (Hazard Hunt): 1) prior to starting work; 2) when changing tasks; and 3) throughout the day. Focus on each new task, procedures, and skill sets to be used.

[1] JOB TASKS	[2] POTENTIAL HAZARDS	[3] HAZARD CONTROLS (beyond wearing "Required" PPE)
1) Set-Up Activities	a. Lack of concentration or focus.	a1. Review all plans (HASP, Work, Utility, Site Plans, etc.), logs, and field notes prior to starting a new task. Identify daily tasks and required personnel actions. a2. Conduct safety tailgate meeting with subcontractor personnel prior to beginning work activities.
	b. Fire and explosion.	b1. No smoking or open flame. Periodically monitor ambient air concentrations with PID/LEL Meters.
	c. Electric shock/ electrocution.	c1. Review TRC's Pre-Job Safety Briefing for minimum approach distances on cranes and excavators.
	d. Malfunctioning heavy equipment safety devices.	d1. Inspect heavy equipment to determine if in good condition. Perform all equipment and safety device checks prior to event startup (per operating manual).

Always perform a Safety Assessment (Hazard Hunt): 1) prior to starting work; 2) when changing tasks; and 3) throughout the day. Focus on each new task, procedures, and skill sets to be used.		
[1] JOB TASKS	**[2] POTENTIAL HAZARDS**	**[3] HAZARD CONTROLS (beyond wearing "Required" PPE)**
2) Excavation of Soil	a. Physical injury from falling or flying objects.	a1. Stay out of the immediate excavation area and the excavator swing radius. a2. Wear appropriate PPE including hardhats, safety glasses, and any additional PPE as directed by the SSO.
	b. Noise.	b1. All personnel will use hearing protection within work area while heavy machinery is operating >85dB.
	c. Being struck by moving vehicles or equipment onsite.	c1. Always wear at a minimum, Class II safety vest, establish eye with operators utilizing flag men wear appropriate. c2. Vehicles shall use reverse beepers or flagmen. c3. Face the direction of oncoming traffic during work activities when possible.
	d. Cut/pinched fingers or toes; and strained muscles.	d1. See PPE Quick Summary.
	e. Equipment tip over.	e1. Watch equipment location & swing points; monitor live & dead loads. e2. If a crane is being used, make sure to take away from the operation at all times when the crane is in use.
	f. Toxic or explosive atmosphere.	f1. Periodically monitor ambient atmosphere with PID or LEL meter. upwind if concentrations are detected above HASP defined action levels.
	g. Slips, trips, and falls.	g1. Maintain a clean, unobstructed work area by good housekeeping and placing unused equipment away from work area.
	h. Cave-in	h1. Follow TRC's CP024 Excavation and Trench Program. h2. Never enter an excavation without the proper training, and a competent person documenting and monitoring the excavation. h3. Excavations must have be properly sloped or have shorting installed. Never enter an excavation that does not have either of these two engineering controls in place, and a documented and approved engineering drawings.
3) Staging and Dumping of HC Impacted Soil	a. Bad organization creating confusion and hazard.	a1. keep area clear of parked vehicles or stored materials/equipment. a2. Identify truck ingress/egress lanes and keep clear.
	b. Slips, trips, and falls.	b1. Maintain a clean, unobstructed work area by good housekeeping and placing unused equipment away from work area.

	LOCATION(S) WHERE HAZARD IS TO BE EXPECTED	[3] HAZARD CONTROLS (beyond wearing "Required" PPE)
1.	a.	a.
2.	a.	a.
3.	a.	a.

PID—photoionization detector; LEL—lower explosive limit; PPE—Personal Protective Equipment; ANSI—American National Standards Institute

Field Notes:

LIMITATION: As part of TRC's EAP a JSA is provided by TRC for its employees. The purpose of a JSA is NOT to identify all hazards associated with a task, but to identify key potential hazards to get TRC and other onsite personnel thinking about other potential safety hazards and mitigating actions for unsafe conditions and behavior during various works. TRC recognizes that JSAs may not cover every conceivable step or hazard that emerges during a job, so we've provided a "Field Change" section below to amend a JSA if required. The JSA does not supersede or replace any local, state or federal permit, regulation, statute or other entities policies and procedures but is simply a tool for enhancing the execution of safe work at a jobsite under TRC's supervision. Similarly, all subcontractors are required to provide their own JSA(s) for their specialty prior to performing any work for TRC or its customers in accordance with TRC's EAP; however, any unsafe condition or hazard not covered in any JSA is ultimately the direct responsibility of the person or entity performing the work.

Soil/Debris Loading Job Safety Analysis (JSA)

COMPANY/ PROJECT NAME or ID/ LOCATION (City, State)	DATE PREPARED FOR HASP:	☐ NEW ☒ REVISED
TRC/LAUSD Roosevelt HS (Los Angeles, CA)		
JSA WORK ACTIVITY (Description): **Soil/Debris Loading**	List of Contractor(s) and key work activity:	

SITE SPECIFIC JSA AUTHOR	POSITION / TITLE	DEPT	SIGNATURE

TRC HEALTH AND SAFETY MANAGEMENT	POSITION / TITLE	APPROVAL DATE

PERSONAL PROTECTION EQUIPMENT (PPE) QUICK SUMMARY
Required PPE (indicate with "R") vs. Must Have Available On-site (indicate "A")

__R__ REFLECTIVE VEST __R__ HARD HAT __R__ GLOVES: **ANSI Cut Level 4 & 5 Kevlar** __R__ SAFETY GLASSES _____ GOGGLES _____ FACE SHIELD	__A__ HEARING PROTECTION __R__ SAFETY SHOES: Protective Toe _____ 5pt.HARNESS / LANYARD PPE CLOTHING: ____Coveralls ____Tyvek Suit ____Nomex ____Other (specify):	RESPIRATORY PROTECTION: ☐ NA __A__ ½ face Air Purifying Respirator (APR) ____X__ Particulate Mask: ☒ PM100 ☐ PM95 ____X__ Cartridge: ☒ P100-Multigas ☐ _____ _____ Full face ARP; specify cartridge type: _____ Air Supplied Respirator ____SCBA _____Air-line	Additional PPE: Level C PPE for asbestos debris handling (Asbestos trained workers only)

Always perform a Safety Assessment (Hazard Hunt): 1) prior to starting work; 2) when changing tasks; and 3) throughout the day. Focus on each new task, procedures, and skill sets to be used.

[1] JOB TASKS	[2] POTENTIAL HAZARDS	[3] HAZARD CONTROLS (beyond wearing "Required" PPE)
1) Set-up Activities	a. Lack of concentration or focus.	a1. Review all plans (HASP, Work, Utility, Site Plans, etc.), logs, and field notes prior to starting a new task. Identify daily tasks and required personnel actions. a2. Conduct safety tailgate meeting with subcontractor personnel prior to beginning work activities. Explain the site safety hazards and work precautions outlined in the HASP and obtain signatures indicating the HASP was discussed.
	b. Fire and explosion.	b1. No smoking or open flame. Periodically monitor ambient air concentrations with PID/LEL Meters. Shut down job and move personnel and equipment upwind if hydrocarbon concentrations are HASP defined action levels. b2. Deploy 2-20lb ABC Fire extinguishers in accordance site safety officer's direction.
	c. Malfunctioning heavy equipment safety devices.	c1. Inspect drill rig to determine if in good condition. Perform all equipment and safety device checks prior to event startup (per operating manual).

Always perform a Safety Assessment (Hazard Hunt): 1) prior to starting work; 2) when changing tasks; and 3) throughout the day. Focus on each new task, procedures, and skill sets to be used.		
[1] JOB TASKS	**[2] POTENTIAL HAZARDS**	**[3] HAZARD CONTROLS (beyond wearing "Required" PPE)**
2) Staging Soil	a. Bad organization creating confusion and hazard.	a1. Identify staging area with good lateral and vertical access for loading and unloading of trucks.
	b. Physical injury from falling or flying objects.	b1. Always conduct Safe Performance Self-Assessment (SPSA) prior to start of, or change in each work procedure or task. b2. Wear appropriate PPE including hardhats, safety glasses, and any additional PPE as directed by the SSO.
	c. Noise.	c1. All personnel will use hearing protection within work area while heavy machinery is operating at >85 dB.
	d. Being struck by moving vehicles or equipment onsite.	d1. Always wear safety vest, establish eye contact with operators utilizing flag men wear appropriate. d2. Vehicles shall use reverse beepers or flagmen. d3. Create an exclusion zone at least 10-feet beyond the limits of the boring to limit access to staging/work area using snow fencing, barricades, delineators, cones and/or caution tape. d4. Face the direction of oncoming traffic during work activities when possible.
	e. Equipment tip over.	e1. Watch equipment location & swing points; monitor live & dead loads. e2. Use a crane that is adequate for the load (Check loading capacity with operator and manual).
	f. Toxic or explosive atmosphere.	f1. Periodically monitor ambient atmosphere with PID or LEL meter. Shut down job and move personnel and equipment upwind if concentrations are detected above HASP defined action levels.
	g. Slips, trips, and falls.	g1. Maintain a clean, unobstructed work area by good housekeeping and placing unused equipment away from work area.
	h. Unauthorized personnel in exclusion zone.	h1. Use visitor check-in log and allow no-one in exclusion area without proper PPE (as defined on this JSA) and training documentation (e.g., HAZWOPER, other as defined in the HASP).
3) Loading of Hydrocarbon Impacted Soil/Debris	a. Physical injury from falling or flying objects.	a1. Always conduct Safe Performance Self-Assessment (SPSA) prior to start of, or change in each work procedure or task. a2. Wear appropriate PPE including hardhats, safety glasses, and any additional PPE as directed by the SSO.
	b. Noise.	b1. All personnel will use hearing protection within work area while heavy machinery is operating at >85 dB.

Always perform a Safety Assessment (Hazard Hunt): 1) prior to starting work; 2) when changing tasks; and 3) throughout the day. Focus on each new task, procedures, and skill sets to be used.		
[1] JOB TASKS	**[2] POTENTIAL HAZARDS**	**[3] HAZARD CONTROLS (beyond wearing "Required" PPE)**
3) Cont'd	c. Being struck by moving vehicles or equipment onsite.	c1. Always wear safety vest, establish eye contact with operators utilizing flag men wear appropriate. c2. Vehicles shall use reverse beepers or flagmen. c3. Create an exclusion zone at least 10-feet beyond the limits of the boring to limit access to staging/work area using snow fencing, barricades, delineators, cones and/or caution tape. c4. Face the direction of oncoming traffic during work activities when possible.
	d. Cut/pinched fingers or toes; and strained muscles.	d1. See PPE Quick Summary. d2. Use proper lifting techniques and 2-man rule as outlined in TRC's Employee IIPP Handbook and "Back Safety: A User's Guide" training module" handbook, when moving heavy objects (>40 lbs).
	e. Equipment tip over.	e1. Watch equipment location & swing points. Monitor live & dead loads adjacent to the excavation. e2. Maintain 2-foot safety buffer at edge of excavation.
	f. Toxic or explosive atmosphere.	f1. Periodically monitor ambient atmosphere with PID or LEL meter. Shut down job and move personnel and equipment upwind if concentrations are detected above HASP defined action levels.
	g. Slips, trips, and falls.	g1. Maintain a clean, unobstructed work area by good housekeeping and placing unused equipment away from work area.
	h. Unauthorized personnel in exclusion zone.	h1. Use visitor check-in log and allow no-one in exclusion area without proper PPE (as defined on this JSA) and training documentation (e.g., HAZWOPER, other as defined in the HASP).
4) Clean-up	a. Slips, trips, and falls.	a1. Maintain a clean, unobstructed work area by good housekeeping and placing unused equipment away from work area.
	b. Storm water run-off.	b1. Cover all impacted spoils piles and berm to contain storm water run-off.
	c. Soil cross contamination.	c1. Ensure downhole sampling equipment is cleaned between samples. c2. Create a clean sample collection area with removable poly sheeting/aluminum foil or other method ensure a clean work surface that is refreshed between each sample.
	LOCATION(S) WHERE HAZARD IS TO BE EXPECTED	**[3] HAZARD CONTROLS (beyond wearing "Required" PPE)**
1.	a.	a.
2.	a.	a.
3.	a.	a.

PID—photoionization detector; LEL—lower explosive limit; PPE—Personal Protective Equipment; ANSI—American National Standards Institute

Field Notes:

LIMITATION: As part of TRC's EHS Policy, a JSA is provided by TRC for its employees. The purpose of a JSA is NOT to identify all hazards associated with a task, but to identify key potential hazards to get TRC and other onsite personnel thinking about other potential safety hazards and mitigating actions for unsafe conditions and behavior during various works. TRC recognizes that JSA's may not cover every conceivable step or hazard that emerges during a job, so we've provided a "Field Change" section below to amend a JSA if required. The JSA does not supersede or replace any local, state or federal permit, regulation, statute or other entities policies and procedures but is simply a tool for enhancing the execution of safe work at a jobsite under TRC's supervision. Similarly, all subcontractors are required to provide their own JSA(s) for their specialty prior to performing any work for TRC or its customers in accordance with TRC's EHS Policy; however, any unsafe condition or hazard not covered in any JSA is ultimately the direct responsibility of the person or entity performing the work.

Soil Sampling Job Safety Analysis (JSA)

COMPANY/ PROJECT NAME or ID/ LOCATION (City, State)	DATE PREPARED FOR HASP:	☐ NEW ☒ REVISED
TRC/ LAUSD Roosevelt High School (Los Angeles, CA)		

JSA WORK ACTIVITY (Description):	List of Contractor(s) and key work activity:
Soil Sampling	

SITE SPECIFIC JSA AUTHOR	POSITION / TITLE	DEPT	SIGNATURE

TRC HEALTH AND SAFETY MANAGEMENT	POSITION / TITLE	APPROVAL DATE

PERSONAL PROTECTION EQUIPMENT (PPE) QUICK SUMMARY
Required PPE (indicate with "R") vs. Must Have Available On-site (indicate "A")

__R__ REFLECTIVE VEST __R__ HARD HAT __R__ GLOVES: **ANSI Cut 4 Kevlar** __R__ SAFETY GLASSES _____ GOGGLES _____ FACE SHIELD	__A__ HEARING PROTECTION __R__ SAFETY SHOES: Protective Toe _____ 5pt.HARNESS / LANYARD PPE CLOTHING: ____ Coveralls ____ Tyvek Suit ____ Nomex ____ Other (specify):	RESPIRATORY PROTECTION: ☒ NA _____ Dust Mask _____ ½ face Air Purifying Respirator (APR) _____ Particulate Mask: ☐ PM100 ☐ PM95 _____ Cartridge: ☐ P100-Multigas ☐ _____ _____ Full face ARP; specify cartridge type: _____ Air Supplied Respirator ____ SCBA _____ Air-line	Additional PPE/Notes:

Always perform a Safety Assessment (Hazard Hunt): 1) prior to starting work; 2) when changing tasks; and 3) throughout the day. Focus on each new task, procedures, and skill sets to be used.

[1] JOB TASKS	[2] POTENTIAL HAZARDS	[3] HAZARD CONTROLS (beyond wearing "Required" PPE)
1) Set-up	a. Slips, trips, and falls.	a1. Maintain a clean, unobstructed work area by good housekeeping and placing unused equipment away from work area.
	b. Being struck by moving vehicles or equipment onsite.	b1. Always wear safety vest, establish eye contact with operators utilizing flag men wear appropriate. b2. Vehicles shall use reverse beepers or flagmen. b3. Face the direction of oncoming traffic during work activities when possible.
	c. Contamination.	c1. Wear nitrile or latex gloves with ANSI cut level 4 Kevlar gloves underneath when handling soil.
	d. Fire and explosion.	d1. No smoking or open flame. Periodically monitor ambient air concentrations with PID/LEL Meters. Shut down job and move personnel and equipment upwind if hydrocarbon concentrations are HASP defined action levels.

Always perform a Safety Assessment (Hazard Hunt): 1) prior to starting work; 2) when changing tasks; and 3) throughout the day. Focus on each new task, procedures, and skill sets to be used.		
[1] JOB TASKS	**[2] POTENTIAL HAZARDS**	**[3] HAZARD CONTROLS (beyond wearing "Required" PPE)**
2) Soil Sampling	a. Slips, trips, and falls.	a1. Maintain a clean, unobstructed work area by good housekeeping and placing unused equipment away from work area.
	b. Being struck by moving vehicles or equipment onsite.	b1. Always wear safety vest, establish eye contact with operators utilizing flag men wear appropriate. b2. Vehicles shall use reverse beepers or flagmen. b3. Create an exclusion zone at least 10-feet beyond the limits of the boring to limit access to staging/work area using snow fencing, barricades, delineators, cones and/or caution tape. b4. Face the direction of oncoming traffic during work activities when possible.
	c. Contamination.	c1. Wear nitrile or latex gloves with ANSI cut level 3 or 4 Kevlar gloves underneath when handling soil. Wear Safety glasses with splash guards when handling groundwater.
	d. Potential cross-contamination of soil sampling equipment	d1. Collect soil samples (if possible) from mounded soil that is not in contact with metal. d2. Ensure soil samples are capped and placed in a clean, secure area after collection
	c. Fire and explosion.	c1. No smoking or open flame. Periodically monitor ambient air concentrations with PID/LEL Meters. Shut down job and move personnel and equipment upwind if hydrocarbon concentrations are HASP defined action levels. c2. Deploy a 10 or 20lb ABC Fire extinguishers.
	d. Inhalation/ingestion/ thermal contact	d1. No food or drinks in work zone.
	LOCATION(S) WHERE HAZARD IS TO BE EXPECTED	**[3] HAZARD CONTROLS (beyond wearing "Required" PPE)**
1.	a.	a.
2.	a.	a.
3.	a.	a.

PID—photoionization detector; LEL—lower explosive limit; PPE—Personal Protective Equipment; ANSI—American National Standards Institute

Field Notes:_____

_____

LIMITATION: As part of TRC's EHS Policy, a JSA is provided by TRC for its employees. The purpose of a JSA is NOT to identify all hazards associated with a task, but to identify key potential hazards to get TRC and other onsite personnel thinking about other potential safety hazards and mitigating actions for unsafe conditions and behavior during various works. TRC recognizes that JSA's may not cover every conceivable step or hazard that emerges during a job, so we've provided a "Field Change" section below to amend a JSA if required. The JSA does not supersede or replace any local, state or federal permit, regulation, statute or other entities policies and procedures but is simply a tool for enhancing the execution of safe work at a jobsite under TRC's supervision. Similarly, all subcontractors are required to provide their own JSA(s) for their specialty prior to performing any work for TRC or its customers in accordance with TRC's EHS Policy; however, any unsafe condition or hazard not covered in any JSA is ultimately the direct responsibility of the person or entity performing the work.

Backfilling and Compaction Job Safety Analysis (JSA)

COMPANY/ PROJECT NAME or ID/ LOCATION (City, State)	DATE PREPARED FOR HASP:	☐ NEW ☒ REVISED
TRC/LAUSD Roosevelt HS (Los Angeles, CA)		
JSA WORK ACTIVITY (Description): **Backfilling and Compaction**	List of Contractor(s) and key work activity:	

SITE SPECIFIC JSA AUTHOR	POSITION / TITLE	DEPT	SIGNATURE

TRC HEALTH AND SAFETY MANAGEMENT	POSITION / TITLE	APPROVAL DATE
	OSC	

PERSONAL PROTECTION EQUIPMENT (PPE) QUICK SUMMARY
Required PPE (indicate with "R") vs. Must Have Available On-site (indicate "A")

__R__ REFLECTIVE VEST __R__ HARD HAT __R__ GLOVES: **ANSI Cut Level 4 & 5 Kevlar** __R__ SAFETY GLASSES _____ GOGGLES _____ FACE SHIELD	__A__ HEARING PROTECTION __R__ SAFETY SHOES: Protective Toe _____ 5pt.HARNESS / LANYARD PPE CLOTHING: ____Coveralls ____Tyvek Suit ____Nomex ____Other (specify):	RESPIRATORY PROTECTION: ☐ NA __A__ Dust Mask __A__ ½ face Air Purifying Respirator (APR) __X__ Particulate Mask: ☒ PM100 ☐ PM95 __X__ Cartridge: ☒ P100-Multigas ☐ _____ _____ Full face ARP; specify cartridge type: _____ Air Supplied Respirator ____SCBA _____Air-line	Additional PPE: .

Always perform a Safety Assessment (Hazard Hunt): 1) prior to starting work; 2) when changing tasks; and 3) throughout the day. Focus on each new task, procedures, and skill sets to be used.

[1] JOB TASKS	[2] POTENTIAL HAZARDS	[3] HAZARD CONTROLS (beyond wearing "Required" PPE)
1) Set-up Activities Backhoe/ Excavator (Compactor & Material Delivery)	a. Lack of concentration or focus.	a1. Review all plans (HASP, Work, Utility, Site Plans, etc.), logs, and field notes prior to starting a new task. Identify daily tasks and required personnel actions. a2. Conduct safety tailgate meeting with subcontractor personnel prior to beginning work activities. Explain the site safety hazards and work precautions outlined in the HASP and obtain signatures indicating the HASP was discussed.
	b. Fire and explosion.	b1. No smoking or open flame. Periodically monitor ambient air concentrations with PID/LEL Meters. Shut down job and move personnel and equipment upwind if hydrocarbon concentrations are HASP defined action levels. b2. Deploy 2-20lb ABC Fire extinguishers in accordance site safety officer's direction.
	c. Electric shock/ electrocution.	c1. De-energize all circuits/power sources and follow TRC's CP005 Lockout-Tagout Program for circuits within 3-feet of boring location or 10-feet' of overhead utilities.
	d. Malfunctioning heavy equipment safety devices.	d1. Inspect drill rig to determine if in good condition. Perform all equipment and safety device checks prior to event startup (per operating manual).

COMPANY/ PROJECT NAME or ID/ LOCATION (City, State) **TRC/LAUSD Roosevelt HS (Los Angeles, CA)**	DATE PREPARED FOR HASP:	☐ NEW ☒ REVISED
JSA WORK ACTIVITY (Description): **Backfilling and Compaction**	List of Contractor(s) and key work activity:	

1) Cont'd	e. Being struck by moving vehicles or equipment onsite.	e1. Always wear safety vest, establish eye contact with operators utilizing flag men wear appropriate. e2. Vehicles shall use reverse beepers or flagmen. e3. Create an exclusion zone at least 10-feet beyond the limits of the boring to limit access to staging/work area using snow fencing, barricades, delineators, cones and/or caution tape. e4. Face the direction of oncoming traffic during work activities when possible.
	f. Bad organization creating confusion and hazard.	f1. Identify staging area with good lateral and vertical access for loading and unloading of trucks.
2) Compacting Soil	a. Physical injury from equipment.	a1. Wear appropriate ANSI cut level 4 Kevlar gloves when working around moving equipment.
	b. Physical injury from falling or flying objects.	b1. Always conduct Safe Performance Self-Assessment (SPSA) prior to start of, or change in each work procedure or task. b2. Wear appropriate PPE including hardhats, safety glasses, and any additional PPE as directed by the SSO.
	c. Being struck by moving vehicles or equipment onsite.	c1. Always wear safety vest, establish eye contact with operators utilizing flag men wear appropriate. c2. Vehicles shall use reverse beepers or flagmen. c3. Create an exclusion zone at least 10-feet beyond the limits of the boring to limit access to staging/work area using snow fencing, barricades, delineators, cones and/or caution tape. c4. Face the direction of oncoming traffic during work activities when possible.
	d. Poor or miscommunications.	d1. Review and use hazard communications contained HASP to prepare for working in loud or hazardous environment.
	e. Cut/pinched fingers or toes; and strained muscles.	e1. See PPE Quick Summary. e2. Use proper lifting techniques and 2-man rule as outlined in TRC's Manual Lifting Policy and "Back Safety: A User's Guide" training module", when moving heavy objects (>40 lbs).

Always perform a Safety Assessment (Hazard Hunt): 1) prior to starting work; 2) when changing tasks; and 3) throughout the day. Focus on each new task, procedures, and skill sets to be used.		
[1] JOB TASKS	[2] POTENTIAL HAZARDS	[3] HAZARD CONTROLS (beyond wearing "Required" PPE)
2) Cont'd	f. Equipment tip over.	f1. Watch equipment location & swing points; monitor live & dead loads. f2. Use a crane that is adequate for the load (Check loading capacity with operator and manual).
	g. Noise.	g1. All personnel will use hearing protection within work area while heavy machinery is operating at >85 dB.
	h. Cuts and abrasions.	H1. Wear ANSI cut level 4 or 5 Kevlar gloves when working with hand tools or picking up debris.
	b. Physical injury from equipment.	b1. Wear appropriate ANSI cut level 4 Kevlar gloves when working around moving equipment.
	i. Backfilling and compaction.	i1. Clear unusable detritus (roots, trash, concrete chunks, etc.) from soil to be reused as backfill to allow for proper compaction. i2. Support all exposed utilities and hand fill around piping runs. i3. When backfilling, place at least 1-foot of backfill over utility line before compacting to prevent crushing/breaking utility line. i4. Wet soil down to properly compact, do not over saturate.
	j. Back strain, muscle fatigue objects.	j1. Use proper lifting techniques and 2-man rule when moving heavy objects (>40 lbs). j2. When hand digging, use the leverage in the shovel handle to break the soil loose, and don't force it out.
	d. Cut/pinched fingers or toes; and strained muscles.	d1. See PPE Quick Summary. d2. Use proper lifting techniques and 2-man rule as outlined in TRC's Manual Lifting Policy and "Back Safety: A User's Guide" training module", when moving heavy objects (>40 lbs).
3) Clean-up and Overnight/ Over Weekend Storage	a. Slips, trips, and falls.	a1. Maintain a clean, unobstructed work area by good housekeeping and placing unused equipment away from work area.
	b. Bad organization creating confusion and hazard.	b1. Identify staging area with good lateral and vertical access for loading and unloading of trucks.
	c. Run-off.	c1. Cover all soil stockpiles with plastic-sheeting overnight. c2. Delineate and block access to open pits/trenches with snow-fencing, delineators, and caution tape. c3. Cover open trenches with plastic sheet and berm around to reduce water run-off in the case of rain.

Always perform a Safety Assessment (Hazard Hunt): 1) prior to starting work; 2) when changing tasks; and 3) throughout the day. Focus on each new task, procedures, and skill sets to be used.		
[1] JOB TASKS	[2] POTENTIAL HAZARDS	[3] HAZARD CONTROLS (beyond wearing "Required" PPE)
	LOCATION(S) WHERE HAZARD IS TO BE EXPECTED	[3] HAZARD CONTROLS (beyond wearing "Required" PPE)
1.	a.	a.
2.	a.	a.
3.	a.	a.

PID—photoionization detector; LEL—lower explosive limit; PPE—Personal Protective Equipment; ANSI—American National Standards Institute

Field Notes:

LIMITATION: As part of TRC's EHS Policy, a JSA is provided by TRC for its employees. The purpose of a JSA is NOT to identify all hazards associated with a task, but to identify key potential hazards to get TRC and other onsite personnel thinking about other potential safety hazards and mitigating actions for unsafe conditions and behavior during various works. TRC recognizes that JSA's may not cover every conceivable step or hazard that emerges during a job, so we've provided a "Field Change" section below to amend a JSA if required. The JSA does not supersede or replace any local, state or federal permit, regulation, statute or other entities policies and procedures but is simply a tool for enhancing the execution of safe work at a jobsite under TRC's supervision. Similarly, all subcontractors are required to provide their own JSA(s) for their specialty prior to performing any work for TRC or its customers in accordance with TRC's EHS Policy; however, any unsafe condition or hazard not covered in any JSA is ultimately the direct responsibility of the person or entity performing the work.

Compaction Testing Job Safety Analysis (JSA)

COMPANY/ PROJECT NAME or ID/ LOCATION (City, State)	DATE PREPARED FOR HASP:	☐ NEW
TRC/LAUSD Roosevelt HS (Los Angeles, CA)		☒ REVISED
JSA WORK ACTIVITY (Description):	List of Contractor(s) and key work activity:	
Compaction Testing		

SITE SPECIFIC JSA AUTHOR	POSITION / TITLE	DEPT	SIGNATURE

TRC HEALTH AND SAFETY MANAGEMENT	POSITION / TITLE	APPROVAL DATE
	OSC	

PERSONAL PROTECTION EQUIPMENT (PPE) QUICK SUMMARY
Required PPE (indicate with "R") vs. Must Have Available On-site (indicate "A")

__R__ REFLECTIVE VEST __R__ HARD HAT __R__ GLOVES: **ANSI Cut Level 4 & 5 Kevlar** __R__ SAFETY GLASSES _____ GOGGLES _____ FACE SHIELD	__A__ HEARING PROTECTION __R__ SAFETY SHOES: Protective Toe _____ 5pt.HARNESS / LANYARD PPE CLOTHING: ____Coveralls ____Tyvek Suit ____Nomex ____Other (specify):	RESPIRATORY PROTECTION: ☐ NA __R__ ½ face Air Purifying Respirator (APR) __X__ Particulate Mask: ☒ PM100 ☐ PM95 __X__ Cartridge: ☒ P100-Multigas ☐ _____ _____ Full face ARP; specify cartridge type: _____ Air Supplied Respirator ____SCBA ____Air-line	Additional PPE/Notes: As per defined in the job/site specific Health and Safety Plan (HASP) wear PPE at all times when performing site work.

Always perform a Safety Assessment (Hazard Hunt): 1) prior to starting work; 2) when changing tasks; and 3) throughout the day. Focus on each new task, procedures, and skill sets to be used.

[1] JOB TASKS	[2] POTENTIAL HAZARDS	[3] HAZARD CONTROLS (beyond wearing "Required" PPE)
1) Set-up Activities (Compactor & Material Delivery)	a. Physical Injury or equipment damage from lack of concentration or focus.	a1. Review all plans (HASP, Work, Utility Plans, etc.) and logs in field notebook prior to starting a new task.
	a. Lack of concentration or focus.	a1. Review all plans (HASP, Work, Utility, Site Plans, etc.), logs, and field notes prior to starting a new task. Identify daily tasks and required personnel actions. a2. Conduct safety tailgate meeting with subcontractor personnel prior to beginning work activities. Explain the site safety hazards and work precautions outlined in the HASP and obtain signatures indicating the HASP was discussed.
	b. Physical injury from equipment.	b1. Wear appropriate ANSI cut level 4 Kevlar gloves when working around moving equipment.

Always perform a Safety Assessment (Hazard Hunt): 1) prior to starting work; 2) when changing tasks; and 3) throughout the day. Focus on each new task, procedures, and skill sets to be used.		
[1] JOB TASKS	**[2] POTENTIAL HAZARDS**	**[3] HAZARD CONTROLS (beyond wearing "Required" PPE)**
1) Cont'd	b. Being struck by moving vehicles or equipment onsite.	b1. Always wear safety vest, establish eye contact with operators utilizing flag men wear appropriate. b2. Vehicles shall use reverse beepers or flagmen. b3. Create an exclusion zone at least 10-feet beyond the limits of the boring to limit access to staging/work area using snow fencing, barricades, delineators, cones and/or caution tape. b4. Face the direction of oncoming traffic during work activities when possible.
	c. Bad organization creating confusion and hazard.	c1. Identify staging area with good lateral and vertical access for loading and unloading of trucks.
2) Compaction Testing	a. Physical injury from falling or flying objects.	a1. Always conduct Safe Performance Self-Assessment (SPSA) prior to start of, or change in each work procedure or task. a2. Wear appropriate PPE including hardhats, safety glasses, and any additional PPE as directed by the SSO.
	b. Being struck by moving vehicles or equipment onsite.	b1. Always wear safety vest, establish eye contact with operators utilizing flag men wear appropriate. b2. Vehicles shall use reverse beepers or flagmen. b3. Create an exclusion zone at least 10-feet beyond the limits of the boring to limit access to staging/work area using snow fencing, barricades, delineators, cones and/or caution tape. b4. Face the direction of oncoming traffic during work activities when possible.
	c. Poor or Miscommunications.	c1. Review and use hazard communications contained HASP to prepare for working in loud or hazardous environment.
	d. Cut/pinched fingers or toes; and strained muscles.	d1. See PPE Quick Summary. d2. Use proper lifting techniques and 2-man rule as outlined in TRC's Manual Lifting Policy and "Back Safety: A User's Guide" training module", when moving heavy objects (>40 lbs).
	e. Equipment tip over.	e1. Watch equipment location & swing points. Monitor live & dead loads adjacent to the excavation. e2. Maintain 2-foot safety buffer at edge of excavation.

Always perform a Safety Assessment (Hazard Hunt): 1) prior to starting work; 2) when changing tasks; and 3) throughout the day.

[1] JOB TASKS	[2] POTENTIAL HAZARDS	[3] HAZARD CONTROLS (beyond wearing "Required" PPE)
2) Cont'd	f. Noise.	f1. All personnel will use hearing protection within work area while heavy machinery is operating at >85 dB.
LOCATION(S) WHERE HAZARD IS TO BE EXPECTED		**[3] HAZARD CONTROLS (beyond wearing "Required" PPE)**
1.	a.	a.
2.	a.	a.
3.	a.	a.

PID—photoionization detector; LEL—lower explosive limit; PPE—Personal Protective Equipment; ANSI—American National Standards Institute

Field Notes:

LIMITATION: As part of TRC's EHS Policy, a JSA is provided by TRC for its employees. The purpose of a JSA is NOT to identify all hazards associated with a task, but to identify key potential hazards to get TRC and other onsite personnel thinking about other potential safety hazards and mitigating actions for unsafe conditions and behavior during various works. TRC recognizes that JSA's may not cover every conceivable step or hazard that emerges during a job, so we've provided a "Field Change" section below to amend a JSA if required. The JSA does not supersede or replace any local, state or federal permit, regulation, statute or other entities policies and procedures but is simply a tool for enhancing the execution of safe work at a jobsite under TRC's supervision. Similarly, all subcontractors are required to provide their own JSA(s) for their specialty prior to performing any work for TRC or its customers in accordance with TRC's EHS Policy; however, any unsafe condition or hazard not covered in any JSA is ultimately the direct responsibility of the person or entity performing the work.

COMPANY/ PROJECT NAME or ID/ LOCATION (City, State) **TRC/ LAUSD Roosevelt High School (Los Angeles, CA)**	DATE PREPARED:	☐ NEW ☒ REVISED
JSA WORK ACTIVITY (Description): **55 Gallon Drum Transport/Handling**	List of Contractor(s) and key work activity:	

SITE SPECIFIC JSA AUTHOR	POSITION / TITLE	DEPT	SIGNATURE

"TRC APPROVED" JSA DEVELOPMENT TEAM	POSITION / TITLE	APPROVAL DATE

Required PPE (indicate with "R") vs. Must Have Available On-site (indicate "A")

__R__ REFLECTIVE VEST __A__ HARD HAT __R__ GLOVES: **ANSI Cut Level 4 & 5 Kevlar** __R__ SAFETY GLASSES _____GOGGLES _____FACE SHIELD	____ HEARING PROTECTION __R__ SAFETY SHOES: Protective Toe _____ 5pt.HARNESS / LANYARD PPE CLOTHING: ____Coveralls ____Tyvek Suit ____Nomex ____Other (specify):	RESPIRATORY PROTECTION: ☒ NA _____½ face Air Purifying Respirator (APR) _____Particulate Mask: ☐ PM100 ☐ PM95 ____ Cartridge: ☐ P100-Multigas ☐ _____ _____Full face ARP; specify cartridge type: _____ Air Supplied Respirator ____SCBA _____Air-line	Additional PPE:

Always perform a Safety Assessment: 1) prior to starting work; 2) when changing tasks; and 3) throughout the day. Focus on each new task, procedures, and skill sets to be used.

[1] JOB TASKS	[2] POTENTIAL HAZARDS	[3] HAZARD CONTROLS (beyond wearing "Required" PPE)
1. Setup	a. Slip/trips/falls	a. Maintain a clean, unobstructed work area by good house keeping. Move unused equipment away from designated work area.
	b. Drum Condition	b. Inspect all drums prior to use. Make sure that drums do not have any defect and lids fit tightly.
2. Drum opening/ closing	a. Cut/pinched fingers or toes	a. Utilize proper PPE (see above), ANSI cut level 4 or 5 Kevlar gloves, safety shoes and safety glasses are minimum required protection. a. Wear ANSI cut level 4 or 5 Kevlar gloves during the opening and closing of drums to protect fingers.
3. Transport/handling drums	a. Physical injury (back strain, moving vehicles, pinch points)	a. Make sure to utilize drum dolly when handling drums with soil, grout, concrete or water (or any other material). a. If moving drum on an uneven, inclined or declined surface, utilize a spotter to assist. a. Have one person watch traffic while the other exits exclusion zone. a. Always wear safety vest, establish eye contact with vehicle/equipment operators, utilizing flag men where appropriate.
	b. Environmental Hazard	b. Once material is placed in drum, inspect for leaks. b. Before transporting/handling drum, make sure that the lid is fully secure. b. Make sure to properly label drum (i.e., hazardous, non-hazardous labels, etc.)
4. Drum Storage	a. Security	a. Drums that are left onsite need to be stored in safe location (i.e., away from traffic, pedestrian walkways, etc.). Do not leave drums in handicap parking stalls. a. If drums are stored in an area that is accessible, delineate storage area with caution tape.

LOCATION(S) WHERE HAZARD IS TO BE EXPECTED	POTENTIAL HAZARD	[3] HAZARD CONTROLS (beyond wearing "Required" PPE)
1.	a.	a.
2.	a.	a.
3.	a.	a.

Field Notes:

LIMITATION: As part of TRC's EHS Policy, a JSA is provided by TRC for its employees. The purpose of a JSA is NOT to identify all hazards associated with a task, but to identify key potential hazards to get TRC and other onsite personnel thinking about other potential safety hazards and mitigating actions for unsafe conditions and behavior during various works. TRC recognizes that JSA's may not cover every conceivable step or hazard that emerges during a job, so we've provided a "Field Change" section below to amend a JSA if required. The JSA does not supersede or replace any local, state or federal permit, regulation, statute or other entities policies and procedures but is simply a tool for enhancing the execution of safe work at a jobsite under TRC's supervision. Similarly, all subcontractors are required to provide their own JSA(s) for their specialty prior to performing any work for TRC or its customers in accordance with TRC's EHS Policy; however, any unsafe condition or hazard not covered in any JSA is ultimately the direct responsibility of the person or entity performing the work.

ATTACHMENT F

PRE-JOB SAFETY BRIEFING

Daily Pre Job Safety Briefing

Project Name: LAUSD Roosevelt High School Project Number: _____

Work Location: 456 Mathews Street, Los Angeles, CA Date: _____

Tasks Performed: _____ Time: _____ AM PM

Client Name: LAUSD Submitted By: _____

HASP Available Onsite: Yes ☐ No ☐ Emergency Meeting Location: _____

Emergency Facility(s): White Memorial Medical Center Number(s): 310.900.8900

Physical Address: 1720 East Cesar E Chavez Avenue, Los Angeles, CA

First Aid/CPR Persons: _____

For Emergencies Dial 911/For Non-Emergencies Dial WorkCare (888) 449-7787

Personal Protective Equipment Required	Yes	No	Type
Fall Protection	☐	☐	_____
body harness, lifelines, barricades, other (specify)			
Eye/Face	☐	☐	_____
goggles, face shield, hood, other (specify)			
Respirator	☐	☐	_____
SCBA, supplied air, HEPA, dust, other (specify)			
Foot Protection	☐	☐	_____
safety toe, EH rated, rubber boots, other (specify)			
Hand Protection	☐	☐	_____
leather, cut resistant, chemical, EH, other (specify)			
Head Protection	☐	☐	_____
hard hat, helmet, electrical hazard, other (specify)			
Clothing	☐	☐	_____
coveralls, welding, sleeves, rain, FR, reflective vest, chemical, other (specify)			
Hearing Protection	☐	☐	_____

Procedures/Programs Required	Yes	No
Hot Work	☐	☐
LOTO/Energy Control	☐	☐
Trenching/Excavation	☐	☐
Signs/Barricades	☐	☐
Confined Space	☐	☐
Cranes/Critical Lifts	☐	☐
Line Breaking/Hot Tap	☐	☐
Scaffolds/Aerial Lifts	☐	☐
System Testing/ Grounding	☐	☐
Employee Certification/Training Required		
Crane Operator	☐	☐
Forklift Operator	☐	☐
Mobile Equipment Operator	☐	☐
Railroad/eRailsafe	☐	☐
OSHA 10/30	☐	☐
HAZWOPER	☐	☐
MSHA	☐	☐

Additional Considerations

Work Procedures:

☐ Check for utility clearance ☐ Adequate work zone

☐ Vehicle grounds ☐ Working clearances

☐ Discuss potential exposure to hazards

People: ☐ Worker fatigue ☐ Other work groups

☐ Public safety ☐ Pedestrian control ☐ Experience

☐ Traffic control ☐ Other utilities ☐ Spec. Training

Tools/Equipment: ☐ Inspection of drilling equipment

☐ Inspection of hoses

☐ Inspection of tools

☐ Specialized tools/equipment

☐ Correct tool/equipment for the job

Special Precautions: ☐ Adjacent structures

☐ Condition of structures ☐ Weather conditions

☐ Lighting conditions ☐ Terrain ☐ Water bodies

☐ Spills and leaks ☐ Environmental ☐ Cultural

Other: _____

If Conditions CHANGE…Stop Work, Review, and Revise the Plan!!

Daily Pre Job Safety Briefing

Hazards Associated with the Job (focus on the GEMS)				
Gravity	**Electrical**	**Mechanical**	**Kinetic**	**Other/Environmental**
☐ Falling from a height ☐ Falling objects ☐ Falling structures ☐ Climbing obstructions ☐ Dangerous trees	☐ Electrical contact ☐ Flash potential ☐ Induced voltage ☐ Utility strike	☐ Equipment failure ☐ Cable tension ☐ Moving parts ☐ Crane/Rigging	☐ Traffic ☐ Driving conditions ☐ Moving/Shifting loads ☐ Rotating machinery ☐ Vehicle stability ☐ Heavy equip. operation	☐ Asbestos/Lead ☐ Animals/Insects ☐ Confined space ☐ Excavations ☐ Heat/Cold ☐ Poisonous Plants

List all hazards associated with this task	**Signatures of Crew Members Present**
Barriers to eliminate/control above hazards?	

Site-Specific Health & Safety Plan (HSP)
LAUSD Roosevelt High School
November 2017

ATTACHMENT G

WORKCARE PROGRAM INFORMATION

EARLY INCIDENT INTERVENTION®

Immediate Access to Medical Advice for Work Related Incidents

(888) 449-7787

INTRODUCTION

WorkCare, Inc. (WorkCare) and TRC have partnered together to promote Incident Intervention®, a resource designed to support company safety goals/targets—while reducing runaway-costs associated with workplace injuries and illnesses.

PURPOSE

Early Incident Intervention provides TRC employees with **IMMEDIATE** telephonic access to WorkCare clinicians at the time of a presumed, non-emergency workplace injury or illness. Clinicians provide expert guidance on the evaluation of symptoms, appropriate first aid, and the need for additional medical evaluation or treatment.

When utilizing this service within the first hour of an incident, known as the "Golden Hour," licensed medical staff can guide the case so that medical evaluation and treatment are rendered appropriately.

> ***"…helps the worker traverse the unpredictable terrain of work-related injuries and illness."***

PRINCIPLES OF EARLY INCIDENT INTERVENTION

- Utilizes principles of the "Golden Hour."
- Provides workers immediate clinician support at the time of an incident.
- Focuses on providing the right care, at the right time in the proper setting.

BENEFITS FOR EMPLOYEES

- Instant access to a medically qualified professional for evaluation of symptoms and possible outcomes.
- Professional guidance on appropriate first aid measures and medications.
- Professional advice regarding the need for additional medical evaluation or treatment.

BENEFITS FOR TRC

- Point of contact for emergency and non-emergency medical clinicians.
- Triages the incident to determine risk and urgency, delivering interventions that are consistent with medical guidelines for the specified injury and illness.
- Maintains communication with clinicians to ensure accurate and timely reporting.

Site-Specific Health & Safety Plan (HSP)
LAUSD Roosevelt High School
November 2017

ATTACHMENT H

TRC's CP024 TRENCH AND EXCAVATION PROGRAM

1. PURPOSE

TRC's Trench and Excavation Compliance Program has been developed based on the Occupational Safety and Health Administration (OSHA) standards for the construction industry (29 CFR 1926, Subpart P – Excavations).

2. SCOPE

This Compliance Program applies to all open excavations made in the earth's surface. Excavations are defined to include trenches. These guidelines apply to all Operating Unit facilities and project sites.

3. DEFINITIONS

Accepted engineering practices: Those requirements which are compatible with standards of practice required by a registered professional engineer.

Aluminum Hydraulic Shoring: A pre-engineered shoring system comprised of aluminum hydraulic cylinders (cross braces) used in conjunction with vertical rails (uprights) or horizontal rails (wales). Such system is designed specifically to support the sidewalls of an excavation and prevent cave-ins.

Bell-bottom pier hole: A type of shaft or footing excavation, the bottom of which is made larger than the cross section above to form a belled shape.

Benching (Benching system): A method of protecting employees from cave-ins by excavating the sides of an excavation to form one or a series of horizontal levels or steps, usually with vertical or near-vertical surfaces between levels.

Cave-in: The separation of a mass of soil or rock material from the side of an excavation, or the loss of soil from under a trench shield or support system, and its sudden movement into the excavation, either by falling or sliding, in sufficient quantity so that it could entrap, bury, or otherwise injure and immobilize a person.

Competent person: One who is capable of identifying existing and predictable hazards in the surroundings, or working conditions which are unsanitary, hazardous, or dangerous to employees, and who has authorization to take prompt corrective measures to eliminate them.

Cross braces: The horizontal members of a shoring system installed perpendicular to the sides of the excavation, the ends of which bear against either uprights or wales.

Excavation: Any man-made cut, cavity, trench, or depression in an earth surface, formed by earth removal.

Faces or Sides: The vertical or inclined earth surfaces formed as a result of excavation work.

Failure: The breakage, displacement, or permanent deformation of a structural member or connection so as to reduce its structural integrity and its supportive capabilities.

Hazardous atmosphere: An atmosphere which by reason of being explosive, flammable, poisonous, corrosive, oxidizing, irritating, oxygen deficient, toxic, or otherwise harmful, may cause death, illness, or injury.

Kick-out: The accidental release or failure of a cross brace.

Protective system: A method of protecting employees from cave-ins, from material that could fall or roll from an excavation face or into an excavation, or from the collapse of adjacent structures. Protective systems include support systems, sloping and benching systems, shield systems, and other systems that provide the necessary protection.

Ramp: An inclined walking or working surface that is used to gain access to one point from another, and is constructed from earth or from structural materials such as steel or wood.

Registered Professional Engineer: A person who is registered as a professional engineer in the state where the work is to be performed. However, a professional engineer, registered in any state is deemed to be a "registered professional engineer" within the meaning of this standard when approving designs for "manufactured protective systems" or "tabulated data" to be used in interstate commerce.

Sheeting: The members of a shoring system that retain the earth in position and in turn are supported by other members of the shoring system.

Shield (Shield system): A structure that is able to withstand the forces imposed on it by a cave-in and thereby protect employees within the structure. Shields can be permanent structures or can be designed to be portable and moved along as work progresses. Additionally, shields can be either premanufactured or job-built in accordance with 1926.652(c)(3) or (c)(4). Shields used in trenches are usually referred to as "trench boxes" or "trench shields."

Shoring (Shoring system): A structure such as a metal hydraulic, mechanical or timber shoring system that supports the sides of an excavation, and which is designed to prevent cave-ins.

Sloping (Sloping system): A method of protecting employees from cave-ins by excavating to form sides of an excavation that are inclined away from the excavation so as to prevent cave-ins. The angle of incline required to prevent a cave-in varies with differences in such factors as the soil type, environmental conditions of exposure, and application of surcharge loads.

Stable rock: Natural solid mineral material that can be excavated with vertical sides and will remain intact while exposed. Unstable rock is considered to be stable when the rock material on the side or sides of the excavation is secured against caving-in or movement by rock bolts or by another protective system that has been designed by a registered professional engineer.

Structural ramp: A ramp built of steel or wood, usually used for vehicle access. Ramps made of soil or rock are not considered structural ramps.

Support system: A structure such as underpinning, bracing, or shoring, which provides support to an adjacent structure, underground installation, or the sides of an excavation.

Tabulated data: Tables and charts approved by a registered professional engineer, and used to design and construct a protective system.

Trench (Trench excavation): A narrow excavation (in relation to its length) made below the surface of the ground. In general, the depth is greater than the width, but the width of a trench (measured at the bottom) is not greater than 15 feet (4.6 m). If forms or other structures are installed or constructed in an excavation so as to reduce the dimension measured from the forms or structure to the side of the excavation to 15 feet (4.6 m) or less (measured at the bottom of the excavation), the excavation is also considered to be a trench.

Trench box: See Shield.

Trench shield: See Shield.

Type A soil: Cohesive soils with an unconfined compressive strength of 1.5 tons per square foot (tsf) or greater. Examples of cohesive soils are clay, silty clay, sandy clay, clay loam, and, in some cases, silty clay loam and sandy clay loam. Cemented soils such as caliche and hard pan are also considered Type A. However, no soil is Type A if:

- The soil is fissured.
- The soil is subject to vibration from heavy traffic, pile driving, or similar effects.
- The soil has been previously disturbed.
- The soil is part of a sloped, layered system where the layers dip into the excavation on a slope of four horizontal to one vertical (4H:1V) or greater.
- The material is subject to other factors that would require it to be classified as a less stable material.

Type B soil**:** Cohesive soil with an unconfined compressive strength greater than 0.5 tsf but less than 1.5 tsf; granular cohesion less soils including angular gravel (similar to crushed rock), silt, silt loam, sandy loam, and in some cases, silty clay loam and sandy clay loam; previously disturbed soils except those that would otherwise be classed as Type C soil; soil that meets the unconfined compressive strength or cementation requirements for Type A but is fissured or subject to vibration; dry rock that is not stable; material that is part of a sloped, layered system where the layers dip into the excavation on a slope less steep than four horizontal to one vertical (4H:1V), but only if the material would otherwise be classified as Type B.

Type C soil: Cohesive soil with an unconfined compressive strength of 0.5 tsf or less; granular soils, including gravel, sand, and loamy sand; submerged soils, including soil from which water is freely seeping; submerged rock that is not stable; material in a sloped, layered system where the layers dip into the excavation at a slope of four horizontal to one vertical (4H:1V) or steeper.

Uprights**:** The vertical members of a trench shoring system placed in contact with the earth and usually positioned so that individual members do not contact each other. Uprights placed so that individual members are closely spaced, in contact with or interconnected to each other, are often called "sheeting."

Wales: Horizontal members of a shoring system placed parallel to the excavation face whose sides bear against the vertical members of the shoring system or earth.

4. RESPONSIBILITIES

4.1 TRC's National Safety Director is responsible for establishing the Trench and Excavation Program requirements and providing/communicating them to the Health and Safety Network. The National Safety Director will review contract documents as required that include project and Client-Specific Requirements.

4.2 The Health and Safety Network is responsible for the Trench and Excavation Program implementation including, but not limited to:

- Qualifying or identifying Competent Person(s) for trench and excavation safety.
- Training new and existing TRC employees.
- Communicating and coordinating TRC's Trench and Excavation Program requirements with all TRC subcontractors, including identification of Subcontractor(s) Competent Person(s).
- Procuring TRC health and safety equipment (harnesses, lanyards, vertical and horizontal lifeline and other materials).
- Working in conjunction with identified Competent Person(s) to provide on-site direction on Trench and Excavation issues.
- Leading all investigations along with the Competent Person, Project Manager, Field Team Leader, and subcontractor health and safety representative or their designees, if a Trench and Excavation Program violation occurs on-site.
- Assisting in Trench and Excavation Program audits in conjunction with on-site TRC subcontractor, and the health and safety representatives or their designees.
- Maintaining records for health and safety activities on-site including equipment inspections and procedural audits of employee Trench and Excavation Program implementation.
- Coordinating assistance during emergency situations.

4.3 OSHA defines a Competent Person as one who is capable of identifying existing and predictable hazards in the surroundings or working conditions which are unsanitary, hazardous, or dangerous to employees, who has authorization to take prompt corrective measures to eliminate them (29 CFR 1926.32[f]). By way of training and/or experience, a Competent Person is knowledgeable of applicable standards, and is capable of identifying workplace hazards related to the specific operation. Under TRC's Trench and Excavation Program the Competent Person will:

- Perform all duties as specified in the Trench and Excavation Program.

- Review and approve all Health and Safety Plans (HASPs) and Job Safety Analyses (JSAs) that include work in and around trenches and excavations.
- In the event of simultaneous operations, cooperate fully with the Subcontractor's Person in Charge.
- Communicate with performing authorities (i.e., employees working in or around trenches or excavations) regarding the presence of other operations on-site.
- Work with Project Manager and/or Field Team Leader to identify and manage the risks associated with the project site.
- Assist in the training of employees who will be performing tasks in and around a trench or excavation.
- Ensure that a rescue plan is established by working with the Project Manager and/or facility safety personnel prior to any employees entering or working around a trench or excavation.
- Provide guidance as required for Trench and Excavation Program issues and questions.
- Coordinate with Project Managers and Health and Safety Network on trench and excavation audits.
- Observe the implementation of Trench and Excavation Program and conduct audits as required or directed.

4.4 The Project Manager is responsible for assisting the Health and Safety Network in the implementation of the Trench and Excavation Program. Project Managers must hold all TRC and other project employees working on-site accountable (zero tolerance policy) for maintaining a safe work environment.

4.5 Project Managers and site employees shall be held accountable for performing work in a safe manner according to the requirements of the Trench and Excavation Program.

4.5.1 The Field Team Leader shall:

- Participate in Trench and Excavation Awareness training.
- Confirm that Competent Personnel prepared and/or reviewed the Site-Specific Rescue Plan if required.
- When required, confirm that everyone working under a specific permit adheres to the permit's documented conditions.

5. PROCEDURE

5.1 General Requirements Permit labor

The following guidelines establish the minimum requirements of the applicable state and federal safety regulations for all work in excavations and trenches that might expose employees to the hazards of moving ground:

- All surface encumbrances adjacent to an excavation that might create a hazard to employees must be removed, secured, or supported as necessary to protect employees.
- The estimated location of underground installations, such as sewer, telephone, electric, water, or other underground utilities must be identified before opening an excavation. Utility companies, owners, and local One Call locator services must be contacted within established or customary local response times, advised of the proposed work, and asked to establish the location of the utility underground installations before the work begins.
- When excavations approach the estimated location of underground installations, the exact location is determined by probing or hand digging, as necessary, to prevent accidental contact with the underground installations. While the excavation is open, underground installations that create a hazard to employees will be supported, protected, or removed as necessary to protect employees.

5.1.1 Access and Egress - Structural ramps.

- Structural ramps that are used solely by employees as a means of access or egress from excavations shall be designed by a competent person. Structural ramps used for access or egress of equipment shall be designed by a competent person qualified in structural design, and shall be constructed in accordance with the design.
- Ramps and runways constructed of two or more structural members shall have the structural members connected together to prevent displacement.
- Structural members used for ramps and runways shall be of uniform thickness.
- Cleats or other appropriate means used to connect runway structural members shall be attached to the bottom of the runway or shall be attached in a manner to prevent tripping.
- Structural ramps used in lieu of steps shall be provided with cleats or other surface treatments o the top surface to prevent slipping.
- Appropriate access and egress in the form of a stairway, ladder, or ramp must be provided in all excavations deeper than 4 feet (1.23 m). In trenches, the stairway, ladder, or ramp must be installed so that a worker does not have to travel farther than 25 feet (7.62 m) in any direction to exit.

- Employees exposed to vehicular traffic must wear safety vests or other equivalent apparel marked with or made of reflectorized or high-visibility material.
- No employee shall be permitted underneath loads handled by lifting or digging equipment. Employees shall be required to stand away from any vehicle being loaded or unloaded to avoid being struck by any spillage or falling materials. Operators may remain in the cabs of vehicles being loaded or unloaded when the vehicles are equipped, in accordance with 1926.601(b)(6), to provide adequate protection for the operator during loading and unloading operations.
- A warning system must be provided when mobile equipment is operated adjacent to an excavation and the operator does not have a clear and direct view of the edge of the excavation. The warning system may include barricades, signals, stop logs, or other authorized methods. If possible, the grade should be away from the excavation.
- When deemed necessary by a competent person, excavations where oxygen deficiency (atmospheres containing less than 19.5 percent oxygen) or a hazardous atmosphere exists or could reasonably be expected to exist, such as in excavations in landfill areas or excavations in areas where hazardous substances are stored nearby, the atmospheres in the excavation shall be tested before employees enter excavations greater than 4 feet (1.22 m) in depth.
- When controls are used that are intended to reduce the level of atmospheric contaminants to acceptable levels, testing shall be conducted as often as necessary to ensure that the atmosphere remains safe.
- Emergency rescue equipment, such as rescue breathing apparatus, a safety harness and line, or a basket stretcher must be available where a hazardous atmosphere exists or could be expected to develop in an excavation.
- Employees entering bell-bottom pier holes, or other similar deep and confined footing excavations, shall wear a harness with a lifeline securely attached to it. The lifeline shall be separate from any line used to handle materials, and shall be individually attended at all times while the employee wearing the lifeline is in the excavation.
- Employees shall not work in excavations in which there is accumulated water, or in excavations in which water is accumulating, unless adequate precautions have been taken to protect employees against the hazards posed by water accumulation. The precautions necessary to protect employees adequately vary with each situation, but could include special support or shield systems to protect from cave-ins, water removal to control the level of accumulating water, or use of a safety harness and lifeline.

- If water is controlled or prevented from accumulating by the use of water removal equipment, the water removal equipment and operations shall be monitored by a competent person to ensure proper operation.
- Inspection of an excavation shall be made by a competent person when accumulation of water is present.
- If excavation work interrupts the natural drainage of surface water (such as streams), diversion ditches, dikes, or other suitable means shall be used to prevent surface water from entering the excavation and to provide adequate drainage of the area adjacent to the excavation. Excavations subject to runoff from heavy rains will require an inspection by a competent person.
- The stability of adjacent structures, such as buildings, walls, and sidewalks must be maintained using a support system as necessary to protect employees.
- Excavation below the level of the base or footing of any foundation or retaining wall that could be reasonably expected to pose a hazard to employees shall not be permitted except when:
    - A support system, such as underpinning, is provided to ensure the safety of employees and the stability of the structure; or
    - The excavation is in stable rock; or
    - A registered professional engineer has approved the determination that the structure is sufficiently removed from the excavation so as to be unaffected by the excavation activity; or
    - A registered professional engineer has approved the determination that such excavation work will not pose a hazard to employees.
- Sidewalks, pavements and appurtenant structure shall not be undermined unless a support system or another method of protection is provided to protect employees from the possible collapse of such structures.
- Employees must be protected from loose rock or soil that could fall or roll into the excavation by placing and keeping such material at least 2 feet (0.61 m) from the edge of the excavation.
- A competent person must make daily inspections of excavations to identify and eliminate conditions that could result in cave-ins, failure of support systems, hazardous atmospheres, or other unsafe conditions. Inspections must be conducted before the start of work each day and after every rainstorm or other occurrence that might increase the hazard of moving ground. If problems are found, provisions should be made for immediate removal of personnel.

- Where the competent person finds evidence of a situation that could result in a possible cave-in, indications of failure of protective systems, hazardous atmospheres, or other hazardous conditions, exposed employees shall be removed from the hazardous area until the necessary precautions have been taken to ensure their safety.
- Where employees or equipment are allowed or required to cross over excavations that are 6 feet
- (1.83 m) or greater in depth, appropriate fall protection in the form of walkways or bridges with standard guardrails must be provided.
- An open excavation or trench that is left open overnight must be barricaded, covered, and secured in a manner that prevents anyone from entering the excavation intentionally or accidentally.

5.2 Protective Systems

Sloping, shoring, or shielding will be provided in excavations, except where the excavation is made in stable rock or the excavation is less than 5 feet (1.52 m) deep and an examination by a competent person does not indicate a potential for cave-in.

5.3 Sloping

When sloping or benching is chosen as the method to protect employees in an excavation, one of the following optional designs of sloping and benching systems must be used:

- Option 1 – Slope the excavation at an angle not steeper than one and one-half horizontal to one vertical (34 degrees measured from the horizontal).
- Option 2 – Perform a soil classification and determine the acceptable slopes required.
- Option 3 – Use a project-specific design prepared by a registered professional engineer.

  Engineered designs must be in writing, be rubber stamped, and must include the name and registration number of the engineer, detailed plans, the calculations used in the design, the magnitude of slopes, and the configurations determined to be safe. A copy of the design will be maintained at the jobsite during the use of the engineered system.

5.4 Shoring or Shielding

Only the following methods for support systems, shield systems, and other protective systems can be used at a TRC jobsite:

- Option 1 – Perform a soil classification and determine the appropriate support, shield or other protective system configuration using the shoring manufacturer’s tabulated data.

When using the manufacturer's tabulated data, the shoring system must be installed in accordance with all the specifications, recommendations, limitations, or approvals to deviate issued by the manufacturer. The manufacturer's tabulated data, specifications, recommendations, limitations, and any approval to deviate must be in writing, and maintained at the jobsite during the use of the shoring system.

- Option 2 – Use a project-specific design prepared by a registered professional engineer.

  Engineered designs must be in writing, be rubber stamped, and include the name and registration number of the engineer, detailed plans, the calculations used in the design, and the sizes, types, and configurations of materials to be used in the support system. A copy of the design must be maintained at the jobsite during the use of the engineered system.

5.5 General Guidelines

The materials and equipment used for protective systems must be free of damage or defects that might impair their proper functions. Manufactured materials and equipment must be used and maintained in accordance with the recommendations of the manufacturer. If material or equipment used in a protective system is damaged, it must be inspected by a competent person before being reused.

The installation and removal of protective systems must be performed in accordance with all of the following guidelines:

- Members of support systems must be securely fastened together to prevent sliding, falling, kick-outs, or other predictable failures.
- Support systems shall be installed and removed in a manner that protects employees from cave-ins, structural collapses, or being struck by members of the support system.
- Individual members of support systems must not exceed their design capacities.
- Before individual members can be removed, additional precautions must be taken to protect employees, including installing other structural members to support any additional load imposed on the support system.
- Removal begins at, and progresses from, the bottom of the excavation. Members must be released slowly to reduce the likelihood of failure of the remaining members or a cave-in.
- Backfilling must progress with the removal of support systems.
- Support systems must be coordinated with the excavation of trenches and must extend to within 2 feet (0.61 m) of the bottom of the trench, but only if the system is designed to resist the forces calculated for the full depth of trench, and there is no indication of a loss of soil from behind or below the bottom of the support system.

- Employees shall not be permitted to work on the faces of sloped or benched excavations at levels above other employees except when employees at the lower levels are adequately protected from the hazard of falling, rolling, or sliding material or equipment.
- Shield systems must not be subjected to loads exceeding their design capacities. Shields must be installed in a manner that restricts lateral or hazardous movement in the event that a lateral load is applied suddenly. Employees must be protected when entering or exiting the areas protected by a shield. Employees are not allowed within the shield during installation, removal, or vertical movement.
- When shield systems are used in trenches, excavation of material may proceed 2 feet (0.61 m) below the bottom of the shield only if the shield is designed to resist the forces calculated for the full depth of trench and there is no indication of a loss of soil from behind or below the bottom of the shield.

5.6 Soil Classification

This section describes a method of classifying soil and rock deposits based on site and environmental conditions, and on the structure and composition of the earth deposits.

- Each soil and rock deposit shall be classified by a competent person as Stable Rock, Type A, Type B, or Type C, in accordance with the definitions set forth in this compliance program.
- Soil and rock deposits are classified based on the results of at least one visual and one manual analysis. These analyses must be conducted by a competent person using the tests described in this chapter or other approved methods of soil classification, such as those adopted by the American Society for Testing Materials (ASTM) or the United States Department of Agriculture (USDA).
- The methods used for visual and manual analyses must provide quantitative and qualitative information sufficient to identify the properties, factors, and conditions of the deposits.
- A layered system must be classified based on the weakest layer. However, each layer may be classified individually when a more stable layer lies below a less stable layer.
- If, after classifying a deposit, the properties, factors, or conditions change in any way, the changes must be evaluated by a competent person. The deposit must be reclassified as necessary to reflect the new circumstances.

5.7 Visual Analysis

The visual analysis is conducted to collect qualitative information about the excavation site in general, the soil adjacent to the excavation, the soil forming the sides of the excavation, and soil samples taken from the excavated material. The visual analysis includes:

- Observing samples of the soil that are excavated and soil in the sides of the excavation to estimate the range of particle sizes and the relative amounts of particle sizes. Fine-grained material is cohesive.
- Observing the soil as it is excavated to determine if it stays in clumps. Soil that breaks up easily and does not stay in clumps is granular.
- Observing sides of the opened excavation and the surface area adjacent to the excavation to identify tension cracks or fissured material.
- Observing the area adjacent to the excavation and the excavation itself to identify existing underground utilities, structures, or previously disturbed soils.
- Observing the opened sides of the excavation to identify layered systems. Examine layered systems to determine if the layers slope toward the excavation, and to estimate the degree of slope in the layers.
- Observing the area adjacent to the excavation and the areas within the excavation to identify potential sources of vibration that might affect the stability of the excavation.
- Observing the area adjacent to the excavation and the sides of the opened excavation for evidence of surface water, water seeping from the sides of the excavation, or the location of the water table.

5.8 Manual Analysis

Manual analysis is conducted to collect quantitative and qualitative information about the properties of the soil, and to provide more information to properly classify the soil. The manual analysis includes some or all of the following methods:

- Evaluating the plasticity of the soil by molding a moist or wet sample of soil into a ball and attempting to roll it into threads as thin as 1/8 inch (0.32 cm) in diameter. Cohesive material can be rolled into a thread at least 2 inches (5.08 cm) long without crumbling or breaking.
- Evaluating the cohesiveness of the soil. If the soil is dry and crumbles into individual grains or fine powder with little or moderate pressure, it is granular. If the soil is dry and falls into clumps that break into smaller clumps but the smaller clumps can only be broken up with difficulty, it might be clay in combination with gravel, sand, or silt. If the dry soil breaks into small clumps that can only be broken with difficulty and there is no visual indication the soil is fissured, the soil may be considered unfissured.

- Applying the thumb penetration test to estimate the unconfined compressive strength of cohesive soils. Type A soils with an unconfined compressive strength of 1.5 tsf can be readily indented by the thumb; however, they can be penetrated by the thumb only with very great effort. Type C soils with an unconfined compressive strength of 0.5 tsf can be easily penetrated several inches by the thumb and can be molded by light finger pressure.
- The thumb test should be conducted on an undisturbed soil sample, such as a large clump of soil, as soon as possible after excavation to minimize the effects of drying. If the excavation is later exposed to rain, flooding, or other moisture, the classification of the soil must be changed accordingly.
- Estimating the unconfined compressive strength of soils by using a pocket penetrometer or a hand-operated shear vane in accordance with the manufacturer's recommendations.
- Performing a drying test to differentiate among cohesive material with fissures, unfissured cohesive material, and granular material. After thoroughly drying a sample of soil that is approximately 1 inch (2.54 cm) thick and 6 inches (15.24 cm) in diameter, evaluate the results as follows:
    - If the sample develops cracks as it dries, significant fissures are indicated.
    - If the sample dries without cracking and can be broken by hand, then the material is either unfissured cohesive or fissured cohesive.
    - If considerable force is necessary to break the sample, the soil has significant cohesive material content. The soil can be classified as unfissured cohesive material, and the unconfined compressive strength should be determined.
    - If the sample breaks easily by hand, it is either a fissured cohesive material or a granular material. To distinguish between the two, pulverize the dried clumps of the sample by hand or by stepping on them. If the clumps do not pulverize easily, the material is cohesive with fissures. If they pulverize easily into very small fragments, the material is granular.

5.9 Sloping and Benching Specifications

This section contains the specifications for using sloping and benching to protect employees working in excavations.

- These slope and bench specifications only apply if a soil classification has been conducted and the excavation will be 20 feet (6.10 m) deep or less.
- Determine the maximum allowable slope and configuration based on the soil classification by using the information in table(s) 1, 2 and 3.

Table 1 Maximum Allowable Slope Based on Soil Classification

SOIL OR ROCK TYPE	MAXIMUM ALLOWABLE SLOPES (H:V)[(1)] FOR EXCAVATIONS LESS THAN 20 FEET DEEP[(3)]
STABLE ROCK	VERTICAL (90º)
TYPE A[(2)]	3/4:1 (53º)
TYPE B	1:1 (45º)
TYPE C	1½:1 (34º)

1. The numbers shown in parentheses next to the maximum allowable slopes are angles expressed in degrees from the horizontal. The angles have been rounded off.
2. A short-term, maximum slope of 1/2:1 (63 degrees) is allowable in excavations in Type A soil less than 12 feet (3.66 m) deep. The short-term maximum allowable slopes for excavations deeper than 12 feet (3.66 m) is 3/4 (53 degrees).
3. Sloping or benching for excavations deeper than 20 feet (6.10 m) must be designed by a registered professional engineer.

Table 2 Excavations in Type A, B, and C Soils

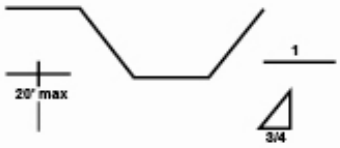
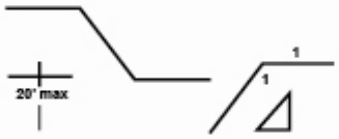
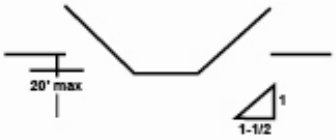
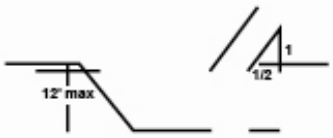
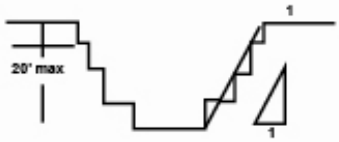
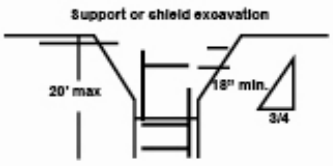
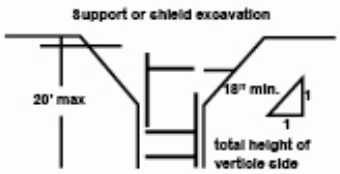
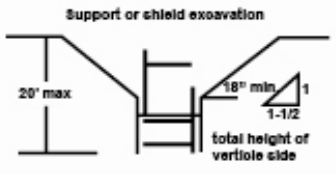
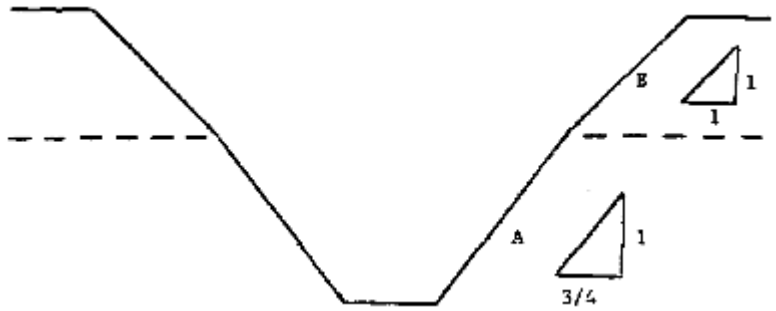
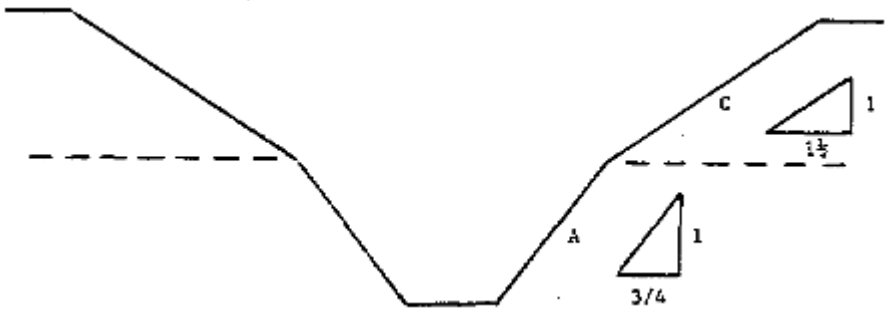
EXCAVATIONS IN TYPE A SOIL	EXCAVATIONS IN TYPE B SOIL	EXCAVATIONS IN TYPE C SOIL
SIMPLE SLOPES LESS THAN 20 FEET DEEP WILL HAVE A MAXIMUM SLOPE OF 3/4:1  SIMPLE SLOPE	SIMPLE SLOPES LESS THAN 20 FEET DEEP WILL HAVE A MAXIMUM SLOPE OF 1:1  SIMPLE SLOPE	SIMPLE SLOPES LESS THAN 20 FEET DEEP WILL HAVE A MAXIMUM SLOPE OF 1-1/2:1  SIMPLE SLOPE
EXCEPTION: SHORT-TERM SIMPLE SLOPES LESS THAN 12 FEET DEEP HAVE A MAXIMUM SLOPE OF 1/2:1  SIMPLE SLOPE SHORT-TERM		
BENCHED EXCAVATIONS LESS THAN 20 FEET DEEP WILL HAVE A MAXIMUM SLOPE OF 3/4:1  SIMPLE BENCH	BENCHED EXCAVATIONS LESS THAN 20 FEET DEEP WILL HAVE A MAXIMUM SLOPE OF 1:1  SIMPLE BENCH	BENCHED EXCAVATIONS ARE NOT ALLOWED
 MULTIPLE BENCH	 MULTIPLE BENCH	BENCHED EXCAVATIONS ARE NOT ALLOWED
SUPPORTED OR SHIELDED EXCAVATIONS LESS THAN 20 FEET DEEP WILL HAVE A MAXIMUM SLOPE OF 3/4:1.  SUPPORTED LOWER PORTION	SUPPORTED OR SHIELDED EXCAVATIONS LESS THAN 20 FEET DEEP WILL HAVE A MAXIMUM SLOPE OF 1:1.  SUPPORTED LOWER PORTION	SUPPORTED OR SHIELDED EXCAVATIONS LESS THAN 20 FEET DEEP WILL HAVE A MAXIMUM SLOPE OF 1-1/2:1.  SUPPORTED LOWER PORTION
THE SUPPORT OR SHIELD MUST EXTEND AT LEAST 18 INCHES ABOVE THE VERTICAL SIDE.	THE SUPPORT OR SHIELD MUST EXTEND AT LEAST 18 INCHES ABOVE THE VERTICAL SIDE.	THE SUPPORT OR SHIELD MUST EXTEND AT LEAST 18 INCHES ABOVE THE VERTICAL SIDE.

Table 3 Excavations Made in Layered Soils

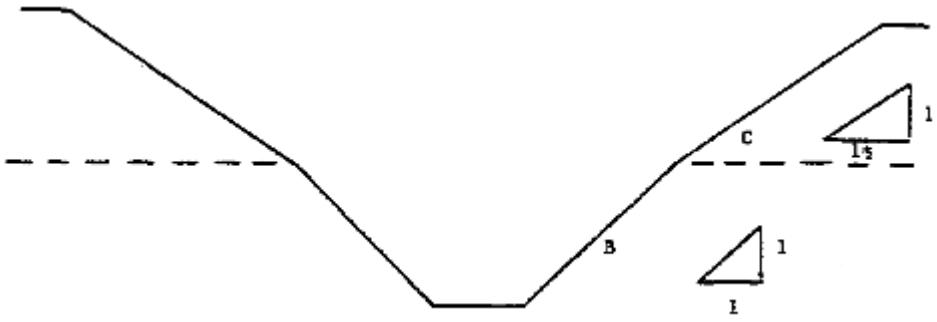
1. All excavations 20 feet or less in depth made in layered soils shall have a maximum allowable slope for each layer as set forth below.



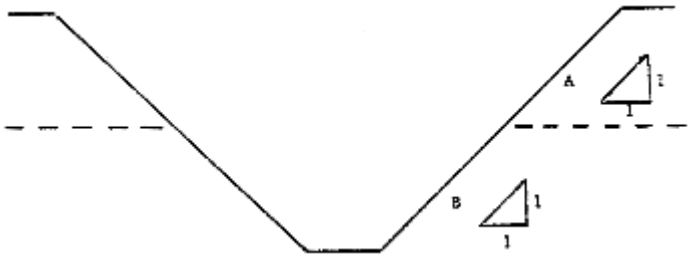
B OVER A



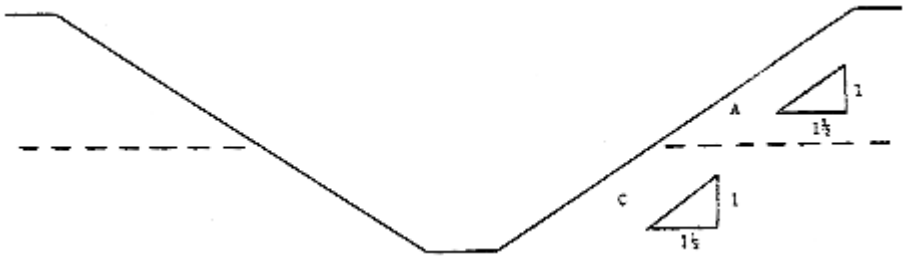
C OVER A



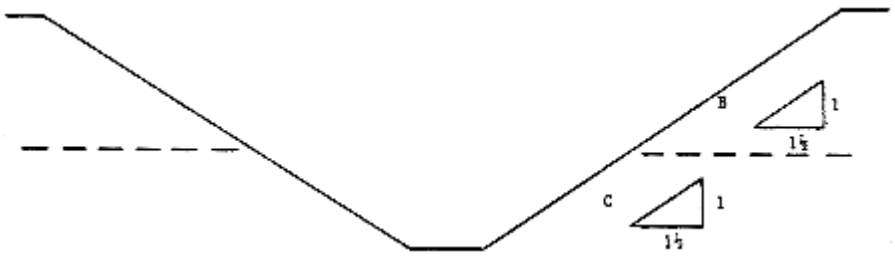
C OVER B



A OVER B



A OVER C



B OVER C

2. All other sloped excavations shall be in accordance with the other options permitted in §1926.652(b).

6. REFERENCES / RELATED DOCUMENTS:

29 CFR 1926 Subpart P, Excavations

CP002 – Risk Analysis Site Specific Health and Safety Program

CP003 – Personal Protective Equipment Program

CP008 – Confined Space Entry Program

CP009 – Health and Safety Training Program

7. APPENDICES

Forms

A. TRC Site-Specific Excavation Plan
B. TRC Pre-Excavation Checklist
C. TRC Excavation Inspection Form
D. TRC Protective Systems Selection Flow Chart

FORMS

A. **TRC SITE-SPECIFIC EXCAVATION PLAN**
B. **TRC PRE-EXCAVATION CHECKLIST**
C. **TRC EXCAVATION INSPECTION FORM**
D. **TRC PROTECTIVE SYSTEMS SELECTION FLOW CHART**

Site Specific Excavation Plan

Project Name: **Project #:**

Location: **Date:**

Company:

Submitted By:

Surface Encumbrances

Have Surface encumbrances that may create a hazard been removed or supported?

☐ Yes

☐ N/A

Underground Installations

Have Utility companies or owners been contacted? ☐ Yes ☐ N/A

By whom: Work Order #: Date:

When excavation operations approach the estimated location of underground installations, how will the exact location of the installations shall be determined?

☐ Probing ☐ Hand digging ☐ Detecting equipment ☐ Other

How will underground installations be protected?

☐ Support ☐ Removal ☐ Other

Access and Egress

Will structural ramps be used? ☐ Yes ☐ N/A

Designed by a competent person? ☐ Yes ☐ N/A

Will excavations be 4 feet in depth or more? ☐ Yes ☐ N/A

Means of egress (requiring no more than 25 feet of lateral travel) ☐ Yes ☐ N/A

☐ Stairway(s) ☐ Ramp(s) ☐ Ladder(s) ☐ Other

Exposure to vehicular Traffic? ☐ Yes ☐ N/A (If yes workers shall wear warning vests or other suitable garments.)

Exposure to falling loads? ☐ Yes ☐ N/A

☐ No workers permitted underneath loads

☐ Workers shall be required to stand away from any vehicle being loaded or unloaded. (Operators may remain in cabs)

Warning System for Mobile Equipment

Will mobile equipment operated adjacent to, or approaching the edge of, excavations have a clear and direct view of the edge of the excavation?

☐ Yes ☐ N/A If yes what warning system will be utilized?

☐ Barricade(s) ☐ Hand Signals ☐ Stop logs ☐ Other

Hazardous Atmospheres

Can oxygen deficiency or a hazardous atmosphere reasonably be expected to exist? ☐ Yes ☐ N/A

If yes, how will atmospheres in excavations greater than 4 feet in depth be tested?

If atmospheres contain less than 19.5% oxygen or other hazardous substance how will it be remediated?

When controls are intended to reduce the level of contaminants to acceptable levels, testing shall be conducted:

☐ Continuously ☐ Periodically

Will emergency rescue equipment be utilized? ☐ Yes ☐ N/A If yes what type?

☐ SCBA ☐ Harness and line ☐ Basket stretcher ☐ Other

Site Specific Excavation Plan

Water Accumulation

Will workers work in excavations in which there is accumulated water? ☐ Yes ☐ N/A

If yes is water controlled or prevented from accumulating by water removal equipment? ☐ Yes ☐ N/A

Equipment type: Competent Person:

Does excavation work interrupt the natural drainage of surface water (such as streams)? ☐ Yes ☐ N/A

Method used to divert water:

Stability of Adjacent Structures

Will the stability of adjacent structures be endangered by excavation operations? ☐ Yes ☐ N/A

If yes, what type of support structure will be used?

☐ Shoring ☐ Bracing ☐ Underpinning ☐ Other

If yes, but support structures will not be used, one of the following must apply:

☐ The excavation is in stable rock

☐ A registered professional engineer has determined that such work will not pose a hazard.

Name of registered professional engineer:

Protection from Loose Rock or Soil

How will workers be protected from materials or equipment that could fall or roll into excavations?

☐ Material placed > 2 feet from edge Retaining devices

Inspections

☐ Inspections of all excavations, adjacent areas and protective systems shall be made by a competent person.

☐ Inspections shall be conducted by the competent person daily, prior to the start of work and as needed throughout the shift. Inspections shall be documented on a Daily Excavation Inspection Form.

☐ Inspections shall be made after every rainfall or other hazard increasing occurrence.

☐ Where the competent person finds evidence of hazardous conditions, workers shall be removed from the hazardous area until the necessary precautions have been taken to ensure their safety.

Fall Protection

Will excavations be 6 feet or greater in depth? ☐ Yes ☐ N/A

If yes, fall protection will consist of:

☐ Barricades ☐ Fall restraint ☐ Harness ☐ Other

Will workers be required or permitted to cross over excavations? ☐ Yes ☐ N/A

If yes, guardrails shall be provided.

SIGNATURES

Supervisor General Supervisor

Project/Construction Manager Safety Representative

Pre-Excavation Checklist

Project Name:	**Project #:**
Location:	**Date:**
Company:	**One Call #**
Submitted By:	

The following procedures are mandatory. Failure to complete this check list could result in disciplinary action or termination:

Complete a pre-excavation walk-out of the entire job site. Your objective is to visually inspect the dig area to ensure all utilities are marked. Look for obvious signs of utilities in the immediate work area that may not be marked such as, above-ground pedestals, gas meters, man-hole covers, drains, or utility poles with cable risers. If you find these indicators and suspect that there is an unmarked utility DO NOT PROCEED**. Call your General Foreman or Locate Ticket Coordinator immediately.**

When you have completed your walk-out, complete the following check list:

1. Verify that the One-Call ticket covers the 'Scope of work' and 'Work to begin' date:
   I have verified the One-Call ticket covers the 'Scope of work' &'Work to begin' date ☐
2. What marked utilities did you observe?
   ☐Gas (Yellow) ☐Electric (Red) ☐Telephone (Orange) ☐Cable TV (Orange) ☐Water (Blue) ☐Sewer (Green)
3. Based on visual observation, did you see any obvious signs of unmarked utilities in the immediate work area?
   ☐Yes ☐No If Yes, please identify?
   ☐Gas (Yellow) ☐Electric (Red) ☐Telephone (Orange) ☐Cable TV (Orange) ☐Water (Blue) ☐Sewer (Green)
4. I have notified my Supervisor and Locate Ticket Coordinator ☐
5. Photograph the entire proposed work area including all locate marks.
   I have photographed the entire site including existing locate/markings prior to excavation ☐
6. Advise your crew members of the following: If they have to cross a marked Utility they must HAND DIG ONLY within 18" of the locate marks. For gas lines add half the diameter of the buried facility to the 18''. If necessary, dig a test-hole (pothole) using hand tools to determine the location of the facility.
   I have advised my crew of this rule ☐
7. When possible, all directional boring / drilling routes must be potholed every 50-80 feet prior to drilling.
   I have advised my crew accordingly and test-holes (potholes) have been dug ☐

~~~~~~~~~~~~~~~~~~~~~~~~~~~~ RESPECT THE MARKS! ~~~~~~~~~~~~~~~~~~~~~~~~~~~~

IN THE EVENT OF DAMAGE

- Notify your Supervisor and Locate Ticket Coordinator
- Complete the TRC Incident Notification Form
- Photograph entire area and damage location

PHOTOGRAPHY TIPS

- Make sure the correct date & time stamp is active on your camera
- Photograph the excavation itself (damage location) and cable depth (include tape measure in hole)
- Take photos from multiple vantage points and of surrounding area (360 degrees)
- If the utility was miss-marked, photograph the locate marks/flags (include tape measure in photo)
- If the utility was not marked, photograph the entire area and approaches to the cut site
- Show a quantifiable location/address (street sign, house number, mail box number etc.)
~~~~~~~~~~~~~~~~~~~~~~~~~~~~

Excavation Flow Diagram

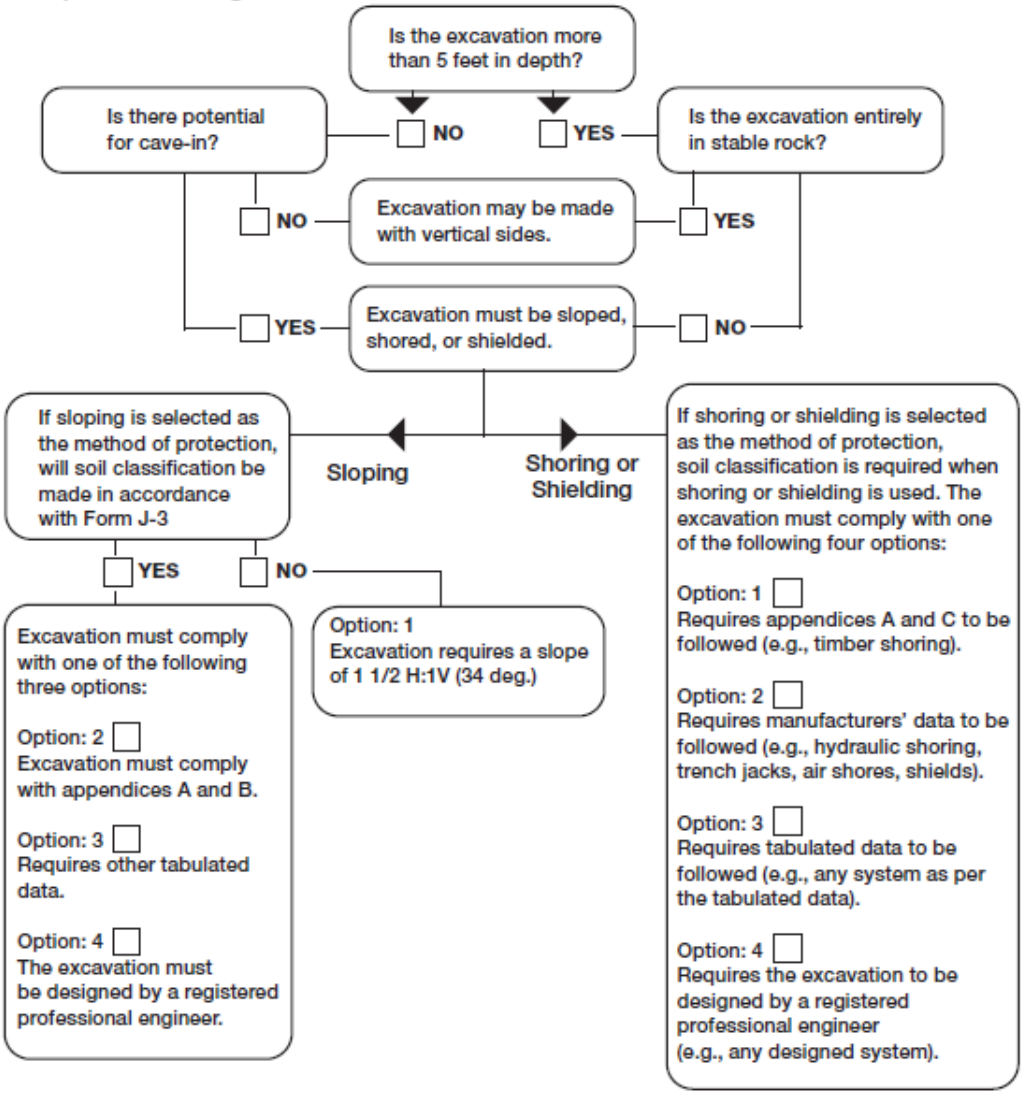
Project Name: **Project #:**

Location: **Date:**

Company:

Submitted By:

The following is a graphic summary of the requirements for excavations 20 feet or less in depth. Protective systems for use in excavations more than 20 feet in depth must be designed by a registered professional engineer.



Excavation Daily Inspection

Project Name: **Project #:**
Location: **Date:**
Company:
Submitted By:

Depth: _____ **Width:** _____ **Date Opened:** _____

Soil classification: ☐ A ☐ B ☐ C

Indicate how the classification was made:

Manual test(s)

a) plasticity			
b) dry strength			
c) thumb penetration			
d) pocket penetrometer			
e) other			

Visual test(s) **Do as many as possible**	**Cohesive Soil**	**Granular Soil**
a) Spoil pile	☐ **Remains in clumps**	☐ **Breaks up easily**
b) Trench Side	☐ **Stands vertical >2 hours**	☐ **Sloughs into trench**

The excavation is properly (circle one):

Shored/Shielded	**(indicate type of shoring)**	☐ **closed**	☐ **open**	☐ **wood**	☐ **metal**	☐ **shield**
Sloped/benched	**(indicate the slope)**	☐ **vertical sides**	☐ **3/4:1**	☐ **1:1**	☐ **1 1/2: 1**	☐ **2:1**

Excavation Checklist:	Morning	Mid-Day	Afternoon
Time:			
Weather:			
Was atmospheric testing required?	☐ **yes** ☐ **no**	☐ **yes** ☐ **no**	☐ **yes** ☐ **no**
Was atmospheric testing done?	☐ **yes** ☐ **no**	☐ **yes** ☐ **no**	☐ **yes** ☐ **no**
Is the spoil pile back 2' from the edge?	☐ **yes** ☐ **no**	☐ **yes** ☐ **no**	☐ **yes** ☐ **no**
Have surface encumbrances been removed?	☐ **yes** ☐ **no**	☐ **yes** ☐ **no**	☐ **yes** ☐ **no**
Are there any signs of sloughing or cave-in?	☐ **yes** ☐ **no**	☐ **yes** ☐ **no**	☐ **yes** ☐ **no**
Is there water accumulation in the bottom?	☐ **yes** ☐ **no**	☐ **yes** ☐ **no**	☐ **yes** ☐ **no**
Are there vibration sources near the excavation?	☐ **yes** ☐ **no**	☐ **yes** ☐ **no**	☐ **yes** ☐ **no**
Is there adequate access/egress (ladder, ramp, etc.)	☐ **yes** ☐ **no**	☐ **yes** ☐ **no**	☐ **yes** ☐ **no**
Has the soil been disturbed previously?	☐ **yes** ☐ **no**	☐ **yes** ☐ **no**	☐ **yes** ☐ **no**
Sides	☐ **yes** ☐ **no**	☐ **yes** ☐ **no**	☐ **yes** ☐ **no**
Top	☐ **yes** ☐ **no**	☐ **yes** ☐ **no**	☐ **yes** ☐ **no**
If the excavation is > 20 feet deep, have engineering designs been documented and complied with?	☐ **yes** ☐ **no**	☐ **yes** ☐ **no**	☐ **yes** ☐ **no**

SIGNATURES

Supervisor General Supervisor

Project/Construction Manager Safety Representative

APPENDIX C

TRANSPORTATION PLAN

APPENDIX C

TRANSPORTATION PLAN

November 2017

THEODORE ROOSEVELT SENIOR HIGH SCHOOL
456 South Mathews Street
Los Angeles, California 90033

Prepared for

LOS ANGELES UNIFIED SCHOOL DISTRICT
Office of Environmental Health and Safety
333 S. Beaudry Avenue, 21st Floor
Los Angeles, California 90017

Prepared by



17911 Von Karman Avenue, Suite 400
Irvine, California 92614

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ABBREVIATIONS AND ACRONYMS

DTSC	Department of Toxic Substances Control
EPA	Environmental Protection Agency
HSP	Health and Safety Plan
LAUSD	Los Angeles Unified School District
OCPs	Organochlorine Pesticides
OPPs	Organophosphorous Pesticides
PCBs	Polychlorinated Biphenyls
RAW	Removal Action Workplan
RCRA	Resource Conservation and Recovery Act
STLC	Soluble Threshold Limit Concentration
SVOCs	Semi-Volatile Organic Compounds
TPH	Total Petroleum Hydrocarbons
TPH-G	Total Petroleum Hydrocarbons as Gasoline
VOCs	Volatile Organic Compounds
WATCH	Work Area Traffic Control Handbook

1.0 INTRODUCTION

This document presents a Transportation Plan for the removal of impacted soil from Los Angeles Unified School District (LAUSD) Roosevelt High School (Site), located at 456 South Mathews Street, Los Angeles, California. Previous site investigations have identified and assessed the extent of soil impacted with arsenic, lead, and petroleum hydrocarbons beneath the Site, and a Removal Action Workplan (RAW) has been prepared to address the excavation and off-site disposal of impacted soil. This Transportation Plan is a key component of the RAW. Removal, transportation, and disposal activities will be performed in accordance with applicable Federal, State, and local laws, regulations, and ordinances. Excavated soils will be shipped by a qualified (licensed/registered and insured) waste hauler in tarped trucks under manifests or proper shipping documents to proper disposal facilities.

Amendments to this Transportation Plan will be made, as appropriate, following selection of an Environmental Consultant and Remediation Contractor by the LAUSD to implement the RAW work scope.

1.1 BACKGROUND

1.1.1 Site Description

Roosevelt High School is currently an operational LAUSD school scheduled for a comprehensive modernization project involving removal and/or renovation of multiple site structures. The proposed renovation will include demolition of the music building, gymnasium, auditorium/classroom building, industrial arts building, four classroom buildings, and 19 portable classroom buildings. New buildings proposed for construction will include a general classroom building, a science and specialty classroom building, a gymnasium, an auditorium, a lunch shelter, and a health/wellness clinic.

The Site is a rectangular-shaped property consisting of approximately 23.70 acres. The property is bounded by South Mathews Street on the northwest, East 4th Street on the northeast, South Mott Street on the southeast, and East 6th Street on the southwest. Properties immediately surrounding the Site to the north across East 4th Street, west across South Mathews Street, and east across South Mott Street consist primarily of residential neighborhoods. The property south of the Site across East 6th Street is developed with the Hollenbeck Middle School. The overall area surrounding the school consists primarily of residential development with some commercial development.

1.1.2 Current Site Use

The Site is currently owned by the LAUSD and operated as Roosevelt High School. The current campus facilities consist of 16 structures, including an administration/classroom building, a lunch pavilion, a cafeteria, a library/classroom, a music building, a gymnasium, an auditorium/classroom building, an industrial arts building, a former auto shop building, and seven classroom buildings. The property also includes multiple portable classroom buildings. Athletic fields and facilities are located along the northeast portion of the property, as well as in the southeast corner of the property.

1.1.3 Proposed Remedial Action

The principal objective of this removal action is the mitigation of impacted soil from the Site to a level necessary to protect human health and the environment. This involves the removal or reduction of contaminants to prevent human exposure to chemicals of concern above applicable removal action goals. Based on an analysis of the nature and extent of impact, and on the removal action goals for the Site, the RAW evaluated multiple alternatives appropriate for addressing the removal action objectives. The selected removal action alternative includes the excavation, transportation, and disposal of soil impacted with arsenic, lead, and/or petroleum hydrocarbons at concentrations above removal action goals. The estimated volume of soil to be remediated from six separate areas across the Site (Areas 2, 3, 5, 6, 9, and at the hydraulic hoists in Area 6) is approximately 7,019 cubic yards (10,528 tons; estimate includes 3,966 cubic yards of non-hazardous soil and up to 3,053 cubic yards of California hazardous lead-impacted soil). Confirmation soil samples will be collected at the excavation limits and from the excavation bottom to verify completion of soil removal. Upon completion, backfill and compaction of the excavation areas will be coordinated with a licensed soils engineer to assure that the backfilled areas meet minimum compaction requirements.

1.2 PURPOSE AND OBJECTIVE

The objective of the proposed remedial action is the removal of approximately 7,019 cubic yards (10,528 tons) of impacted soil from the Site to a level necessary to protect human health and the environment.

2.0 WASTE CHARACTERIZATION AND QUANTITY

2.1 WASTE PROFILE

Soils exceeding the removal and cleanup goals for the Site will be excavated and transported to facilities permitted to process or dispose of the impacted soil. Based on evaluation of available analytical data, the petroleum hydrocarbon-impacted soil has been characterized as non-hazardous and will be transported to a facility permitted to dispose of the soil. Arsenic- and lead-impacted soil removed from each area will be stockpiled and sampled to characterize for disposal. Department of Toxic Substances Control (DTSC) requirements of hazardous waste generation, temporary on-site storage, transportation, and disposal will be followed. Approval from the disposal facilities will be obtained before any excavation commences.

2.2 WASTE QUANTITY

Estimated Quantity of Arsenic- and Lead-Impacted Soils: 6,972 cubic yards or 581 truckloads
Estimated Number of Truckloads per Day to Treatment Facility: up to 30 truckloads

Estimated Quantity of Petroleum Hydrocarbon-Impacted Soils: 47 cubic yards or 4 truckloads
Estimated Number of Truckloads per Day to Disposal Facility: 4 truckloads

See Figures 3A, 4A, 5A, 6A, 8A, and 9A in the RAW for the proposed excavation areas. Additional soil removal may be necessary depending on confirmation sampling results.

2.3 IMPORT FILL MATERIAL

Estimated Quantity of Import Fill Material: maximum 7,721 cubic yards or 643 truckloads if all backfill material must be imported
Estimated Number of Truckloads per Day: up to 30 to 40 truckloads

Areas excavated as a result of removal activities will be backfilled with approved clean fill. The clean fill may consist of one or more of the following sources: 1) clean quarried material; 2) imported material from an off-Site source; and 3) clean soil generated on Site in the course of exposing and removing soil impacts. Debris, plant matter, and other deleterious material shall not be present in soils used for fill. Backfilling and compaction of excavated areas shall be in conformance with City of Los Angeles requirements, and compaction certification will be provided by the LAUSD Geotechnical Engineer of Record.

Prior to using fill material on Site, the soil quality data of the source material will be reviewed. Sampling of fill material intended for use at the Site shall be conducted to verify the quality of the material, unless the fill material originates from a clean, quarried source, in which case no sampling will be conducted. Imported fill will be free of contamination and non-soil material. Clean soil generated on Site from excavation activities must be less than the removal action goals and must comply with LAUSD soil reuse criteria. Soils treated at another site undergoing remediation will not be used as backfill material at the Site.

Sampling of the backfill soils shall be conducted in accordance with the LAUSD Environmental Import/Export Materials Testing (Guidance Section 01 4524) requirements. Soil sample collection shall be performed as described in the RAW. At a minimum, backfill materials will be sampled (discrete and composite samples) at a frequency consistent with the volume-specific sampling criteria outlined in LAUSD Guidance Section 01 4524.

Discrete soil samples will be analyzed for the following:

- Total Petroleum Hydrocarbons with gasoline distinction (TPH-G) using Environmental Protection Agency (EPA) Methods 8015B(M)/5035; and
- Volatile Organic Compounds (VOCs) using EPA Methods 8260B/5035.

Composite soil samples will be analyzed for the following:

- TPH - Full Carbon Speciation using EPA Method 8015B(M);
- Polychlorinated Biphenyls (PCBs) using EPA Method 8082;
- Semi-Volatile Organic Compounds (SVOCs) using EPA Method 8270C;
- Organochlorine Pesticides (OCPs) using EPA Method 8081A;
- Organophosphorus Pesticides (OPPs) using EPA Method 8141A;
- Chlorinated Herbicides using EPA Method 8151A;
- California Title 22 Metals using EPA Methods 6010B/7471A;
- Hexavalent Chromium using EPA Method 7199; and
- Arsenic and Thallium using EPA Method 6020.

The Remediation Contractor will be responsible for providing documentation of the source of clean fill material and for performing and/or providing documentation of the geotechnical suitability and environmental analysis of the clean import fill material.

3.0 SOIL LOADING OPERATIONS

Soil will be removed with earth moving equipment (e.g., backhoe, excavator), as necessary. As soil is excavated, it will be temporarily stored in soil staging areas on Site until off-site transportation for disposal is available. Waste soils will be stockpiled in soil staging areas. As an alternate, excavated soils may be loaded directly onto transportation trucks. A Site-specific plan identifying proposed access points (entrance and exit), truck loading areas, stockpile locations, and the vehicle decontamination area for the majority of the proposed excavation work at the Site will be prepared by the Environmental Consultant following selection by LAUSD, in consultation with the Remediation Contractor selected by LAUSD. The site access plan and soil staging/loading locations may be modified based on field considerations at the time remedial excavation begins and as work progresses.

3.1 SOIL SEGREGATION CONSIDERATION

For each excavation area, soil will be segregated based on the type of impacts. The excavated soil will initially be segregated according to existing soil analytical data, field observation, and field monitoring results.

Five distinct and separate stockpiles will be created:

- Non-hazardous arsenic- and lead-impacted soil;
- California hazardous (non-Resource Conservation and Recovery Act; RCRA) lead-impacted soil;
- Non-hazardous petroleum hydrocarbon-impacted soil;
- Non-impacted soil; and
- Demolition debris (e.g., steel, concrete, asphalt, etc.).

The soil will be stockpiled and managed according to the following criteria:

- Impacted soil (arsenic, lead, and petroleum hydrocarbons) will be segregated from non-impacted soil in separate stockpiles so that mixing of the stockpiles does not occur. The soil will be segregated based on previous analytical data and field observations (e.g., soil staining or discoloration for petroleum hydrocarbon-impacted soil). Soil suspected of being impacted with arsenic, lead, and petroleum hydrocarbons based on previous investigations will be stockpiled in appropriate staging areas for waste characterization and off-site disposal. Soil that is suspected of being clean will be stockpiled separately and samples will be collected for analysis. If results of analyses confirm the soil is clean, it will be transferred to clean stockpile areas for future reuse on Site as fill material. If the suspected clean soil is determined to be impacted, it will be transferred to the impacted soil stockpile to await off-Site transport and disposal. Soil with suspected elevated lead impacts in excess of Soluble Threshold Limit Concentration (STLC) lead limits (based on previous investigation findings) will be stockpiled separately and samples will be collected for analysis. Based on analytical results, this soil will either remain in a separate stockpile to be handled and transported off Site as a California hazardous waste, or be transferred to the non-hazardous soil stockpile to await off-Site transport and disposal.
- The soil stockpile locations will vary depending upon the excavation work area(s). In general, impacted soil stockpiles will be in close proximity to the excavation area(s) for staging and loading for off-Site transport. Clean soil and demolition debris will be stockpiled separately in each area for reuse and off-Site disposal, respectively.

- Soil stockpiles will be placed on top of and covered with plastic sheeting. The plastic sheeting seams will overlap a minimum of 24 inches and be secured with duct tape.
- All soil stockpiles will be visually inspected to ensure integrity of the plastic covered surfaces.
- There is no limitation on the volume of non-VOC-contaminated or clean soil that can be stockpiled on Site. The stockpiles will not exceed 10 feet in height.
- Soil loading into trucks for off-Site transport will be conducted either directly during soil excavation or from the stockpiles of soil. All transportation and disposal activities will be performed in accordance with applicable Federal, State, and local laws, regulations, and ordinances.
- Impacted soil will be removed from the Site no greater than 30 days from the time of excavation.
- A record of the identification and business addresses of the generator, transporter, and storage/treatment facilities will be maintained. Such record (manifest) will be signed by each party at the time custody is transferred.

Soil sampling and analysis shall be performed as described in Section 7.7 of the RAW.

3.2 TRUCK LOADING OPERATIONS

Trucks will be loaded in the designated areas and driven to the designated disposal facilities. The impacted soil from each stockpile or excavation area will be loaded into trucks using a front-end loader.

3.3 DUST CONTROL DURING SOIL LOADING OPERATIONS

The waste hauler is required to provide a bin/truck that does not allow soil to be spilled or blown out from the bottom, sides, or tops of the bin/truck. During soil loading operations, dust suppression will be performed by lightly spraying or misting the work area with water, as necessary. Efforts will be made to minimize the soil drop height from the loader's bucket into the bin/truck. The loader will be positioned to load soil from the leeward side of the bin/truck, if possible. By loading in the designated area, the trucks will not have to drive on impacted soil, thereby avoiding the creation of dust in the air or dirt in the truck tires.

4.0 TRANSPORTATION CONTROL

Soil for off-Site disposal will be transported in end-dump trailers/trucks to designated facilities.

4.1 DUST CONTROL DURING TRANSPORTATION

Vehicles will be decontaminated in a track-out prevention zone. This will consist of a rumble plate or asphalt pad along construction/work exits. Stray waste material on vehicles and the tires that cannot be covered or protected, will be cleaned off manually. The dump truck portion of the truck will then be covered with a tarp to prevent soil and/or dust from spilling out of the truck during transport to the disposal facility.

Prior to leaving the load-out area, each transportation truck will be inspected by the Remediation Contractor to ensure that the payload is adequately covered, the truck is cleaned of overburdened soil, and the shipment is properly manifested. If so, the truck will be cleared for departure and the contact phone number of the Remediation Contractor will be provided. The truck driver will be directed to contact the Remediation Contractor at the given phone number if problems arise after leaving the Site.

4.2 TRAFFIC CONTROL

4.2.1 Truck Staging Area

Designated Truck Staging Areas: Varies depending upon the location of on-site soil excavation and loading operations.

Prior to loading, all trucks will be staged in the designated area to avoid impacts on the local streets. Careful coordination of trucks will be exercised to help avoid staging off Site and long wait times for trucks. Trucks will not be allowed to sit idling for more than a few minutes to avoid unnecessary exhaust fumes.

4.2.2 Site Access Control

Location of Designated Site Access Gate: Varies by excavation area:

- Area 2 – East 4th and South Mathews Streets
- Area 3 – East 4th and South Mott Streets
- Area 5 – East 6th Street
- Area 6 – South Mott Street
- Area 9 – East 6th Street

Construction access to the Site will be from the existing gates on South Mathews Street, East 4th Street, East 6th Street, and South Mott Street. Construction traffic must utilize these points of access throughout the duration of the work.

In general, the proposed remedial action incorporates the following Site access controls:

- Site will be enclosed by chain-link fencing at all times.
- Access to the Site will be limited to the gates along South Mathews Street, East 4th Street, East 6th Street, and South Mott Street. The gates will be locked after work hours.
- Site access will be limited to authorized personnel.
- All personnel entering the Site will be required to have appropriate health and safety training and will sign the site-specific health and safety plan each morning.
- All visitors will be registered and must sign in upon entering the Site.
- Access to the excavation areas with exposed impacted soils will be restricted in accordance with the site-specific health and safety plan.

Vehicles and equipment used in the handling of impacted soil will be decontaminated before leaving the Site.

Trucks to be loaded will only access the Site through the designated gate and will not be allowed to cross soil removal or staging areas. A flag person will be located at the gate to assist the truck drivers to safely enter and depart the Site. As the truck leaves, the flag person will assist the truck driver to safely merge into street traffic.

4.2.3 On-Site Traffic Flow

Maximum Number of Onsite Waste Transportation Trucks: Five (5)

Traffic will be coordinated in such a manner that, at any given time, no more than the maximum number of waste transportation trucks specified above will be on the Site to reduce truck traffic on surrounding surface streets and reduce dust generation during on-site transportation.

4.2.4 Speed Limit

While on Site, all vehicles will be required to maintain slow speeds (e.g., less than 5 miles per hour [mph]) for safety purposes and dust control measures. While on the road, all waste transporters will follow the speed limit requirements and defensive driving techniques (over traffic or road conditions) for traffic safety.

4.2.5 Rush Hours

Transportation trucks will be timed to avoid rush-hour traffic time periods.

4.2.6 Local Traffic Control

Transportation of impacted soils will be on arterial streets and/or freeways, approved for truck traffic, to minimize any potential impact on the local neighborhood. Traffic control for the Site shall conform to the ordinances and regulations of the jurisdictional agency having authority over traffic control and shall conform to the latest edition of the *Work Area Traffic Control Handbook (WATCH)*, 2016 (BNI Publications, 2016). All necessary permits will be obtained.

Specific traffic control patterns will be established on a day-to-day basis, responsive to work location and access needed during the construction period. Traffic flow patterns will be coordinated to ensure safe flow of traffic along streets surrounding the Site. These flow patterns will be established through portable traffic signs and/or flagmen posted at the Site entrance and exit. The number of daily truckloads during implementation of the RAW is not expected to cause a disruption in local traffic.

4.3 TRANSPORTATION ROUTES

Transportation in the Site area consists of residential and commercial traffic. Access to four major interstate freeways (5, 10, 60, and 101) is available within a 1-mile radius of the Site. The proposed routes of transportation for off-Site shipment of impacted soil will be finalized and included as part of this Transportation Plan following selection of the Environmental Consultant and Remediation Contractor by LAUSD, and agreement on the disposal facilities. The routes will be selected to minimize the truck travel time on surface streets and to provide the shortest distance traveled.

5.0 OFF-SITE LAND TREATMENT OR DISPOSAL FACILITIES

Based on the results of waste profiling and classification, the excavated soil will be transported to proper off-site treatment or disposal facilities. Transportation and disposal activities will be performed in accordance with applicable Federal, State, and local laws, regulations, and ordinances. Excavated soils will be shipped by a qualified (licensed/registered and insured) waste hauler in tarped trucks under manifests or proper shipping documents to a proper disposal facility.

Non-hazardous petroleum hydrocarbon-, arsenic-, and lead-impacted soil will be transported to:

Simi Valley Landfill & Recycling Center (owned by Waste Management, Inc.)
2801 Madera Road
Simi Valley, California 93065
Phone: (805) 579-7267

California hazardous (non-RCRA) lead-impacted soil will be transported to:

South Yuma County Landfill (owned by CR&R Incorporated)
19536 South Avenue 1 E
Yuma, Arizona 85365
Phone: (928) 341-9300

6.0 SHIPMENT DOCUMENTATION

6.1 CALIFORNIA HAZARDOUS WASTE SHIPMENT

If the suspected lead-impacted soil is profiled as a California hazardous waste, the Uniform Hazardous Waste Manifest form will be used to track the movement of hazardous waste soils from the point of generation to the point of ultimate disposition. Prior to transporting the excavated soil off Site, an authorized representative of LAUSD or its designated representative will sign each hazardous waste manifest. The hazardous waste hauler will then sign the manifest and distribute one signed copy to the Remediation Contractor's site manager. The Remediation Contractor's site manager will maintain a copy of the hazardous waste manifest for each truckload until completion of the excavation.

6.2 NON-HAZARDOUS WASTE SHIPMENT

For excavated soil that is profiled as non-hazardous waste, a proper shipping document (such as a non-hazardous waste manifest) of the hauler will be used to document and accompany each truck shipment. At a minimum, the shipping document will include the following information:

- Name and Address of Waste Generator
- Name and Address of Waste Transporter
- Name and Address of Disposal Facility
- Description of the Waste
- Quantity of Waste Shipped

The Remediation Contractor's site manager will maintain a copy of the shipping document on Site for each truckload until completion of the excavation.

7.0 RECORD KEEPING

Project documentation and record keeping will be conducted as outlined in Section 7.2 of the RAW. The environmental consultant and Remediation Contractor will work jointly to maintain a field log and take photographs during the excavation activities. The field logs and photographs will serve to document observations, personnel on Site, truck count, and other vital project information.

8.0 HEALTH AND SAFETY

A site-specific health and safety plan (HSP) has been prepared and included as Appendix B of the RAW. Everyone working at the Site will be required to be familiar with the HSP, attend or be briefed on the daily tailgate meeting, and sign the HSP Acceptance Form.

9.0 REQUIREMENTS OF TRANSPORTERS

Qualified transporters will be hired for hauling the excavated soil off Site. The hauling contractor(s) used to transport impacted soil to the off-Site disposal facilities will be fully licensed and permitted by the EPA and the State of California. Contractors shall comply with the City of Los Angeles Truck Route Ordinance and use City-approved truck routes.

Trucks used for the off-Site transportation of impacted soil will remain in clean areas at all times to minimize the need to decontaminate the truck tires. During loading, noise, odor, and dust emissions will be monitored and mitigated as outlined in the RAW.

9.1 LICENSE AND INSURANCE

The selected transporters will be fully licensed and insured for hauling the excavated soils off Site. For transportation of hazardous wastes, the selected transporter will be a registered hazardous waste hauler. Prior to hiring, the Remediation Contractor will verify that the selected transporter has a valid registration/license and insurance policy for transporting wastes and that the transporter will not release waste soil during transport.

9.2 CONTINGENCY PLAN

Each waste hauler is required to have a contingency plan prepared to deal with the following conditions:

a. When there are emergency situations (vehicle breakdown, accident, waste spill, waste leak, fire, explosion, etc.) during transportation of excavated soils from the Site to the designated disposal facility;
b. When the volumes of excavated soil change; or
c. When waste characteristics change.

The contingency plan will be prepared in accordance with DTSC's guidance for preparing transportation plans for site remediation (DTSC, May 1994). Once the waste hauler is selected, a copy of its contingency plan will be attached to this Transportation Plan.

Phase I Environmental Site Assessment Report

Theodore Roosevelt High School
456 South Mathews Street
Los Angeles, California 90033

Converse Project No. 16-41-126-01
August 30, 2016

Prepared For:

Los Angeles Unified School District
Office of Environmental Health & Safety
333 South Beaudry Avenue, 21st Floor
Los Angeles, California 90017

Prepared By:

Converse Consultants
717 South Myrtle Avenue
Monrovia, California 91016

Converse Consultants
Geotechnical Engineering, Environmental and Groundwater Science, Inspection and Testing Services

August 30, 2016

Mr. Andrew Fowler
Los Angeles Unified School District (LAUSD)
Office of Environmental Health & Safety
Los Angeles, California 90017

Subject: **PHASE I ENVIRONMENTAL SITE ASSESSMENT REPORT**
Theodore Roosevelt High School
456 South Mathews Street
Los Angeles, California 90033
Converse Project No. 16-41-126-01

Mr. Fowler:

Converse Consultants (Converse) is pleased to submit the attached report that summarizes the activities and the results of a Phase I Environmental Site Assessment (Phase I ESA) that was conducted at the referenced property (Property).

A summary of the assessment is presented in the Executive Summary, as well as in Sections 8.0, 9.0, and 10.0 of the report. Recognized Environmental Conditions were identified during this assessment.

We appreciate the opportunity to be of service. Should you have any questions or comments regarding this report, please contact John Ziegler at (626) 930-1234 or Michael Van Fleet at (626) 930-1267.

CONVERSE CONSULTANTS

John Ziegler
Senior Professional

Michael Van Fleet, PG
Senior Geologist

Dist.: 1/Addressee via Electronic Mail (PDF Format)

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Executive Summary

The following is an Executive Summary of the Phase I Environmental Site Assessment (Phase I ESA) that was conducted by Converse Consultants (Converse). Please refer to the appropriate sections of the report for a complete discussion of these issues. In the event of a conflict between this Executive Summary and the report, or an omission in the Executive Summary, the report shall prevail.

This report presents the results of the Converse Phase I ESA performed at the Theodore Roosevelt High School (Roosevelt High School) located at 456 South Mathews Street in the City of Los Angeles, Los Angeles County, California, referred to as the Property in this report. Converse was retained by LAUSD to conduct this Phase I ESA. Our study has been conducted in order to identify, to the extent practical within the scope of an ESA, Recognized Environmental Conditions (RECs) in connection with the Property.

Converse has compiled and reviewed information that was obtained from interviews, document research, and on-site and area reconnaissance to identify potential environmental conditions at the Property, in conformance with the ASTM Standard E: 1527-13 Environmental Site Assessment Standard Practice (ASTM Standard: E1527-13) and the LAUSD *Procedures for Environmental Review of Proposed Projects Reference Guide* 5314.1. This Phase I ESA was conducted during the period of May 3, 2016 to June 24, 2016.

The Property is owned by the LAUSD and operated as the Roosevelt High School, Boyle Heights Continuation and School of Science, Technology, Engineering & Math (STEM) at Roosevelt High.

The Property is located to the southeast of South Mathews Street and northeast of South Mott Street in between East 4th Street and East 6th Street, in the City of Los Angeles, Los Angeles County, California. The Property is located 0.5 miles east of the 5 Freeway (Golden State Freeway) and 0.7 miles northeast of the Interstate 5, 60 Freeway and 101 Freeway junctions.

According to information from the City of Los Angeles Planning Department, the Property is located within a methane zone within the City of Los Angeles.

A gas transmission line owned by Sempra Energy is located adjacent to the northeast along 4th Street and diverts further north to South Fickett Street. According to information from the Sempra Energy website, this pipeline is generally equipped with a larger diameter and operates at pressures above 200 psi. This pipeline transports gas from supply points to the gas transmission system.

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According to historical research conducted by Converse, the Property was historically developed with multiple residential dwellings and historical streets (South Fickett Street, Eagle Street, Lanfranco Street) from as early as 1894. The Roosevelt High School was constructed in a smaller area in the central portion of the Property in 1922. Expansions of the Property occurred from the 1940s to the 1970s to include the present day Property footprint.

The Property was identified in the following databases on the Environmental Data Resources (EDR) Radius Report:

- Resource Conservation and Recovery Act (RCRA) Generators list;
- National Pollutant Discharge Elimination System (NPDES);
- Emissions Inventory Data (EMI);
- Facility and Manifest Data (HAZNET/FINDS); and
- Enforcement and Compliance History Online (ECHO)

No violations were noted.

The adjoining property to the north and northeast were identified in the following databases EDR Radius Report:

- US Coin Laundry Inc. at 2601 East 4th Street located to the northeast, at a higher elevation, was identified as a US Historical Cleaner in 2008.
- Mrs. Dora Kast at 2547 East 4th Street located to the north-northeast, at a higher elevation, was identified as a US Historical Cleaner in 1937. Rosenthal HD at 2523 East 4th Street located to the north, at a higher elevation, was identified as a US Historical Cleaner in 1924 and 1929.
- Derian Jos at 2505 East 4th Street located to the north, at a higher elevation, was identified as a historical auto stations facility in 1929, 1933, 1937 and 1942.

No violations were noted.

This assessment has revealed no evidence of RECs in connection with the Property except for the following:

- The potential presence of Lead Based Paint (LBP) residue in the shallow soils around the drip lines of the existing and former Property buildings.
- The potential presence of Organochlorine pesticides (OCP) in shallow soils around the foundations of the existing and former Property buildings.
- The potential presence of arsenic in shallow soils.
- The potential presence of polychlorinated biphenyls (PCB's) in shallow soils.
- The potential presence of contaminants of concern (COCs) in fill materials at the Property.
- The 3-stage clarifier and hydraulic hoists associated with former auto shop operations at the mid-eastern portion of the Property.

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- Based on the age of the Property buildings, asbestos, PCB's and lead based paint buildings materials may have been used during construction.
- The Property being located within a methane zone.

Based on this assessment, Converse has the following conclusions and recommendations:

- Prior to redevelopment activities, a subsurface assessment in the area of the current clarifier and hydraulic lifts should be conducted to determine if these features have impacted the subsurface of the Property.
- Prior to redevelopment activities, shallow subsurface sampling should be conducted for the potential presences of LBP, OCP, arsenic and PCBs in the current and former Property buildings and potential COCs in the fill material.
- Conduct a methane survey in accordance with LADBS Site Testing Standards
- Converse recommends that all asbestos, PCBs and lead-based paint building materials be identified and abated prior to demolition and/or redevelopment activities.

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1.0 Introduction

1.1 Purpose and Scope of Services

This report presents the results of the Converse Consultants (Converse) Phase I Environmental Site Assessment (ESA) performed at the Roosevelt High School located at 456 South Mathews Street in the City of Los Angeles, Los Angeles County California, referred to as the Property in this report. Converse was retained by LAUSD to conduct this Phase I ESA. Our study has been conducted in order to identify, to the extent practical, Recognized Environmental Conditions (RECs) in connection with the Property. The term Recognized Environmental Conditions is defined in Section 1.1.1 of the American Society of Testing and Materials (ASTM) Standard Practice as *the presence or likely presence of any hazardous substances or petroleum products in, at or on a property due to any release to the environment; under conditions indicative of a release to the environment; under conditions that pose a material threat of a future release to the environment.*

This Phase I ESA was completed in accordance with our proposal dated April 5, 2016. Our work consisted of the following and was completed in general conformance with the scope and limitations of the ASTM Practice E1527-13 and complies with standards and practices set forth in 40 Code of Federal Regulations (CFR) Part 312 for AAI.

- Interviews with the Property owner representatives
- Property and vicinity reconnaissance
- Review of regulatory agency records
- Description of physical setting
- Historical review
- Interviews with public agency personnel
- Preparation of this report

1.2 Non-Scope Considerations

There are a number of non-scope issues which are sometimes assessed concurrently with a Phase I ESA. Unless specifically agreed in the contract proposal documents, these non-scope considerations are not included as part of the Phase I assessment. Examples of non-scope issues include:

- Asbestos-containing building material
- Lead-base Paint
- Radon
- Lead in Drinking Water

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- Wetlands
- Cultural & Historic Resources
- Industrial Hygiene
- Health & Safety
- Mold
- Diffuse Anthropogenic Pollution
- Regulatory Compliance
- Ecological Resources
- Endangered Species
- Indoor Air Quality
- Biological Agents
- Non-liquid Polychlorinated Biphenyls

No Non-scope issues were addressed in this report.

1.3 Significant Assumptions

No assumptions were made for this assessment that need to be noted as significant.

1.4 Limitations and Exceptions

The following limitations and exceptions were encountered during the course of this assessment:

- Freedom of Information Act Requests (FOIA) were submitted to the, City of Los Angeles Fire Department Hazardous Materials Division, and the Los Angeles Regional Water Quality Control Board. Responses from these agencies were not received in time for the inclusions of this assessment. However, based on the nature of use of the Property and known historical use, this limitation is not deemed significant.

1.5 Special Terms and Conditions

No special terms or conditions were identified during this assessment.

1.6 Reliance

This report is for the sole benefit and exclusive use of LAUSD in accordance with the terms and conditions attached to our proposal under which these services have been provided. Its preparation has been in accordance with generally accepted environmental practices. No other warranty, either express or implied, is made. The Scope of Services associated with the report was designed solely in accordance with the objectives, schedule, budget, and risk-management preferences of LAUSD.

This report should not be regarded as a guarantee that no further contamination, beyond that which could be detected within the scope of this assessment, is present at the Property. Converse makes no warranties or guarantees as to the accuracy or completeness of information provided or compiled by others. It is

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possible that information exists beyond the scope of this assessment. It is not possible to absolutely confirm that no hazardous materials and/or substances exist at the Property. If none are identified as part of a limited scope of work, such a conclusion should not be construed as a guaranteed absence of such materials, but merely the results of the evaluation of the property at the time of the assessment. Also, events may occur after the Property visit, which may result in contamination of the Property. Additional information, which was not found or available to Converse at the time of report preparation, may result in a modification of the conclusions and recommendations presented.

This report presents the results of the Converse Consultants (Converse) Phase I Environmental Site Assessment (ESA) performed at the Roosevelt High School located at 456 South Mathews Street in the City of Los Angeles, Los Angeles County California, referred to as the Property in this report. Converse was retained by LAUSD to conduct this Phase I ESA. Our study has been conducted in order to identify, to the extent practical, Recognized Environmental Conditions (RECs) in connection with the Property. The term Recognized Environmental Conditions is defined in Section 1.1.1 of the American Society of Testing and Materials (ASTM) Standard Practice as *the presence or likely presence of any hazardous substances or petroleum products in, at or on a property due to any release to the environment; under conditions indicative of a release to the environment; under conditions that pose a material threat of a future release to the environment.*

This Phase I ESA was completed in accordance with our proposal dated April 5, 2016. Our work consisted of the following and was completed in general conformance with the scope and limitations of the ASTM Practice E1527-13 and complies with standards and practices set forth in 40 Code of Federal Regulations (CFR) Part 312 for AAI.

- Interviews with the Property owner representatives
- Property and vicinity reconnaissance
- Review of regulatory agency records
- Description of physical setting
- Historical review
- Interviews with public agency personnel
- Preparation of this report

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2.0 Property Description

2.1 Current Use(s) of the Property

The Property is owned by the LAUSD and operated as the Roosevelt High School, Boyle Heights Continuation and School of Science, Technology, Engineering & Math (STEM) at Roosevelt High.

A Property location map and a field generated Property plan are provided in Appendix A. Pertinent Property photographs are provided in Appendix B.

2.2 Location and Legal Description

The Property is located at 456 South Mathews Street. The Property is located to the southeast of South Mathews Street and northeast of South Mott Street in between East 4th Street and East 6th Street, in the City of Los Angeles, Los Angeles County, California. The Property is located 0.3 miles east of the 10 Freeway (Santa Monica Freeway) and 0.5 miles northeast of the Interstate 5, 60 Freeway and 101 Freeway junctions.

The Los Angeles County Assessor's Parcel Number for the Property is 5185-004-929. The legal description of the Property is described as the following:

TR=34758 EX OF STS LOT 1

2.3 Zoning Information

According to the City of Los Angeles Zoning Information and Map Access System (ZIMAS), the zoning for the Property is *Z1-2129: East Los Angeles State Enterprise Zone* and *Z1-2452: Transit Priority Area* in the City of Los Angeles and is defined as Public Utilities.

According to information provided on the ZIMAS database, the Property is located within a methane zone within the City of Los Angeles.

2.4 Property Characteristics

The Property is rectangular shaped parcel containing approximately 23.70 acres. The Property is improved with multiple buildings and portable classroom buildings. In addition to Property buildings, the Property improved with a

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basketball court, a swimming pool, tennis courts, a football field, a soccer field, asphalt paved parking areas, multiple quads. The Property is used for educational purposes.

The Property fronts South Mathews Street to the northwest, East 4th Street to the northeast, South Mott Street to the southeast and East 6th Street to the southwest. Historic Lanfraco Street and South Frickett Street were located in the southeast corner and central portion of the Property.

2.5 Description of Property Structure(s)

The Property is constructed with 16 structures including an admin/classroom building, a lunch pavilion, a cafeteria, a library/classroom, a music building, a gymnasium, an auditorium/classroom building, an industrial arts building, a former auto shop building, and seven (7) classroom buildings. In addition to the Property buildings, the Property is also developed with numerous portable classroom buildings.

The school will be undergoing renovation that will result in the demolition of the music building, gymnasium, auditorium/classroom building, industrial arts building four (4) classroom buildings and 19 portable classroom buildings. New buildings will include a general classroom building, a science and a specialty classroom building, a gymnasium, an auditorium, a lunch shelter and a health/wellness clinic. Property upgrades will include site infrastructure, accessibility, parking and drop off, landscape/hardscape, and exterior paint.

The following services were present at the Property at the time of the assessment.

- Electricity: City of Los Angeles Department of Water and Power (DWP);
- Gas: Southern California Gas Company;
- Potable Water: DWP;
- Sanitary Sewer: Los Angeles City Sanitation;
- Heating, Ventilation, Air Conditioning (HVAC): Roof-mounted and ground chillers; and
- Solid Waste: Republic.

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3.0 User Provided Information & Responsibilities

3.1 Requested Documents and Information

The ASTM E1527-13 specifies that the User provide any helpful documents that may be available. Converse requested that the User LAUDS provide the following documents and information.

- Environmental site assessment or environmental compliance audit reports
- Environmental permits or hazardous waste generator notices/reports
- Registrations for aboveground and underground storage tanks
- Septic systems, oil wells, or water wells
- Registrations for underground injection systems
- Material Safety Data Sheets; Community Right to Know Plans; or Safety, Preparedness and prevention Plans; Spill Protection Countermeasures and Control Plans
- Reports regarding hydrologic conditions on the Property or surrounding area
- Notices or other correspondence form any government agency relating to past or current violations of environmental laws with respect to the Property or relating to environmental liens encumbering the Property.
- Hazardous waste generator notices or reports
- Geotechnical studies
- Risk assessments
- Recorded Activity Use Limitations (AULs)
- Proceedings regarding hazardous substances and petroleum products including any pending, threatened or past: litigation; administrative proceedings; or notices from any governmental entity regarding possible violations of environmental laws or other possible liability related to hazardous substances or petroleum products.

A current Alta Survey was provided for review.

A Geotechnical Investigation for the Proposed Roosevelt High School Campus Modifications dated June 14, 2015 prepared by Geotechnical Professionals, Inc. (GPI) was provide for review. Five (5) exploratory borings were performed at a depth of 30 to 50 ½ feet below grade. According to GPI, undocumented fill soils, 5 to 14 feet below grade were encountered in the borings. The soils at the boring locations consisted of slightly moist to very moist clayey sands, silty sands, sandy clays, sandy silts and silty clayey. The fills soils were likely undocumented and relatively old, give the age of the Property. Based on the results of the GPI investigation, from a geotechnical viewport, it is feasible to develop the Property as proposed.

No other documents were provided for review.

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3.2 User Provided Information

Section 6 of ASTM E1527-13 outlines specific User's responsibilities. This information will help identify the possibility of RECs in connection with the Property. The ASTM Standard provides a questionnaire to help the User to comply with the statutory requirements to perform tasks which would help identify RECs. Converse included the questionnaire as Attachment A to our proposal. In general, any Users should make Converse aware of information they have regarding the following:

- Environmental Cleanup Liens filed or recorded against the Property
- Activity and land use limitations that are in place on the Property or have been filed or recorded in a registry.
- Specialized knowledge or experience of the person seeking to qualify for the Legal Liability Protections (LLP)
- Relationship of the purchase price to fair market value of the Property if it were not contaminated
- Commonly known or reasonably ascertainable information about the Property
- The degree or obviousness of the presence or likely presence of contamination at the Property, and the ability to detect this contamination by appropriate investigation.

The following information was requested from the LAUSD.

3.2.1 Environmental Cleanup Liens

An environmental lien search was conducted by EDR. No environmental liens were identified.

3.2.2 Activity and Use Limitations

The User did not provide any information indicating they were aware of any AULs.

3.2.3 Specialized Knowledge or Experience

The User did not provide any information indicating they had specialized knowledge or experience related to the Property or nearby properties.

3.2.4 Reason for Significantly Lower Purchase Price

Converse has no information regarding the purchase price of the Property or comparable properties. The User has not indicated to Converse that there is

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any conclusion that there was a lower purchase price because of known or suspected contamination at the Property.

3.2.5 Commonly Known or Reasonably Ascertainable Information

The User did not provide any information about: past uses; specific chemicals at the Property; past spills; environmental cleanup or other reasonably ascertainable information regarding the Property.

3.2.6 Obviousness of Contamination

The User did not provide any information based on their knowledge or experience that would be obvious indicators of contamination on the Property.

Unless specifically stated otherwise in the Scope of Services, the purpose of this Phase I ESA was to qualify for the landowner liability protections to CERCLA Liability as described in ASTM E1527-13.

Business risk unrelated to the CERCLA innocent landowners defense are only assessed as specifically agreed in the Scope of Services and discussed in Section 11.0, Additional Non-Scope Services, of this report.

3.3 Continuing Obligations

In order to assert a LLP, the User must satisfy a number of statutory requirements that are generally referred to as Continuing Obligations, which are outside the Scope of Services of the Phase I ESA. Examples of Continuing Obligations include providing legally required notices stopping continuing releases and complying with land use restrictions. Failure to comply with these and other statutory post-acquisition requirements will jeopardize liability protection.

It is the responsibility of the User to comply with the Continuing Obligations requirements of ASTM E1527-13 and AAI. Anyone seeking LLP protections should take independent action beyond this Phase I ESA to perfect their position.

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4.0 Owner Provided Information

The ASTM E1527-13 specifies that the Property owner and the Key Site Manager provide any helpful documents that may be available as listed below.

- Environmental site assessment or environmental compliance audit reports
- Environmental permits or hazardous waste generator notices/reports
- Registrations for aboveground and underground storage tanks
- Septic systems, oil wells, or water wells
- Registrations for underground injection systems
- Material Safety Data Sheets; Community Right to Know Plans; or Safety, Preparedness and Prevention Plans; Spill Protection Countermeasures and Control Plans
- Reports regarding hydrologic conditions on the Property or surrounding area
- Notices or other correspondence form any government agency relating to past or current violations of environmental laws with respect to the Property or relating to environmental liens encumbering the Property.
- Hazardous waste generator notices or reports
- Geotechnical studies
- Risk assessments
- Recorded AULs
- Proceedings regarding hazardous substances and petroleum products including any pending, threatened or past: litigation; administrative proceedings; or notices from any governmental entity regarding possible violations of environmental laws or other possible liability related to hazardous substances or petroleum products.

The Property Owner is also the User of this report. Please refer to Section 3.0.

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5.0 Records Review

5.1 Physical Setting

5.1.1 Physical Setting

The Property is located approximately 313 feet above mean sea level with surface topography sloping towards the south-southeast (United States Geological Survey [USGS] Topographic Map, Los Angeles, California, 2012).

5.1.2 Geology

The Property is underlain by marine and non-marine (continental) sedimentary rocks of the Pleistocene age containing older alluvium, lake, playa and terrace deposits (Division of Mines and Geology, Geologic Map of California, 1991).

5.1.3 Groundwater

The nearest groundwater well to the Property is located approximately one-mile southwest of the Property near the intersection of East 12th Street and South Soto Street. Los Angeles County, Department of Public Works (DPW) well number 2778 was last measured on April 14, 2016. At that time, the depth to groundwater was recorded at 245.10 feet below ground surface. The water surface elevation was -22.40.

5.1.4 Potable Water Supplier

Potable water is supplied by City of Los Angeles Department of Water and Power.

5.2 Historical Review

5.2.1 Aerial Photograph and Map Review

Available historical aerial photographs, Sanborn maps and USGS topographic maps, as described in Table 1, were reviewed.

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Copies of the aerial photographs, Sanborn maps, and topographic maps have been provided in Appendix C, EDR-Historical Information.

Table 1 – Aerial Photograph and Map Review

Date	Reference	Observations
1894, 1896, 1900	Topographic Maps	The Property and adjoining properties are located within a residential area of Boyle Heights. East 4th Street and South Mott Street are located to the north and east of the Property. The general vicinity of the Property appears to be developed for residential use. Brooklyn Heights is located further north and the Los Angeles Terminal Railroad is located further south-southeast. A channel (presumably the Los Angeles River) is located further west. The Evergreen Cemetery is located further northeast.
1906	Sanborn Map	The Property is depicted with numerous residential dwellings identified with the following addresses throughout the Property: • 422- 566 South Mathews Street (the western perimeter of the Property); • 490-559 South Fickett Street (towards the southern portion of the Property); • 2515-2539 ½ Lanfranco Street (towards the southeast corner of the Property); • 2638 6th Street, - 596 South Mott Street (to the eastern perimeter of the Property); • 2614 - 2649 Melvin Street, 2632, 2633 Eagle Street (to the southeast corner and central areas of the Property); and • 2500, - and 2614 East 4th Street (the northern perimeter of the Property). The adjoining properties to the northeast, northwest, north, east, west, southeast, southwest and south are depicted with residential dwellings. No commercial stores or industrial operations were depicted. East 4th Street is located to the north, South Mott Street is located to the east, 6th Street is located to the south and South Mathews Street is located to the west of the Property. The general vicinity of the Property appears to be developed with residential dwellings.
1921	Sanborn Map	The Property is depicted with numerous residential dwellings and automobile garages identified with the following addresses throughout the Property: • 405- 556 South Mathews Street (the western perimeter of the Property); • 2515 - 2533 6th Street (southern perimeter of the Property);

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Table 1 – Aerial Photograph and Map Review

Date	Reference	Observations
		• 400 - 519 South Fickett Street (central portion of the Property); • 2600- 2649 Lanfranco Street (towards the southeast corner of the Property); • 2600 - 2649 East 5th Street (towards the southeast corner of the Property); • 481-511 South Mott Street (to the southeast perimeter of the Property); • 2600- 2649 Eagle Street (east-central portion of the Property); • 2500- 2614 East 4th Street (the northern perimeter of the Property). The adjoining properties are depicted with residential dwellings to the northeast, east, southeast and west. Commercial stores are depicted to the north in addition to residential dwellings. The Boyle Heights Intermediate High School is located to the south and southwest. The general vicinity of the Property appears to be developed with residential dwellings and commercial structures.
1923	Aerial Photograph	The central portion of the Property appears to be developed with three (3) structures and a field. South Frickett Street is located in the central portion of the Property. The remaining areas appear to be developed with residential dwellings. The adjoining properties appear to be developed with residential dwellings to the northeast, north, northwest, east south and southeast. The adjoining property to the south-southeast appear to be developed as a school. East 4th Street is located to the north, South Mott Avenue is located to the east, East 6th Street is located to the south and South Mathews Street is located to the west. The general vicinity of the Property appears to be located in an urban area developed with residential dwellings and commercial stores. No industrial operations are visible.
1928	Aerial Photograph	The northeast corner of the Property appears to be developed with structures associated with the Roosevelt High School. South Fickett Street is located in the central portion of the Property and Lafranco Street towards the south of the Property. The remaining areas of the Property appear to be developed with residential dwellings. The adjoining properties appear to be developed with residential dwellings to the northeast, north, northwest, east south and southeast. The adjoining property to

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Table 1 – Aerial Photograph and Map Review

Date	Reference	Observations
		the south-southeast appear to be developed as a school. East 4th Street is located to the north, South Mott Avenue is located to the east, East 6th Street is located to the south and South Mathews Street is located to the west. The general vicinity of the Property appears to be located in an urban area developed with residential dwellings and commercial stores. No industrial operations are visible.
1926, 1928	Topographic Maps	The northeast corner of the Property appears to be developed with the current auditorium/classroom building and several additional buildings. Former South Fickett Street is located to the west of the current auditorium/classroom building. The remaining areas of the Property are developed with residential dwellings. Lanfranco Street is located in the southeast corner of the Property. The adjoining properties are developed for residential dwellings. 4th Street is located to the north, South Mott Street is located to the east, 6th Street is located to the south and South Mathews Street is located to the west. The general vicinity of the Property appears to be developed for residential and commercial use. A channel (presumably the Los Angeles River) is located further west. The Evergreen Cemetery is located further northeast. The Hollenbeck Park is located further west.
1938, 1948	Aerial Photographs	The northeast corner of the Property appears to be developed with structures associated with the Roosevelt High School. South Fickett Street is located in the central portion of the Property and Lafranco Street towards the south of the Property. The remaining areas of the Property appear to be developed with residential dwellings. The adjoining properties appear to be developed with residential dwellings to the northeast, north, northwest, east south and southeast. The adjoining property to the south-southeast appear to be developed as a school. East 4th Street is located to the north, South Mott Avenue is located to the east, East 6th Street is located to the south and South Mathews Street is located to the west. The general vicinity of the Property appears to be located in an urban area developed with residential dwellings and commercial stores. No industrial operations are visible.

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Table 1 – Aerial Photograph and Map Review

Date	Reference	Observations
1949	Sanborn Map	The northeast corner of the Property is depicted as the Theodore Roosevelt High School, addressed as 422, 450 South Fickett Street, 2621, 2635, 2649 Lanfranco Street and 2612 East 4th Street. The current auditorium/classroom building is depicted with a construction date of 1923. Additionally, a gymnasium is depicted to the north of the auditorium with a construction date of 1926, two (2) shop buildings are located to the east of the auditorium, with a construction date of 1923 and 1926, a cafeteria to the southeast of the auditorium with a construction date of 1932 and seven (7) other classroom buildings. The northwest corner of the Property is depicted with a store, identified as 400 South Mathews Street and 2300 East 4th Street. The remaining areas of the Property are depicted with residential dwellings identified with the following addresses: • 405 - 556 South Mathews Street (the western perimeter of the Property); • 2515 -2533 6th Street (southern perimeter of the Property); • 400 - 519 South Fickett Street (central portion of the Property); • 2616-2649 Lanfranco Street (towards the southeast corner of the Property); • 2600 - 2649 East 5th Street (towards the southeast corner of the Property); • 2505-, 2528 East 4th Street (the northern perimeter of the Property). The adjoining properties are depicted with residential dwellings to the northeast, east, southeast and west. Commercial stores are depicted to the north in addition to residential dwellings. The Hollenbeck Middle School is located to the south and southwest. The general vicinity of the Property appears to be developed with residential dwellings and commercial structures.
1952	Aerial Photograph	The northeast corner of the Property appears to be developed with structures associated with the Roosevelt High School. South Fickett Street is located in the central portion of the Property and Lafranco Street towards the south of the Property. The remaining areas of the Property appear to be developed with residential dwellings. The adjoining properties appear to be developed with

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Table 1 – Aerial Photograph and Map Review

Date	Reference	Observations
		residential dwellings to the northeast, north, northwest, east south and southeast. The adjoining property to the south-southeast appear to be developed as a school. East 4th Street is located to the north, South Mott Avenue is located to the east, East 6th Street is located to the south and South Mathews Street is located to the west. The general vicinity of the Property appears to be located in an urban area developed with residential dwellings and commercial stores. No industrial operations are visible.
1953	Topographic Map	The northeast corner of the Property is identified as the Theodore Roosevelt High School and appears to be developed with the current auditorium/classroom building and portable classroom buildings. Former South Fickett Street is located to the west of the current auditorium/classroom building. The remaining areas of the Property are developed shaded pink presumably representing residential use. Lanfranco Street is located in the southeast corner of the Property. The adjoining properties are developed for residential dwellings to the north, northeast, northwest, east, west southeast and southwest. The adjoining property to the south is identified as the Hollenbeck Junior High School. 4th Street is located to the north, South Mott Street is located to the east, 6th Street is located to the south and South Mathews Street is located to the west. The general vicinity of the Property appears to be developed for residential and commercial use. A channel (presumably the Los Angeles River) is located further west. The Evergreen Cemetery is located further northeast. The Hollenbeck Park is located further west. Ramona High School, the Jewish Academy, the Sheridan Street School and the First Street School are located further northeast and north. The Soto Street School, Jackson High School, and Lorena Street School are located further south and southeast.
1964	Aerial Photograph	The northeast corner of the Property appears to be developed with structures associated with the Roosevelt High School. South Fickett Street is located in the central portion of the Property and Lafranco Street towards the south of the Property. The remaining areas of the Property appear to be developed with residential dwellings. The adjoining properties appear to be developed with

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Table 1 – Aerial Photograph and Map Review

Date	Reference	Observations
		residential dwellings to the northeast, north, northwest, east south and southeast. The adjoining property to the south-southeast appear to be developed as a school. East 4th Street is located to the north, South Mott Avenue is located to the east, East 6th Street is located to the south and South Mathews Street is located to the west. The general vicinity of the Property appears to be located in an urban area developed with residential dwellings and commercial stores. No industrial operations are visible.
1966	Topographic Map	The northeast corner of the Property is identified as the Theodore Roosevelt High School and appears to be developed with the current auditorium/classroom building and portable classroom buildings. Former South Fickett Street is located to the west of the current auditorium/classroom building. The remaining areas of the Property are developed shaded pink presumably representing residential use. Lanfranco Street is located in the southeast corner of the Property. The adjoining properties are developed for residential dwellings to the north, northeast, northwest, east, west southeast and southwest. The adjoining property to the south is identified as the Hollenbeck Junior High School. 4th Street is located to the north, South Mott Street is located to the east, 6th Street is located to the south and South Mathews Street is located to the west. The general vicinity of the Property appears to be located in an urbanized area of the City of Los Angeles with residential development, commercial development, schools and hospitals.
1970	Sanborn Map	The northeast corner of the Property is depicted as the Theodore Roosevelt High School with a larger area from the 1949 Sanborn Map. South Fickett Street is no longer depicted. The current auditorium/classroom building is depicted with an initial construction date of 1923. Additionally, a gymnasium is depicted to the north of the auditorium with a construction date of 1967, and classrooms are located throughout the area. The northwest corner of the Property is depicted with a store, identified as 400 South Mathews Street and 2300 East 4th Street. The remaining areas of the Property are depicted with residential dwellings identified with the following

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Table 1 – Aerial Photograph and Map Review

Date	Reference	Observations
		addresses: • 405 - 556 South Mathews Street (the western perimeter of the Property); • 2515 - 2533 6th Street (southern perimeter of the Property); • 2616 - 2649 Lanfranco Street (towards the southeast corner of the Property); • 2600, - 2649 East 5th Street (towards the southeast corner of the Property); • 2505- 2510 East 4th Street (the northern perimeter of the Property). The adjoining properties are depicted with residential dwellings to the northeast, east, southeast and west. Commercial stores are depicted to the north in addition to residential dwellings. The Hollenbeck Middle School is located to the south and southwest. The general vicinity of the Property appears to be developed with residential dwellings and commercial structures.
1972	Topographic Map	The entire Property footprint is now developed as the Theodore Roosevelt High School. The adjoining properties are developed for residential dwellings to the north, northeast, northwest, east, west southeast and southwest. The adjoining property to the south is identified as the Hollenbeck Junior High School. 4th Street is located to the north, South Mott Street is located to the east, 6th Street is located to the south and South Mathews Street is located to the west. The general vicinity of the Property appears to be located in an urbanized area of the City of Los Angeles with residential development, commercial development, schools and hospitals.
1972, 1977	Aerial Photograph	The footprint of the high school has now expanded to include the central portion and northwestern corners adjacent to South Mathews Street. The northern portion of South Fickett is no longer visible. The southern portion of the Property along Fickett and Lanfranco is still developed with residential dwellings. By 1977 the residential structures are gone and this portion of the Property appears to have been incorporated into the school. The adjoining properties appear to be developed with residential dwellings to the northeast, north, northwest, east south and southeast. The adjoining property to the south-southeast appear to be developed as a

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Table 1 – Aerial Photograph and Map Review

Date	Reference	Observations
		school. East 4th Street is located to the north, South Mott Avenue is located to the east, East 6th Street is located to the south and South Mathews Street is located to the west. The general vicinity of the Property appears to be located in an urban area developed with residential dwellings and commercial stores. No industrial operations are visible.
1981	Aerial Photograph	The entire Property footprint now appears to be developed with structures associated with educational purposes and appears to be constructed with the present day structures. The southern portion of the Property is now developed as a parking lot and field. The central and northern portion of the Property is developed with educational building, a pool, tennis courts and a football field. The adjoining properties appear to be developed with residential dwellings to the northeast, north, northwest, east south and southeast. The adjoining property to the south-southeast appear to be developed as a school. East 4th Street is located to the north, South Mott Avenue is located to the east, East 6th Street is located to the south and South Mathews Street is located to the west. The general vicinity of the Property appears to be located in an urban area developed with residential dwellings and commercial stores. No industrial operations are visible.
1981	Topographic Map	The Property is developed as the Theodore Roosevelt High School. The adjoining properties are developed for residential dwellings to the north, northeast, northwest, east, west southeast and southwest. The adjoining property to the south is identified as the Hollenbeck Junior High School. 4th Street is located to the north, South Mott Street is located to the east, 6th Street is located to the south and South Mathews Street is located to the west. The general vicinity of the Property appears to be located in an urbanized area of the City of Los Angeles with residential development, commercial development, schools and hospitals.
1989, 1994	Aerial Photographs	The Property is developed as the Roosevelt High School and appears to be constructed with the current structures including an admin/classroom building, a lunch pavilion, a cafeteria, a library/classroom, a music building, a gymnasium, an auditorium/classroom

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Table 1 – Aerial Photograph and Map Review

Date	Reference	Observations
		building, an industrial arts building, a former auto shop building, and seven (7) classroom buildings. The southern portion of the Property is developed as a parking lot and field. The northern portion of the Property with a pool, tennis courts and a football field. The adjoining properties appear to be developed with residential dwellings to the northeast, north, northwest, east south and southeast. The adjoining property to the south-southeast appear to be developed as a school. East 4th Street is located to the north, South Mott Avenue is located to the east, East 6th Street is located to the south and South Mathews Street is located to the west. The general vicinity of the Property appears to be located in an urban area developed with residential dwellings and commercial stores. No industrial operations are visible.
1994	Topographic Map	The Property is developed as the Theodore Roosevelt High School. The adjoining properties are developed for residential dwellings to the north, northeast, northwest, east, west southeast and southwest. The adjoining property to the south is identified as the Hollenbeck Junior High School. 4th Street is located to the north, South Mott Street is located to the east, 6th Street is located to the south and South Mathews Street is located to the west. The general vicinity of the Property appears to be located in an urbanized area of the City of Los Angeles with residential development, commercial development, schools and hospitals.
2002, 2005, 2009, 2012, 2012	Aerial Photographs	The Property is developed as the Roosevelt High School and appears to be constructed with the current structures including an admin/classroom building, a lunch pavilion, a cafeteria, a library/classroom, a music building, a gymnasium, an auditorium/classroom building, an industrial arts building, a former auto shop building, and seven (7) classroom buildings. The southern portion of the Property is developed as a parking lot and field. The northern portion of the Property with a pool, tennis courts and a football field. The adjoining properties appear to be developed with residential dwellings to the northeast, north, northwest, east south and southeast. The adjoining property to the south-southeast appear to be developed as a school. East 4th Street is located to the north, South Mott Avenue is located to the east, East 6th Street is

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Table 1 – Aerial Photograph and Map Review

Date	Reference	Observations
		located to the south and South Mathews Street is located to the west. The general vicinity of the Property appears to be located in an urban area developed with residential dwellings and commercial stores. No industrial operations are visible.
2012	Topographic Map	The Property and adjoining properties are not depicted with any structures in the 2012 topographic map, however it is assumed that the Property and adjoining properties are developed as they are today. The general vicinity of the Property appears to be located in an urbanized area of the City of Los Angeles. The 10 Freeway is located further west and the 5/60/101 Freeway junction is located further southwest.

5.2.2 Building Permit Review

A Building Permit report was requested from EDR. The report indicated no building permits were available for the Property.

Records of the City of Los Angeles Department of Building and Safety were searched and no records were found. Based on the development of the Property as a school, the oversight of the design and construction process would have been through the State of California Division of State Architect (DSA).

Converse has requested to review historical building records associated with the previous residential dwellings developed on the Property at the Los Angeles Department of Building and Safety. According to the Los Angeles Building Department, no records were available for the historical addresses associated with the Property.

5.2.3 City Directories

A city directory search was completed on the Property by EDR. The complete city directory is provided in Appendix D, EDR-City Directory.

The Property was identified under the following listings in the directories published during the years indicated:

The Property was identified with residential tenants beginning in 1924. The Roosevelt High School, Community Adult Day School, and Boyle Heights High School was identified beginning in 1976.

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The historical street addresses located within the Property (South Fickett, Lanfranco Street or Eagle Street) were not identified in the EDR City Directories listings.

The adjacent properties were identified as either residential or commercial uses in the city directories from 1925 to 1977.

No industrial uses appeared to be identified on the Property or adjacent properties.

5.2.4 Data Failure

Historical information regarding the Property was dated as early as 1894 for residential use. A historical data failure occurred during this assessment. Remaining ASTM sources are deemed unlikely to yield significant information.

5.2.5 Summary of Historical Property Use

According to historical research conducted by Converse, the Property was historically constructed with multiple residential dwellings and historical streets (South Fickett Street, Eagle Street, Lanfranco Street) from as early as 1894. The Roosevelt High School was constructed in a smaller area in the central portion of the Property in 1922. Expansions of the Property occurred from the 1940s to the 1970s to include the present day Property footprint.

5.2.6 Summary of Past Uses of Adjoining Properties

The adjoining properties appear to be developed for residential use from as early as 1894. The Hollenbeck Middle School was developed on the southern adjoining property in 1949.

5.2.7 Summary of Past Uses of the Surrounding Area

The general vicinity of the Property appears to be located in an urban area from as early as 1894 and is developed with residential dwellings and commercial stores. No industrial operations were visible in the Property vicinity.

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5.3 Results of Environmental Records Sources Review

An Environmental Data Resources (EDR) report of Standard Environmental Record Sources (Records) was prepared specifically for the Property. The search included queries to the following databases for cases within specified ASTM search distances. A copy of the EDR Radius Map Report is provided in Appendix E.

5.3.1 Property Listings

The Property, LAUSD/Roosevelt High School (A1), LA USD Roosevelt HS (A2), LA UNI SCH DIST ROOSEVELT HIG (A3) and Roosevelt High School SLC Project (A4) (456 South Mathews Street) was identified on the following databases:

Resource Conservation and Recovery Act (RCRA) Generators List
The EPA's RCRA Program identifies and tracks hazardous waste from the point of generation to the point of disposal. This is a database which lists facilities which generate, store, transport, treat, or dispose of hazardous waste. Small quantity facilities generate less than 1,000 kilograms per month of non-acutely hazardous waste. Large quantity facilities generated at least 1,000 kilograms per month of non-acutely hazardous waste or one kilogram per month of acutely hazardous waste.

The Property was identified as a RCRA small quantity generator in 1997. No violations were noted.

National Pollutant Discharge Elimination System (NPDES)
Database of sites which storm water compliance information.

The Property submitted storm water compliance information for construction activities in 2013. The current status is now terminated. No violations were noted.

Emissions Inventory Data (EMI)
Database of sites with emissions inventory.

The Property submitted emissions data in 1990. No violations were reported.

Facility and Manifest Data (HAZNET)
Database of sites which submit a hazardous waste manifest to DTSC.

The Property submitted hazardous waste manifest for the disposal of waste oil and mixed oil, laboratory waste chemicals and asbestos containing wastes. No violations were noted.

Facility and Manifest Data (FINDS)
Database of sites which submit a hazardous waste manifest to DTSC.

No violations were noted.

Enforcement and Compliance History Online database (ECHO)

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Database of sites which submit compliance history to Environmental Protection Agency (EPA)

The Property was identified on the EPA ECHO database. No violations were noted.

The Property, Boyle Heights High School (544 South Mathews Street) (5), was identified on the following database:

RCRA Generators List
The EPA's RCRA Program identifies and tracks hazardous waste from the point of generation to the point of disposal. This is a database which lists facilities which generate, store, transport, treat, or dispose of hazardous waste. Small quantity facilities generate less than 1,000 kilograms per month of non-acutely hazardous waste. Large quantity facilities generated at least 1,000 kilograms per month of non-acutely hazardous waste or one kilogram per month of acutely hazardous waste.

The Property was identified as a RCRA large quantity generator in 1987 and 2008 for the disposal of lead. No violations were noted.

No historical addresses associated with Property were identified in the EDR Radius Report.

5.3.2 Adjoining Properties

The following adjoining properties were identified in the EDR report:

- US Coin Laundry Inc. at 2601 East 4th Street (6) located to the northeast, at a higher elevation, was identified as a US Historical Cleaner in 2008.

The above property is not a concern due to its use as a coin laundry.

- Mrs. Dora Kash at 2547 East 4th Street (B7) located to the north-northeast, at a higher elevation, was identified as a US Historical Cleaner in 1937.

- Rosenthal HD at 2523 East 4th Street (B8, C9) located to the north, at a higher elevation, was identified as a US Historical Cleaner in 1924 and 1929

- Derian Jos at 2505 East 4th Street located to the north, at a higher elevation, was identified as a historical auto stations facility in 1929, 1933, 1937 and 1942 (C10).

These above properties are not a concern as they appear to be occupational listings from the City Directory.

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5.3.3 Other Off-site Locations of Concern

Other off-site locations of concern identified by EDR within a maximum one-mile radius from the Property included registered UST sites, LUST sites, hazardous waste generators and permitted hazardous materials handlers.

The potential for environmental concern to the Property from these off-site locations appears to be low due to one or more of the following: type of regulatory listing; type of resource (soil) affected, location with respect to the direction of regional groundwater, distance from the Property; status of the case; remedial efforts being directed by a regulatory agency; and/or potential responsible parties have been identified.

5.3.4 Orphan Listings

The EDR database report identified three (3) orphan listings. The two (2) orphan sites that were identified by address were found to be in the general vicinity of the Property; however, due to distance, location with respect to the direction of regional groundwater, and/or type of listing were determined to have a low potential for environmental concern to the Property.

One orphan sites was identified only by street name. The street name was found in the general vicinity of the Property; however, the specific site location could not be determined. This orphan site appeared to have a low potential for environmental impact to the Property due to one or more of the following: type of regulatory listing; type of resource (soil) affected, location with respect to the direction of regional groundwater, distance from the Property; status of the case; remedial efforts being directed by a regulatory agency; and/or potential responsible parties have been identified.

5.4 Additional Environmental Record Sources

5.4.1 U.S. Department of Transportation, Pipeline and Hazardous Material Safety Administration (PHMSA)

PHMSA online mapping system for gas transmission pipelines or hazardous liquid pipelines in Los Angeles County was reviewed (https://www.npms.phmsa.dot.gov/default.htm). No pipelines are located on the Property.

A gas transmission line owned by Sempra Energy is located adjacent to the northeast along 4th Street and diverts further north to South Fickett

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Street. According to information from the Sempra Energy website, this pipeline is generally equipped with a larger diameter and operates at pressures above 200 psi. This pipeline transports gas from supply points to the gas transmission system.

5.4.2 California Environmental Protection Agency (Cal/EPA), Department of Toxic Substances Control (DTSC)

No information regarding the Property was on file with DTSC.

The Envirostor website (http://www.envirostor.dtsc.ca.gov/public/) was reviewed for information, and the Property was not listed in the database.

5.4.3 Cal/EPA, Los Angeles Regional Water Quality Control Board (RWQCB)

Information was requested from RWQCB but was not received in time for inclusion in this report.

The Geotracker website (http://geotracker.waterboards.ca.gov/) was reviewed for information, and the Property was not listed in the database.

5.4.4 California Department of Conservation, Division of Oil, Gas and Geothermal Resources (DOGGR)

According the DOGGR District 1 Map (http://maps.conservation. ca.gov), there are no oil or gas wells located on the Property or adjacent properties. The Property is located in the Boyle Heights (ABD) oil field.

5.4.5 South Coast Air Quality Management District (SCAQMD)

Records available at the SCAQMD were consistent with the files reviewed on the FINDs database.

The SCAQMD Facility and Information Detail (FIND) database was reviewed for information. The following information was identified:

- Co-Power Inc. (456 South Mathews Street) a Permit to Operate (PTO) (D25759) was on file for a natural gas generator on March 23, 1990 but the application was cancelled on September 26, 1990. No violations or notices to comply were on file for the Property.

- LA Unified School District, Roosevelt High School (456 South Mathews; Facility Identification 71577), inactive PTOs natural gas boilers were on file dated June 2, 1989, Compliance Plan for Rule

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1146 was on file dated May 1, 1990, PTOs for Boilers were on file dated February 12, 2008 and Rule 1415 Plan Notifications were on file dated March 21, 2008, August 18, 2009, February 23, 2010 and April 18, 2014. No violations or notices to comply were on file for the Property.

5.4.6 Los Angeles County, Department of Health Services (DHS), Public Health Investigation

Information was requested from DHS but was not received in time for inclusion in this report.

5.4.7 Los Angeles County, Department of Public Works (DPW), Environmental Programs

There is no information regarding the Property on file with DPW.

5.4.8 City of Los Angeles Fire Department (LAFD), Underground Storage Tank and Fire Prevention Records

There is no information regarding the Property on file with the LAFD, Underground Storage Tank and Fire Prevention.

5.4.9 City of Los Angeles Fire Department (LAFD), Hazardous Material Records

Information was requested from LAFD but was not received in time for inclusion in this report.

5.4.10 City of Los Angeles Bureau of Sanitation Industrial Waste Management Division.

According to records reviewed, the Property (456 South Mathews Street) was identified as a new or proposed point of discharge beginning on July 1, 1967. Sources discharged water include a cooling tower, floor washing, garbage can be washing, pool maintenance and general equipment washing.

According to Ms. Bellete Yohannes, Chief Environmental Compliance Inspector II with the City of Los Angeles Waste Management Division, no citations have been issued to the Property in 5 years.

5.4.11 Methane Area

According to information provided on the ZIMAS database, the Property is located within a methane zone within the City of Los Angeles.

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6.0 Property Reconnaissance

6.1 Methodology

On May 18, 2016 Converse visited the Property to evaluate present use and to identify observable environmental conditions at the Property. Our methodology involved walking the perimeters, center lines, and accessible interior areas of the buildings while noting observed evidence of present and potential environmental concerns.

A field-generated map is provided in Appendix A. Pertinent Property photographs are provided in Appendix B.

6.2 Limiting Conditions

Converse's findings are based on the Property conditions observed on May 18, 2016.

6.3 Interior Observations of Property

During our Property visit, Converse made the following observations of the interior of the Property's building(s):

Table 3 – Interior Observations of Property

Item or Condition	Observed Evidence	No Evidence Observed	Comments
Hazardous Substances & Petroleum Products:	☒	☐	Consumer quantities of hazardous substances associated with maintenance operations was observed. In the maintenance office located in the central portion of the Property and in the shed located on the in the northeast corner of the Property.
Storage Tanks & Related Equipment:	☐	☒	
Odors:	☐	☒	
Standing Surface Water or Other Pools of Liquid:	☐	☒	

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Table 3 – Interior Observations of Property

Item or Condition	Observed Evidence	No Evidence Observed	Comments
Drums & Other Containers of Hazardous Substances, Petroleum Products, or Other Unidentified Contents:	☒	☐	Previously discussed in *Hazardous Substances and Petroleum Products*.
Transformers or Equipment containing Polychlorinated Biphenyls (PCBs):	☒	☐	Two (2) hydraulic hoists associated with the former auto shop class was observed in the mid-eastern portion of the Property in the former auto shop building. Based on the nature of use of these features and known redevelopment activities, these features are considered a REC. Three (3) elevators are located at the Property. The elevators are located in the library, admin/classroom building and auditorium/classroom building. No stains or drains were observed in the elevator shafts during the site reconnaissance.
Heating/Cooling System:	☒	☐	
Stains or Corrosion on Floors, Walls, or Ceilings:	☒	☐	
Drains and Sumps:	☒	☐	Several floor drains were observed in the kitchen within the cafeteria building and in the boiler room within the auditorium classroom.

In addition to the above items, Converse also made the following observations:

- Boilers are located in the basement of the auditorium/classroom building and the admin/classroom building.
- Evidence of a fire was observed at the maintenance office building located in the mid-southern portion of the Property.

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6.4 Exterior Observations of Property

During our Property visit, CONVERSE made the following observations of the exterior of the Property:

Table 4 – Exterior Observations of Property

Item or Condition	Observed Evidence	No Evidence Observed	Comments
Hazardous Substances & Petroleum Products:	☐	☒	
Storage Tanks & Related Equipment:	☐	☒	
Odors:	☐	☒	
Standing Surface Water or Other Pools of Liquid:	☐	☒	
Drums & Other Containers of Hazardous Substances, Petroleum Products, or Other Unidentified Contents:	☐	☒	
Transformers or Equipment containing Polychlorinated Biphenyls (PCBs):	☐	☒	
Pits, Ponds, or Lagoons:	☐	☒	
Stained Soil or Pavement:	☐	☒	
Stressed Vegetation (other than from insufficient water):	☐	☒	
Evidence of Mounds, Depressions or Filled or Graded Areas Suggesting Trash or Other Solid Waste Disposal:	☐	☒	
Waste Water or any discharge (including storm water) into a Drain, Ditch, or Stream on or Adjacent to the Property:	☒	☐	A 3-stage clarifier is located in the mid-eastern portion of the Property adjacent to the former auto shop building. Evidence of floor drains leading to the clarifier from the former auto shop building was also observed.

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Table 4 – Exterior Observations of Property

Item or Condition	Observed Evidence	No Evidence Observed	Comments
			Based on the nature of use of these features and known redevelopment activities, these features are considered a REC. Storm water drains were located throughout the campus.
Wells (active, inactive, or abandoned):	☐	☒	
Septic Systems or Cesspools:	☐	☒	
Prior Structures:	☐	☒	
Roads, Tracks, Railroad Tracks or Spurs:	☒	☐	

In addition to the above items, Converse also made the following observations:

- A chiller used to the cool the auditorium/classroom building is located to the southwest of this building.

- A swimming pool is located on the northwest corner of the Property. According to on-site interviews the pool is maintained by the City of Los Angeles.

6.5 Current Uses of Adjoining Properties

Based on our research and observations during our Property visit, the Property is bordered by the following:

Table 5 – Adjoining Property Use

Direction	Current Development
North:	Silver Moon Market (2503 East 4th Street), TV & Repair (2507 East 4th Street), Taco Restaurant (2511 East 4th Street), Multi-Family Residential (2515 East 4th Street), Alacarn Kitchen Ware (2519 East 4th Street), Single-Family Residential (2527 East 4th Street), Multi-Family Residential (2529 East 4th Street), Single Family Residential (2537 East 4th Street), LA Laundria & Coin Wash (2601 East 4th Street), Multi-Family Residential (2607, 2613 East 4th Street), Single-Family Residential (2617 East 4th Street), Multi-Family Residential (2621, 2527 East 4th

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Table 5 – Adjoining Property Use

Direction	Current Development
	Street), Jose's Discount (2631 East 4th Street), Beauty Shop and Pawn Shop (2639 East 4th Street) and South Fickett Street
Northeast:	Health Food Mart (2701 East Fourth Street)
Northwest:	Multi-Family Residential (2431 East 4th Street)
South:	Hollenbeck Middle School (2510 East 6th Street)
Southeast	Single Family Residential Dwellings
Southwest:	Single-Family Residential Dwellings
East:	South Mott Street followed by residential dwellings, Eagle Street, East 5th Street and Lanfranco Street and a Mini Mart (2700 East 4th Street).
West:	South Mathews Street followed by residential dwellings and a Tortilleria (403 South Mathews Street)

6.6 Current Uses of Surrounding Area

Based on our research and observations during our Property visit, the surrounding area of the Property consists of residential and commercial tenants in addition to a middle school to the south of the Property.

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7.0 Interviews

During the interviews, the owners and occupants were asked if they had any available documents that would be helpful. The documents that were requested are detailed in Section 3.1 of this report:

7.1 Property Owner

Mr. Andrew Fowler of the LAUSD was interviewed during the Property reconnaissance on May 18, 2016. Mr. Fowler was unaware of any environmental concerns associated with the Property other than the features located in the former auto body shop.

7.2 Tenant/Occupant

Mr. William Chau, the facility manager of Roosevelt High School was interviewed during the Property reconnaissance on May 18, 2016. Mr. Chau has been associated with the Property for 6 years. Mr. Chau had no knowledge of any environmental concerns at the Property.

Ms. Norma Rodriguez, facility maintenance personnel for Roosevelt High School was interviewed during the Property reconnaissance. Ms. Rodriguez also attended Roosevelt High School and has been familiar with the Property since 1980. Ms. Rodriguez has no knowledge of any underground storage tanks, above ground storage tanks or any environmental concerns at the Property.

7.3 State or Local Government Officials

Ms. Bellete Yohannes, Chief Environmental Compliance Inspector II with the City of Los Angeles Waste Management Division, was interviewed. According to Ms. Yohannes, no citations have been issued to the Property in 5 years.

7.4 Owners and Occupants of Neighboring Sites

Owners and occupants of neighboring sites were not interviewed as part of this assessment.

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8.0 School Site Selection Checklist

A “Preliminary Environmental Screening of Proposed Project at Existing School Site” was prepared for the Property.

The Property is located within a methane zone within the City of Los Angeles. The remaining questions received a “No” response. A copy of the list is presented in Appendix F.

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9.0 Findings

A cursory summary of findings is provided below. However, details were not included or fully developed in this section, and the report must be read in its entirety for a comprehensive understanding of the items contained herein.

The Property is owned by the LAUSD and operated as the Roosevelt High School, Boyle Heights Continuation and School of Science, Technology, Engineering & Math (STEM) at Roosevelt High.

The Property is located to the southeast of South Mathews Street and northeast of South Mott Street in between East 4th Street and East 6th Street, in the City of Los Angeles, Los Angeles County, California. The Property is located 0.5 miles east of the 5 Freeway (Santa Monica Freeway) and 0.5 miles northeast of the Interstate 5, 60 Freeway and 101 Freeway junctions.

According to information from the City of Los Angeles Planning Department, the Property is located within a methane zone within the City of Los Angeles.

According to historical research conducted by Converse, the Property was historically constructed with multiple residential dwellings and historical streets (South Fickett Street, Eagle Street, Lanfranco Street) from as early as 1894. The Roosevelt High School was constructed in a smaller area in the central portion of the Property in 1922. Expansions of the Property occurred from the 1940s to the 1970s to include the present day Property footprint.

The Property was identified in the following databases on the Environmental Data Resources (EDR) Radius Report:

- Resource Conservation and Recovery Act (RCRA) Generators list;
- National Pollutant Discharge Elimination System (NPDES);
- Emissions Inventory Data (EMI);
- Facility and Manifest Data (HAZNET/FINDS); and
- Enforcement and Compliance History Online (ECHO)

The adjoining property to the north and northeast were identified in the following databases EDR Radius Report:

- US Coin Laundry Inc. at 2601 East 4th Street located to the northeast, at a higher elevation, was identified as a US Historical Cleaner in 2008.
- Mrs. Dora Kash at 2547 East 4th Street located to the north-northeast, at a higher elevation, was identified as a US Historical Cleaner in 1937. Rosenthal HD at 2523 East 4th Street located to the north, at a higher elevation, was identified as a US Historical Cleaner in 1924 and 1929.

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- Derian Jos at 2505 East 4th Street located to the north, at a higher elevation, was identified as a historical auto stations facility in 1929, 1933, 1937 and 1942.

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10.0 Opinion

Based on the findings of this report, it is our opinion that:

- The current use of the Property and adjoining properties are not a REC.
- The historical use of the Property for residential purposes is not a REC.
- The gas transmission pipeline located to the northeast of the Property is an environmental concern.
- The hydraulic hoists and the 3-stage clarifier associated with former auto shop operations at the mid-eastern portion of the Property are considered RECs.
- Based on the age of the Property buildings, there is the potential presence of LBP residue in the shallow soils at the Property.
- Based on the age of the Property buildings, there is a potential presence of Organochlorine pesticides (OCP) in shallow soils around the foundations of the existing and former Property buildings.
- The potential presence of polychlorinated biphenyls (PCB's) in shallow soils.
- The potential presence of arsenic in shallow soils.
- The potential presence of contaminants of concern (COCs) in fill materials at the Property.
- The identification of the Property in a methane zone is a REC.
- The identification of the Property and the adjoining properties to the north-northeast on the EDR Radius Report is not a REC based on lack of violations.
- No historic recognized environmental conditions (HRECs), controlled recognized environmental conditions (CRECs) or de minimus conditions were identified during this assessment. Vapor intrusion concerns were not noted.
- No significant data gaps were identified that affect the ability to the Environmental Professional (EP) to identify RECs.
- There are no unusual circumstances where greater certainty is required regarding RECs.

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11.0 Conclusions and Recommendations

Converse has performed a Phase I Environmental Site Assessment in general conformance with the scope and limitations of ASTM Practice E1527-013 for the Roosevelt High School at 456 South Mathews Street in the City of Los Angeles, Los Angeles County, California. Any exceptions to or deletions from this practice are described in the Limitations and Exceptions of Assessment section of this report.

This assessment has revealed no evidence of RECs in connection with the Property except for the following:

- The potential presence of Lead Based Paint (LBP) residue in the shallow soils around the drip lines of the existing and former Property buildings.
- The potential presence of Organochlorine pesticides (OCP) in shallow soils around the foundations of the existing and former Property buildings.
- The potential presence of arsenic in shallow soils.
- The potential presence of polychlorinated biphenyls (PCB's) in shallow soils.
- The potential presence of contaminants of concern (COCs) in fill materials at the Property.
- The 3-stage clarifier and hydraulic hoists associated with former auto shop operations at the mid-eastern portion of the Property.
- Based on the age of the Property buildings, asbestos, PCB's and lead based paint buildings materials may have been used during construction.
- The Property being located within a methane zone.

Based on this assessment, Converse has the following conclusions and recommendations:

- Prior to redevelopment activities, a subsurface assessment in the area of the current clarifier and hydraulic lifts should be conducted to determine if these features have impacted the subsurface of the Property.
- Prior to redevelopment activities, shallow subsurface sampling should be conducted for the potential presences of LBP, OCP, arsenic and PCBs in the current and former Property buildings and potential COCs in the fill material.
- Conduct a methane survey in accordance with LADBS Site Testing Standards.
- Converse recommends that all asbestos, PCB;'s and lead-based paint building materials be identified and abated prior to demolition and/or redevelopment activities.

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12.0 Deviations and Limitations

Freedom of Information Act Request (FOIA) were submitted to the, City of Los Angeles Fire Department Hazardous Materials Division, and the Los Angeles Regional Water Quality Control Board. Responses from these agencies were not received in time for the inclusions of this assessment. However, based on the nature of use of the Property and known historical use, this limitation is not deemed significant.

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13.0 Additional Non-Scope Services

There are environmental issues outside the scope of the ASTM E1527-13 that can be assessed in connection with a commercial real estate transaction. These are dealt with as non-scope considerations since they do not typically present a Superfund Liability. The specific level of inquiry (if any) is defined in the Proposal which contains a Scope of Work. These non-scope services are very client specific and not covered by the ASTM standard. They are frequently related to the business environmental risk which is defined in the standard as "risk which can have a material environmental or environmentally-driven impact on the business associated with the current or planned use of a parcel of commercial real estate…"

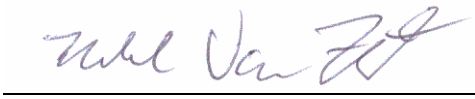
Other than the completion of the CDE Checklist, no non-scope issues were addressed in this report.

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14.0 Signature of Environmental Professional

I declare that, to the best of my professional knowledge and belief, I meet the definition of *Environmental Professional* as defined in §312.10 of 40 CFR 312.

I have the specific qualifications based on education, training and experience to assess a *property* of the nature, history, and setting of the *subject property*. I have developed and performed the all appropriate inquiries in conformance with the standard and practices set forth in 40 CFR Part 312.



Michael Van Fleet, PG
Title

This Phase I ESA was completed under the supervision of the above Environmental Professional. A complete list of preparers, and their responsibilities for this assessment, is provided in the following section (Section 14.0, List of Preparers).

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15.0 List of Preparers

Michael A. Van Fleet
Senior Geologist

B.A. Earth Science, University of California, Santa Cruz, 1999
Professional Geologist; California No. 7869, Washington No. 2900

Mr. Van Fleet has over 13 years of experience working as a geologist in the state of California. The majority of his project experience has been in the areas of environmental assessment and subsequent remediation, but also includes experience in groundwater development. Mr. Van Fleet's experience includes: collection of soil matrix, soil vapor, and groundwater samples; geologic logging of earth materials; designing well completion parameters; regulatory interaction; design and operation of soil vapor and groundwater remediation systems; staff and project management; report preparation and review; and monitoring of contractor activities.

Principal area of responsibility for this ESA report: Report Review.

John Ziegler
Senior Professional

Business Administration, Cal State University Los Angeles, 1970
Architecture, California State Polytechnic University, Pomona
Licensed Architect, State of California

Mr. Ziegler has over 30 years of experience in project administration and project management with 18 years of experience in the oversight, management and administration of environmental assessments. He has served in a variety of roles including oversight and supervision of soil, groundwater and soil vapor investigations, biological surveys, property condition assessments, preparation of human health risk assessments, implementation of remedial activities, fungal investigations, construction administration, specification writing, and cost estimating.

Principal area of responsibility for this ESA report: Project Management, Client Point of Contact and Report Review.

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Sue Krobthong

Project Environmental Scientist

B.S., Environmental Science, Social Science Emphasis, University of California, Riverside, 2005
Certificate of Environmental Management, University of California, Irvine, 2011

Ms. Krobthong is a project environmental professional responsible for conducting Phase I and Phase II Environmental Site Assessments. Ms. Krobthong has 10 years of experience with Phase I and II ESAs, as well as conducting environmental and health and safety compliance audits. Current duties at Converse include project management, business development and client maintenance, conducting/managing ESAs, and completing third party documents reviews.

Principal area of responsibility for this ESA report: Project Management, Historical Research, Regulatory Agency Interaction, Property Reconnaissance, Interviews, and Report Generation.

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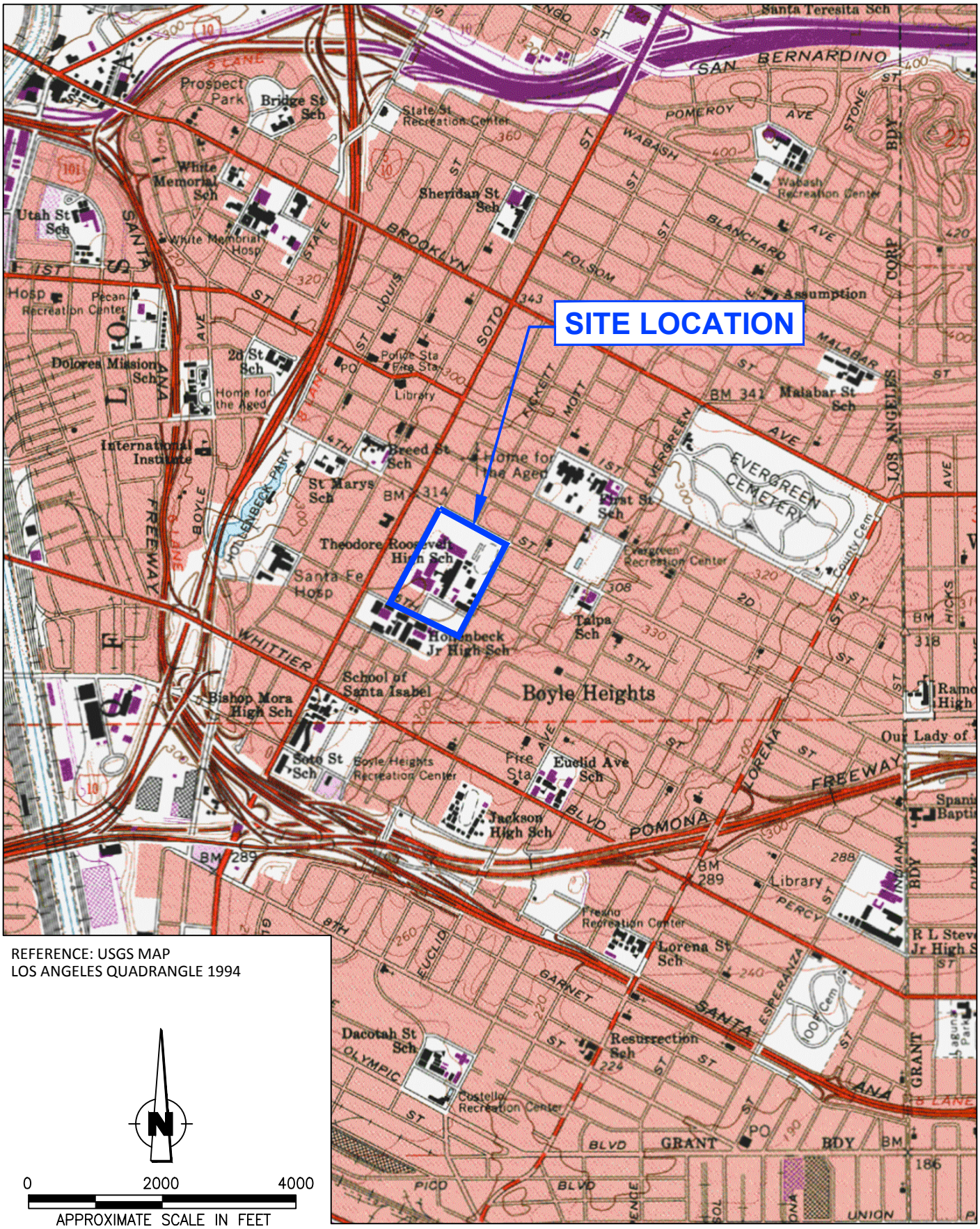
Yohannes, Bellete, Interview May 2016

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Property Plans

Appendix A

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REFERENCE: USGS MAP
LOS ANGELES QUADRANGLE 1994

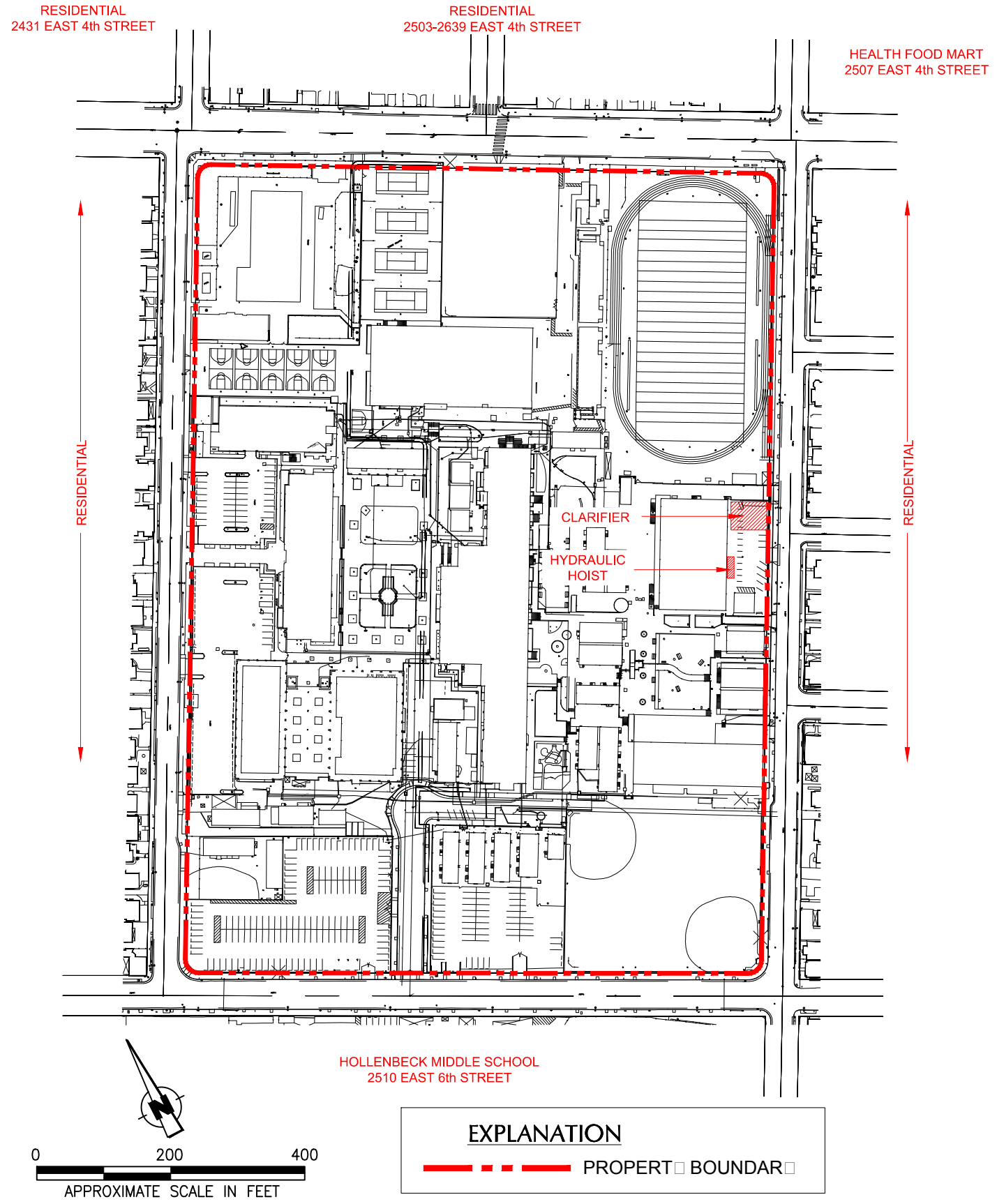
PROPERTY LOCATION MAP

Converse Consultants

ROOSE□ELT □IG□ SC□OOL
LOS ANGELES□CA
FOR: LAUSD

Project No. 16-41-126-01

Figure No. 1



PROPERTY MAP

Converse Consultants

ROOSEVELT HIGH SCHOOL
LOS ANGELES, CA
FOR: LAUSD

Project No.
16-41-126-01

Figure No.
2

Pertinent Property Photographs

Appendix B

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1. View within the auditorium.



2. View of hallways in the auditorium/classroom building.



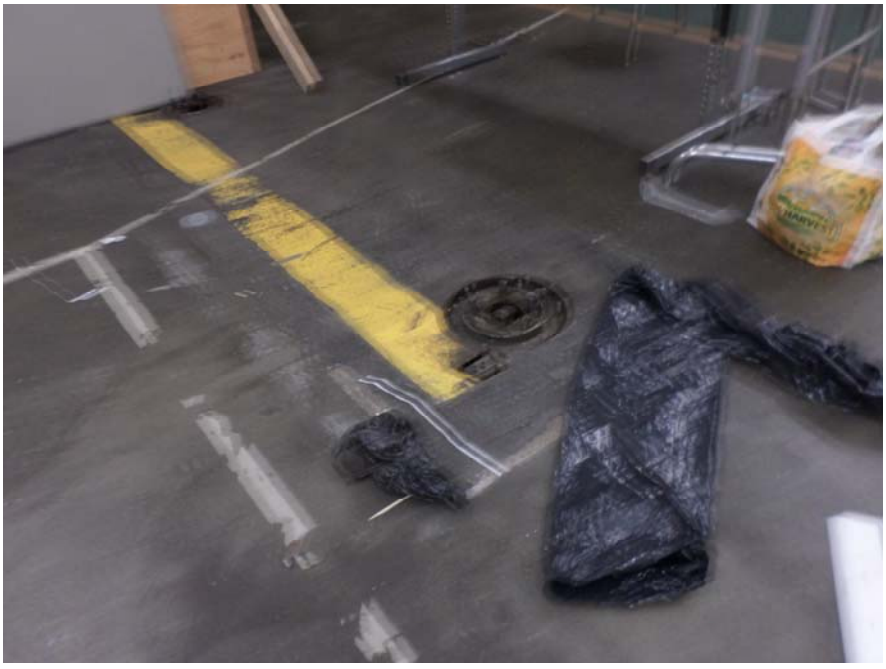
3. View within the gymnasium building.



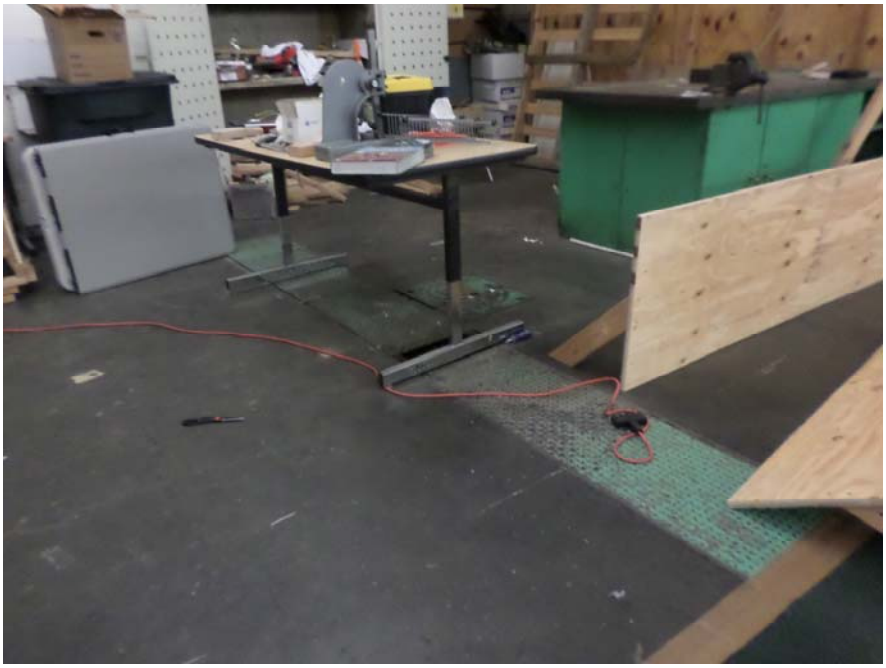
4. View of girl's locker room in the gymnasium building.



5. View of classroom located in the industrial arts building.



6. View of hydraulic hoist located in the former auto body shop located in the mid-eastern portion of the Property.



7. View of drain located ~~of~~ in the former auto body shop leading to the clarifier.



8. View of 3 stage clarifier located ~~in~~ near the mid-eastern portion of the building.



9. View of elevator shaft located in the auditorium/classroom building.



10. View within maintenance office.



11. View of fire damage to the ~~maintainance~~ maintenance office building.



12. View of central portion of the Property.



13. View ~~of~~ within boiler room of the auditorium/classroom building.



14. View of adjoining property to the west along South Mathews Street.



15. View of adjoining property to the north.



16. View of adjoining properties to the east and South Mott Street.

Aerials, Sanborn Maps & Topographic Maps

Appendix C

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Roosevelt High School
456 South Mathews Street
Los Angeles, CA 90033

Inquiry Number: 4609254.12
May 04, 2016

The EDR Aerial Photo Decade Package

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

EDR Aerial Photo Decade Package

05/04/16

Site Name:

Roosevelt High School
456 South Mathews Street
Los Angeles, CA 90033
EDR Inquiry # 4609254.12

Client Name:

Converse Consult Inland Empire
10391 Corporate Drive
Redlands, CA 92374
Contact: Sue Krobthong

Environmental Data Resources, Inc. (EDR) Aerial Photo Decade Package is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's professional researchers provide digitally reproduced historical aerial photographs, and when available, provide one photo per decade.

Search Results:

Year	Scale	Details	Source
2012	1"=500'	Flight Year: 2012	USDA/NAIP
2010	1"=500'	Flight Year: 2010	USDA/NAIP
2009	1"=500'	Flight Year: 2009	USDA/NAIP
2005	1"=500'	Flight Year: 2005	USDA/NAIP
2002	1"=500'	Flight Date: June, 10 2002	USGS
1994	1"=500'	Acquisition Date: May, 31 1994	USGS/DOQQ
1989	1"=500'	Flight Date: August, 22 1989	USGS
1981	1"=500'	Flight Date: February, 21 1981	EDR Proprietary Brewster Pacific
1977	1"=500'	Flight Date: April, 25 1977	EDR Proprietary Brewster Pacific
1972	1"=500'	Flight Date: November, 21 1972	EDR Proprietary Brewster Pacific
1964	1"=500'	Flight Date: July, 28 1964	USGS
1952	1"=500'	Flight Date: August, 01 1952	USGS
1948	1"=500'	Flight Date: July, 10 1948	USGS
1938	1"=500'	Flight Date: May, 22 1938	USGS
1928	1"=500'	Flight Date: January, 01 1928	USGS
1923	1"=500'	Flight Date: January, 01 1923	USGS

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INQUIRY #: 4609254.12
YEAR: 2012
= 500'
N
EDR


INQUIRY #: 4609254.12
YEAR: 2010
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INQUIRY #: 4609254.12
YEAR: 2009
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EDR

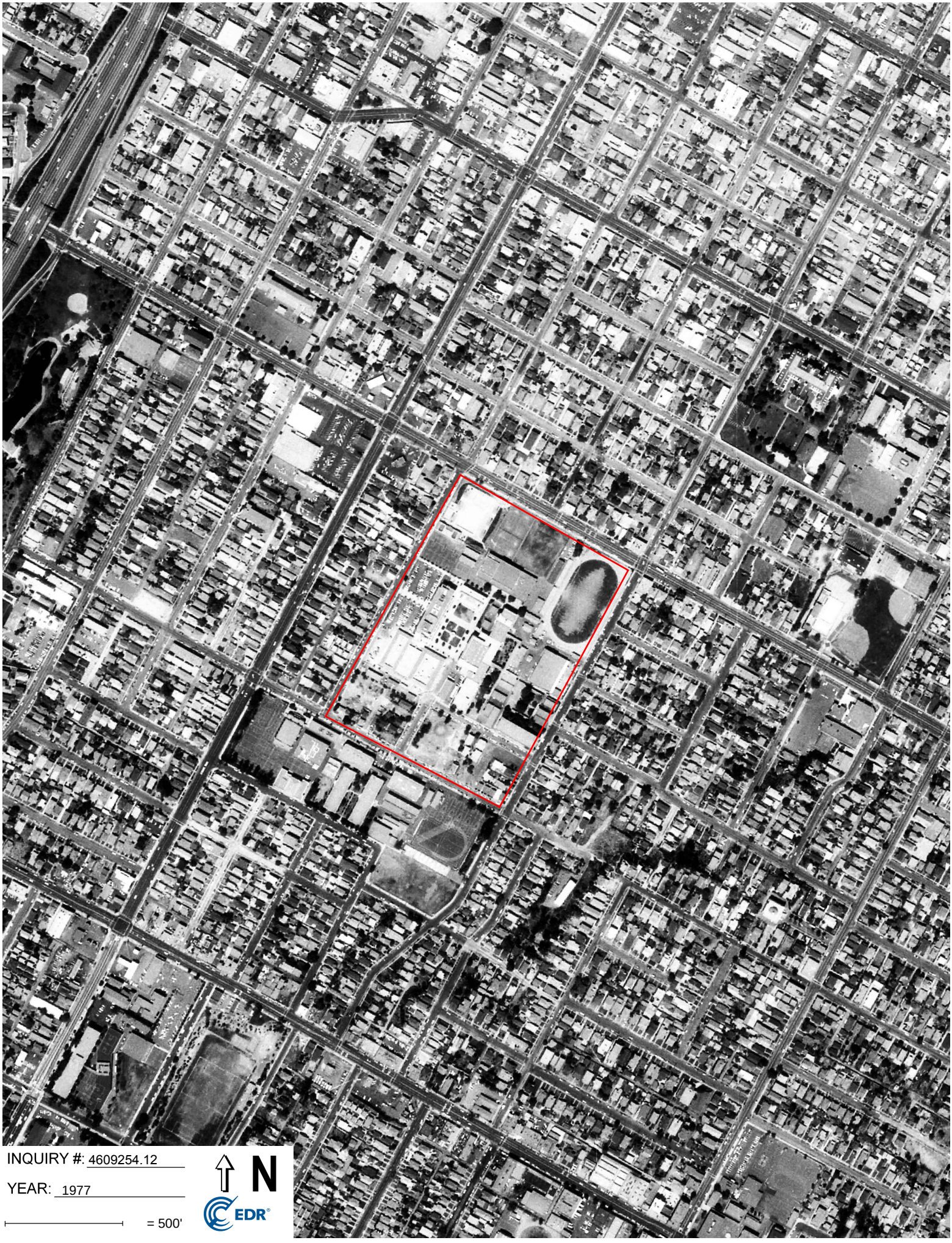

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EDR

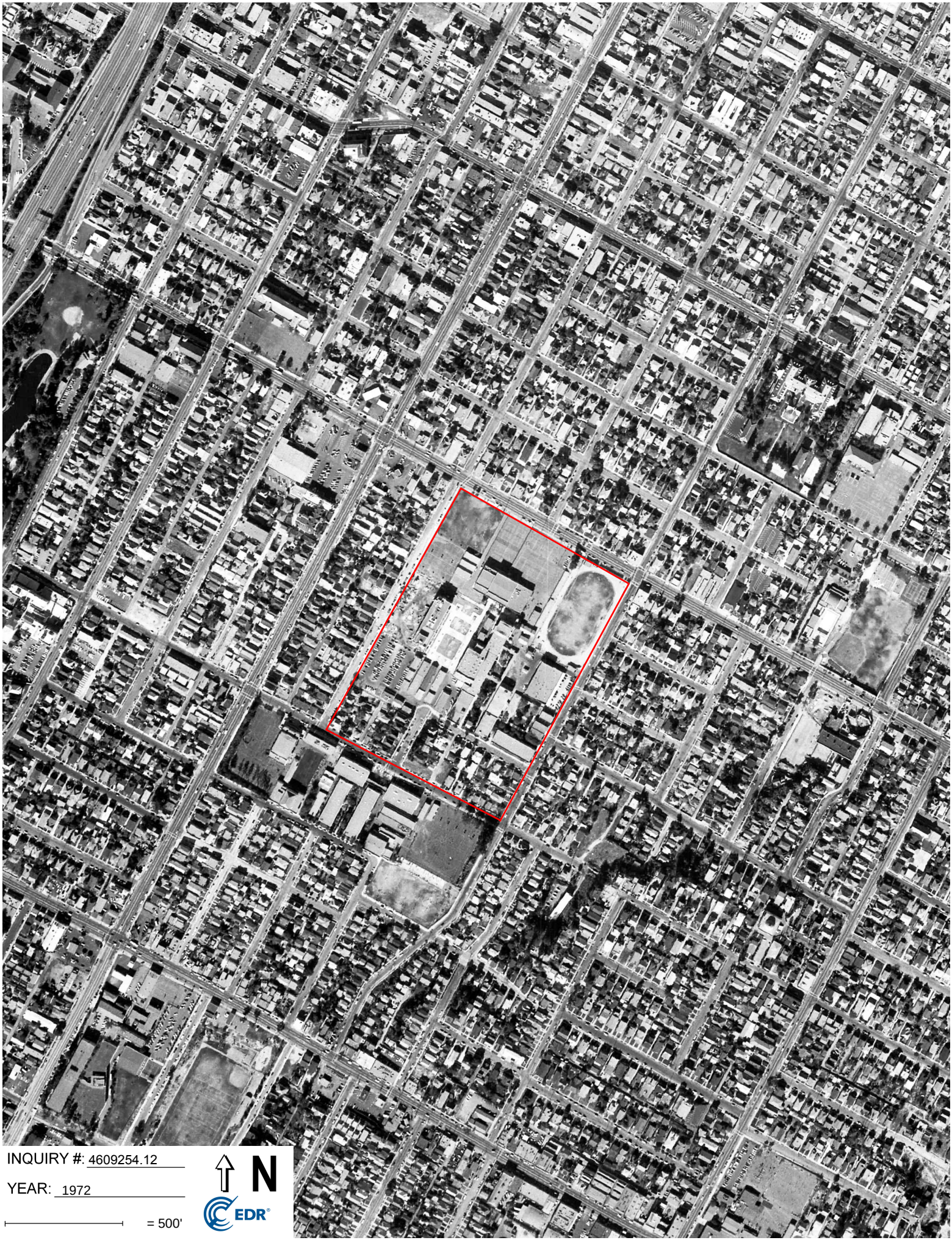

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EDR


INQUIRY #: 4609254.12
YEAR: 1994
= 500'
N
EDR


INQUIRY #: 4609254.12
YEAR: 1989
= 500'
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EDR


INQUIRY #: 4609254.12
YEAR: 1981
= 500'
N
EDR


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YEAR: 1977
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EDR


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YEAR: 1972
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EDR


INQUIRY #: 4609254.12
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EDR



INQUIRY #: 4609254.12

YEAR: 1952

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EDR


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EDR


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EDR



INQUIRY #: 4609254.12

YEAR: 1928

= 500'

N

EDR



INQUIRY #: 4609254.12

YEAR: 1923

= 500'

N

EDR

Roosevelt High School
456 South Mathews Street
Los Angeles, CA 90033

Inquiry Number: 4609254.3
May 03, 2016

Certified Sanborn® Map Report

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Shelton, CT 06484
Toll Free: 800.352.0050
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Certified Sanborn® Map Report

05/03/16

Site Name:

Roosevelt High School
456 South Mathews Street
Los Angeles, CA 90033
EDR Inquiry # 4609254.3

Client Name:

Converse Consult Inland Empire
10391 Corporate Drive
Redlands, CA 92374
Contact: Sue Krobthong

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Certified Sanborn Results:

Certification # 36DB-4706-8195

PO # 16-41-126-01

Project Roosevelt High School

Maps Provided:

1970
1949
1921
1906

Sanborn® Library search results

Certification #: 36DB-4706-8195

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- ☑ Library of Congress
- ☑ University Publications of America
- ☑ EDR Private Collection

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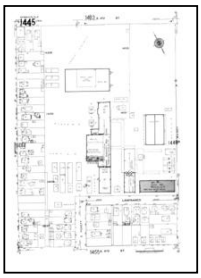
Sanborn Sheet Key

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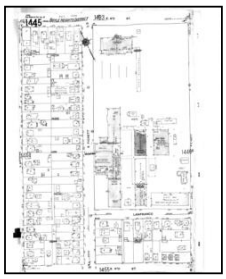


Volume 14, Sheet 1444
1970



Volume 14, Sheet 1445
1970

1949 Source Sheets



Volume 14, Sheet 1445
1949

1921 Source Sheets

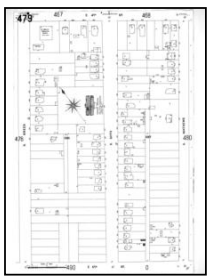


Volume 14, Sheet 1444
1921

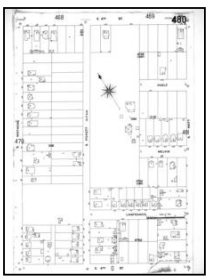


Volume 14, Sheet 1445
1921

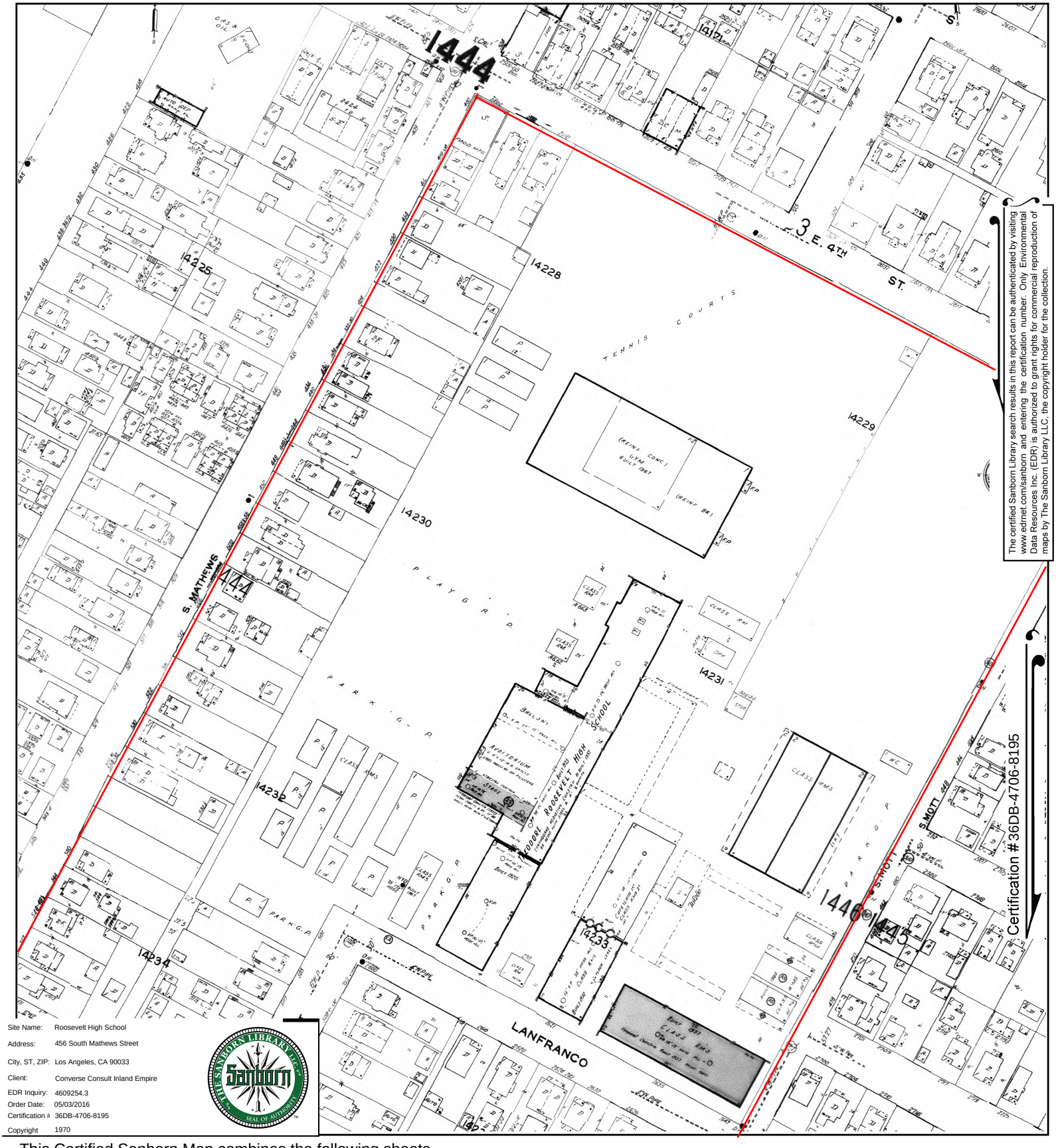
1906 Source Sheets



Volume 4, Sheet 479
1906



Volume 4, Sheet 480
1906

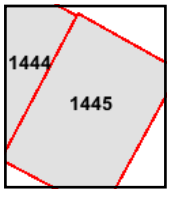


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Address:	456 South Mathews Street
City, ST, ZIP:	Los Angeles, CA 90033
Client:	Converse Consult Inland Empire
EDR Inquiry:	4609254.3
Order Date:	05/03/2016
Certification #:	36DB-4706-8195
Copyright	1970

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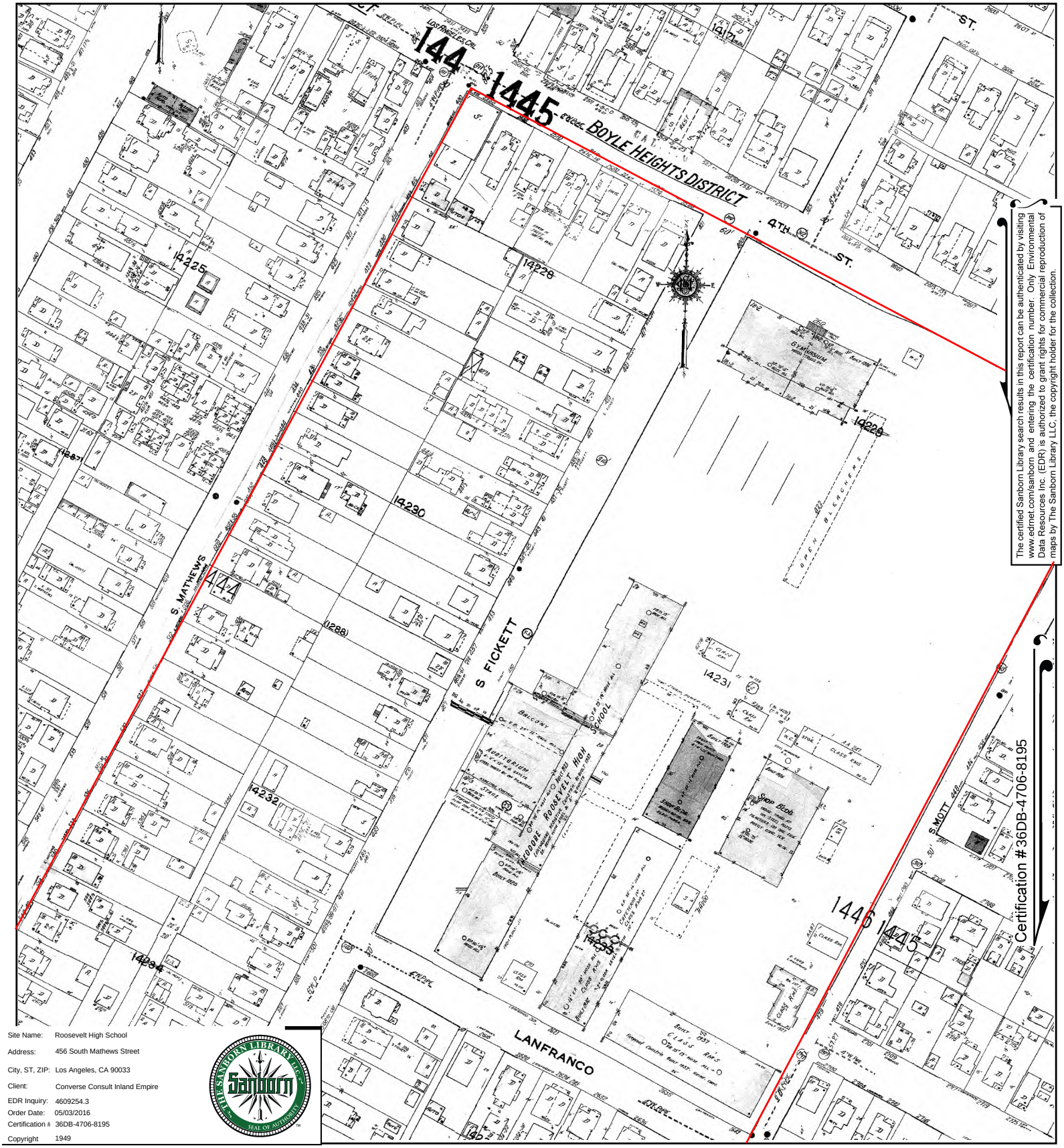




Volume 14, Sheet 1445
Volume 14, Sheet 1444

0 Feet 150 300 600

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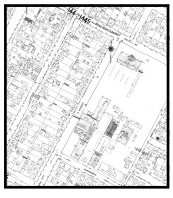
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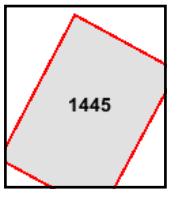
Certification #36DB-4706-8195

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City, ST, ZIP:	Los Angeles, CA 90033
Client:	Converse Consult Inland Empire
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Copyright	1949

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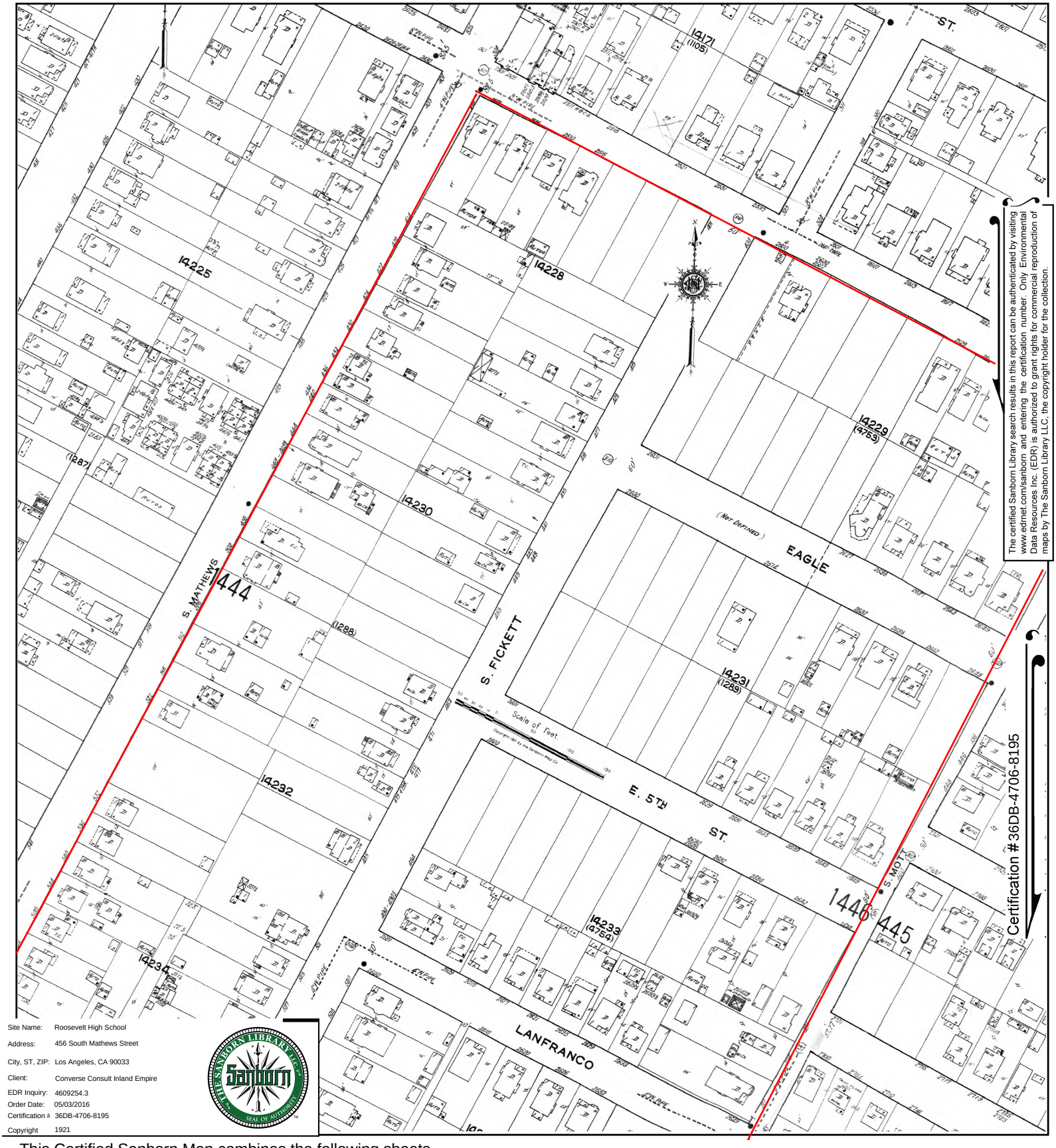
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Volume 14, Sheet 1445

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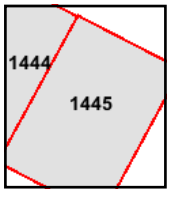


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Client:	Converse Consult Inland Empire
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Order Date:	05/03/2016
Certification #:	36DB-4706-8195
Copyright	1921

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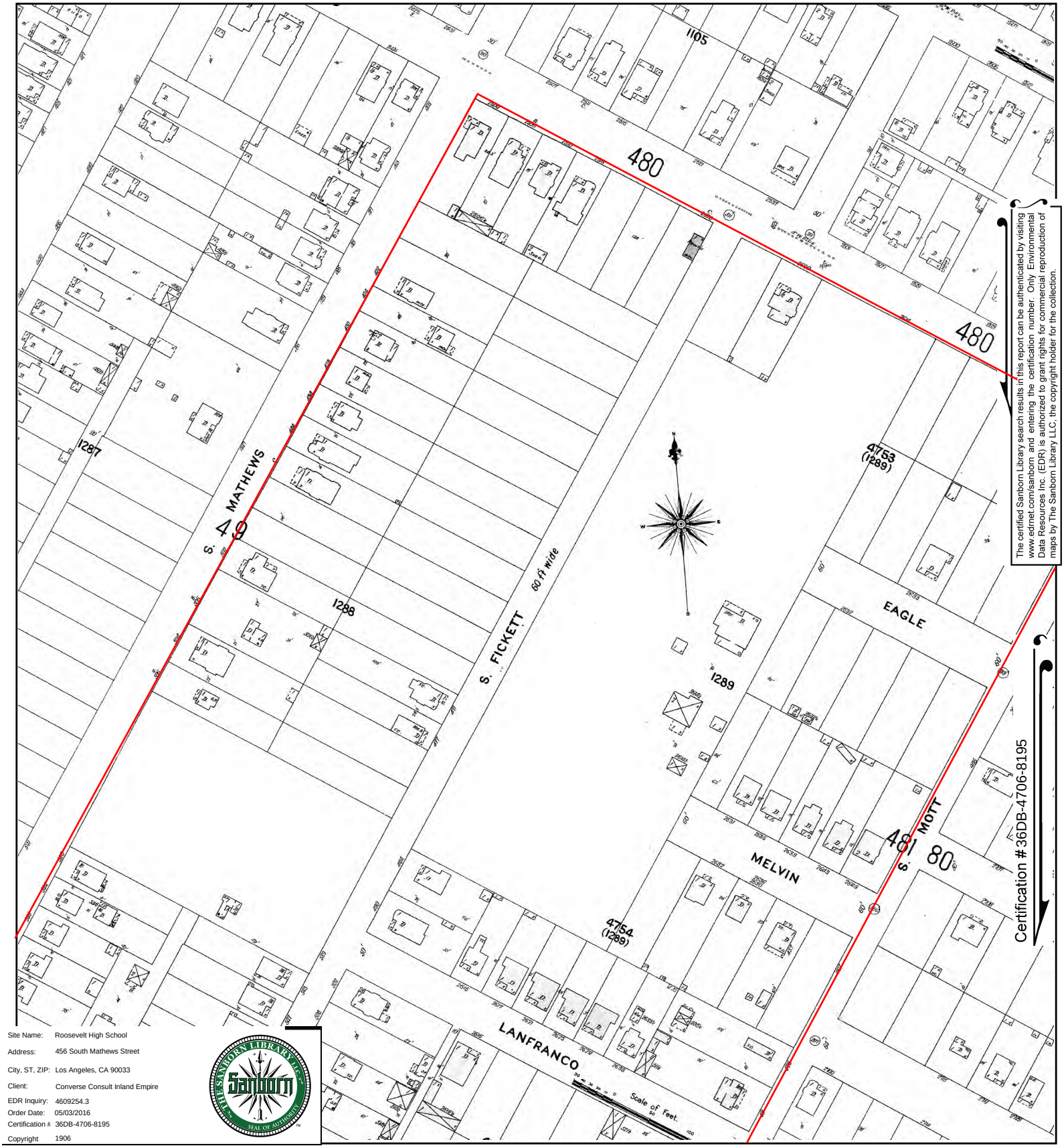




Volume 14, Sheet 1445
Volume 14, Sheet 1444

0 Feet 150 300 600

N

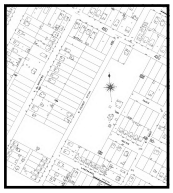


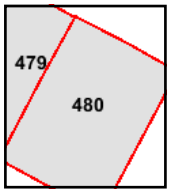
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Address:	456 South Mathews Street
City, ST, ZIP:	Los Angeles, CA 90033
Client:	Converse Consult Inland Empire
EDR Inquiry:	4609254.3
Order Date:	05/03/2016
Certification #:	36DB-4706-8195
Copyright	1906

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Volume 4, Sheet 480
Volume 4, Sheet 479

0 Feet 150 300 600

N

Roosevelt High School
456 South Mathews Street
Los Angeles, CA 90033

Inquiry Number: 4609254.3
May 20, 2016

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05/20/16

Site Name:

Roosevelt High School
456 South Mathews Street
Los Angeles, CA 90033
EDR Inquiry # 4609254.3

Client Name:

Converse Consult Inland Empire
10391 Corporate Drive
Redlands, CA 92374
Contact: Sue Krobthong

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Certification # 36DB-4706-8195

PO # 16-41-126-01

Project Roosevelt High School

Maps Provided:

1970
1949
1921
1906

Sanborn® Library search results

Certification #: 36DB-4706-8195

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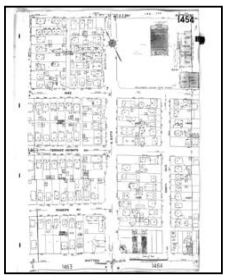


Volume 14, Sheet 1454
1970



Volume 14, Sheet 1455
1970

1949 Source Sheets

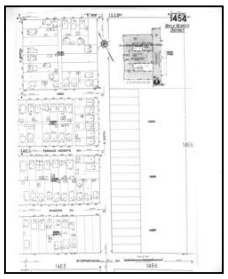


Volume 14, Sheet 1454
1949

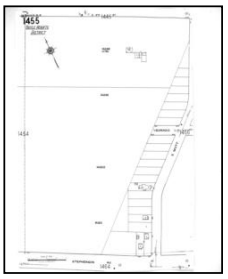


Volume 14, Sheet 1455
1949

1921 Source Sheets



Volume 14, Sheet 1454
1921



Volume 14, Sheet 1455
1921

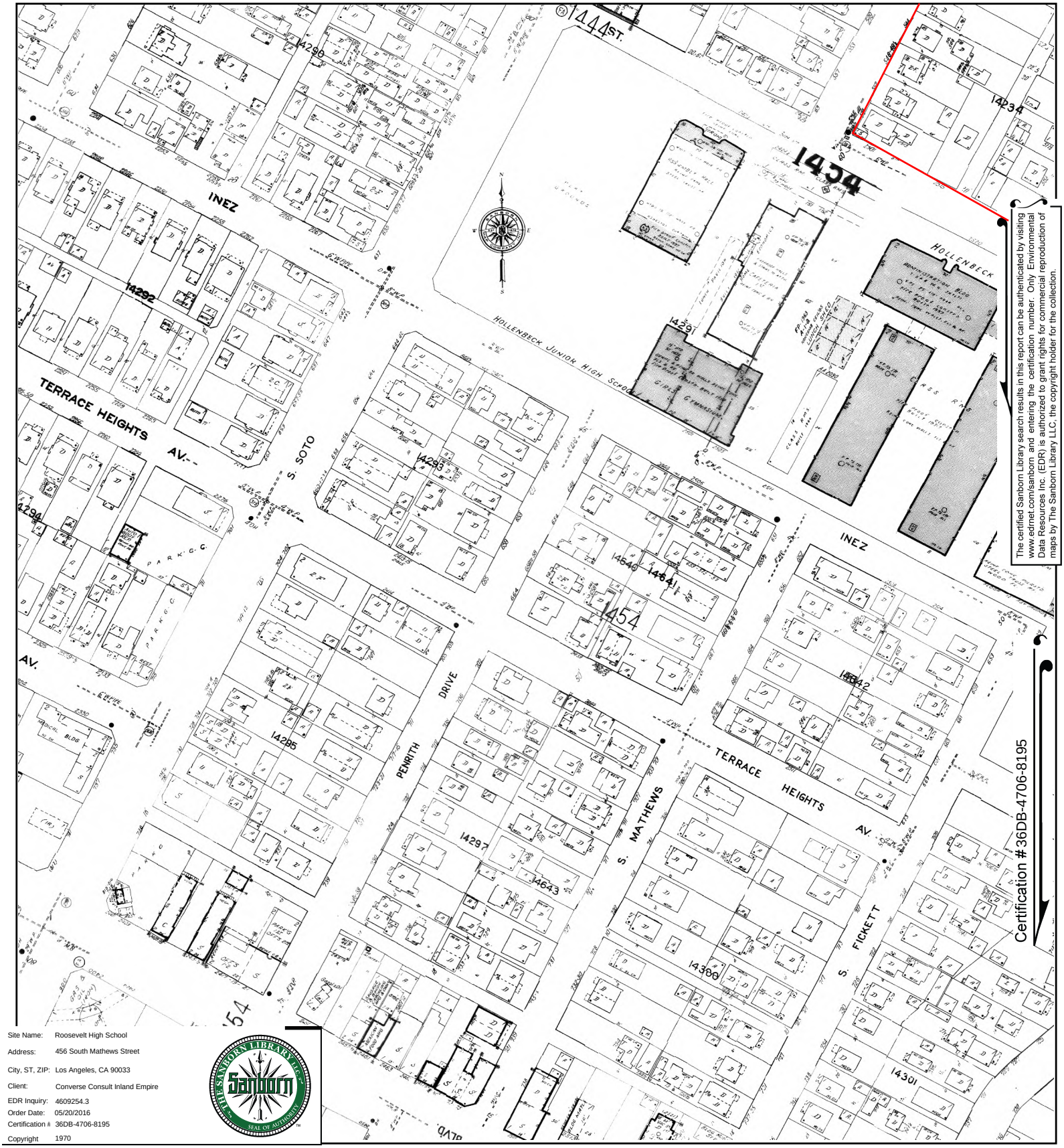
1906 Source Sheets



Volume 4, Sheet 489
1906



Volume 4, Sheet 490
1906



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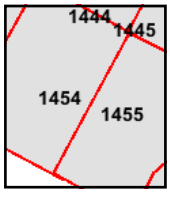
Certification #36DB-4706-8195

Site Name:	Roosevelt High School
Address:	456 South Mathews Street
City, ST, ZIP:	Los Angeles, CA 90033
Client:	Converse Consult Inland Empire
EDR Inquiry:	4609254.3
Order Date:	05/20/2016
Certification #:	36DB-4706-8195
Copyright	1970

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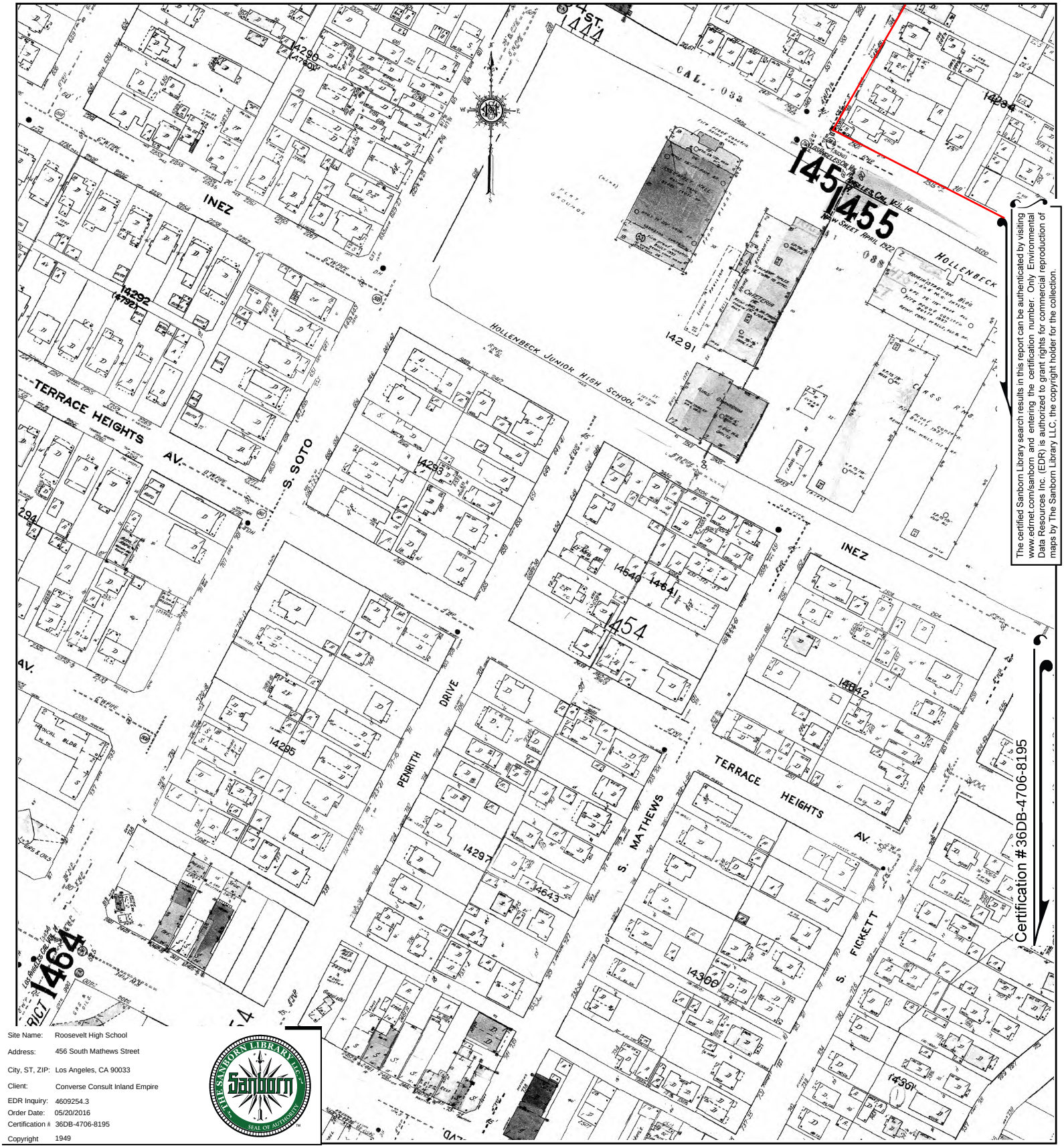
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Volume 14, Sheet 1455
Volume 14, Sheet 1454

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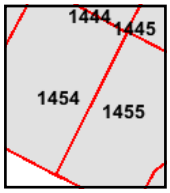
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Client:	Converse Consult Inland Empire
EDR Inquiry:	4609254.3
Order Date:	05/20/2016
Certification #:	36DB-4706-8195
Copyright	1949

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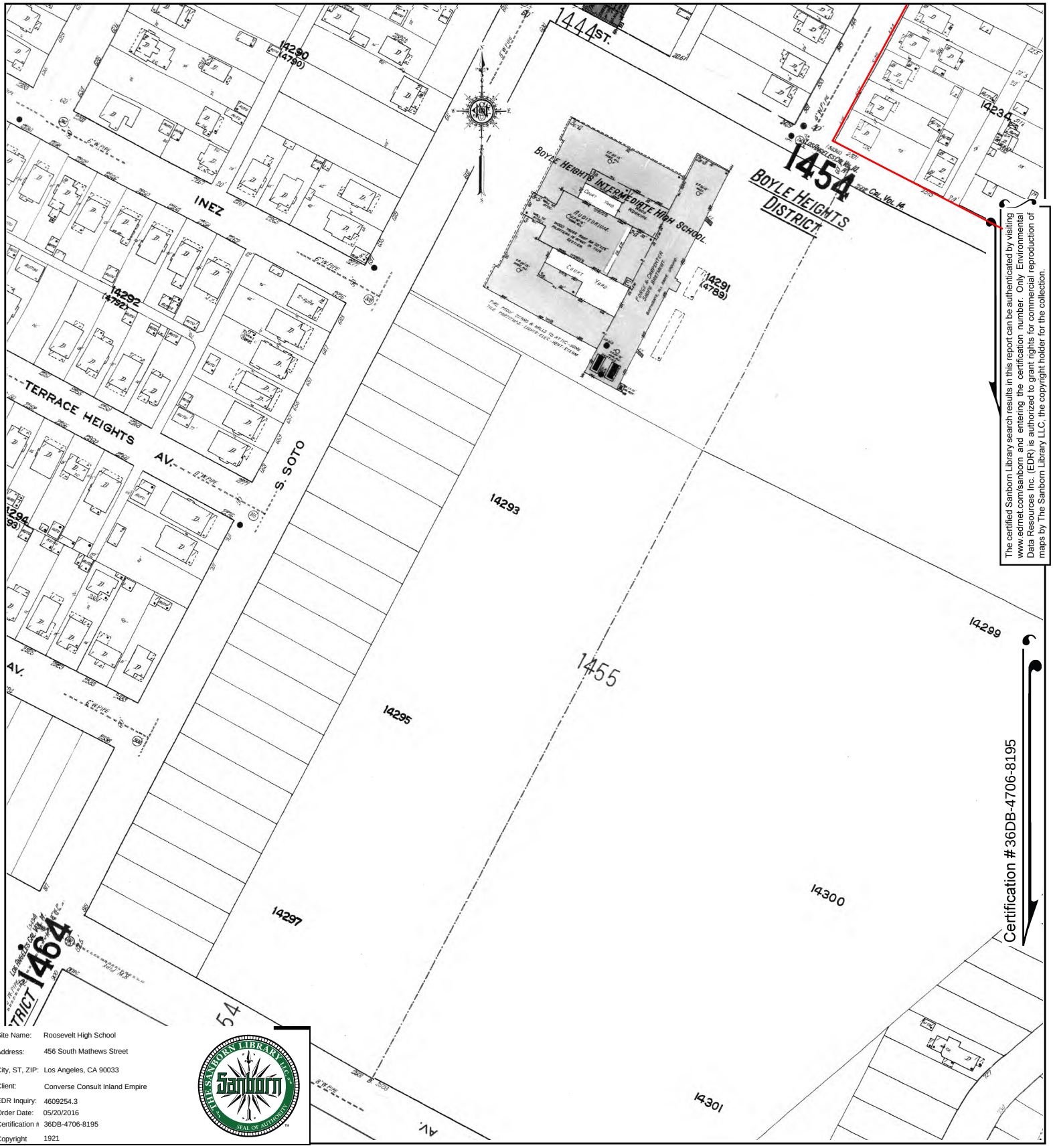
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Volume 14, Sheet 1455
Volume 14, Sheet 1454

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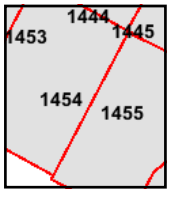


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Copyright	1921

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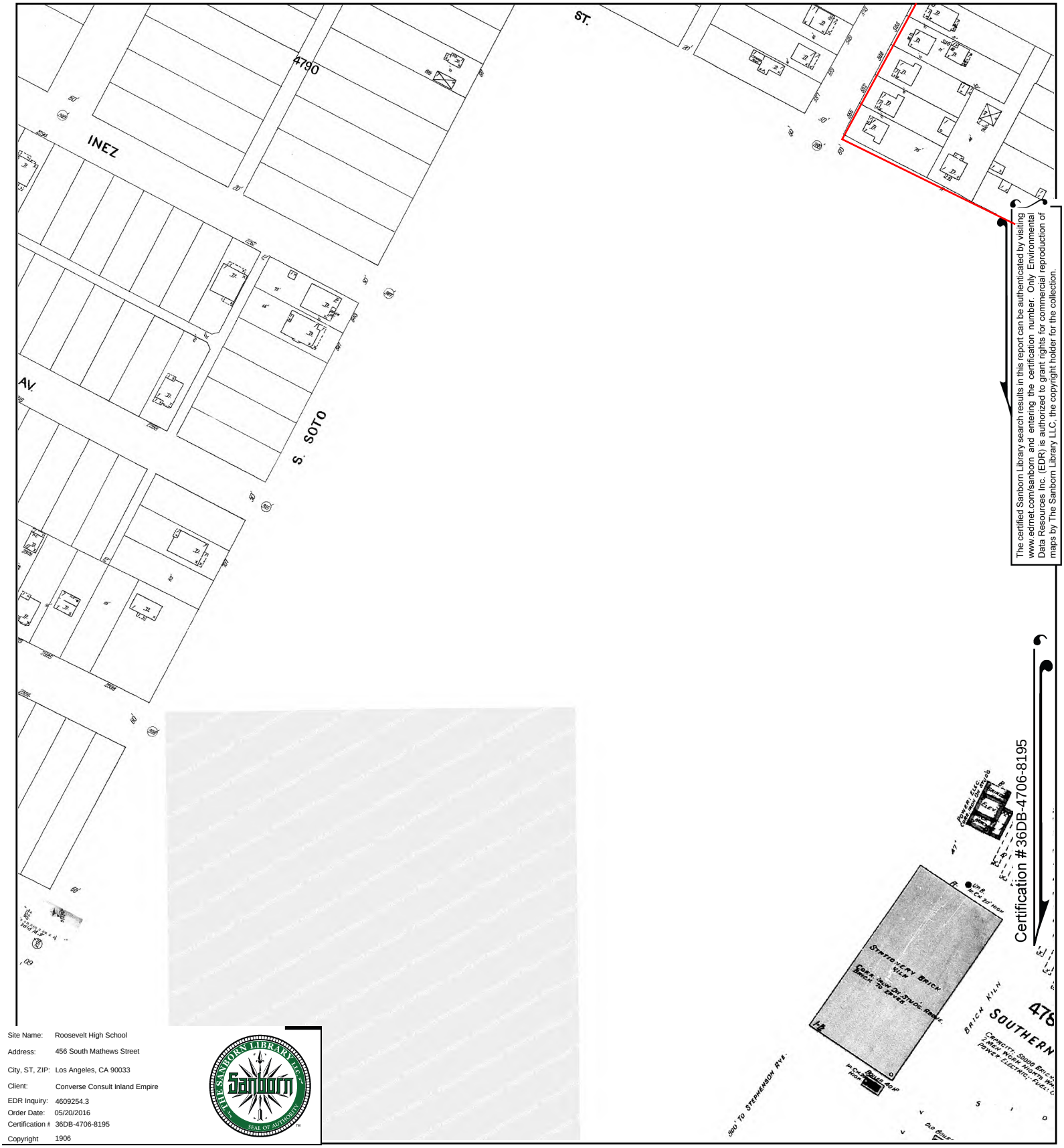




Volume 14, Sheet 1455
Volume 14, Sheet 1454

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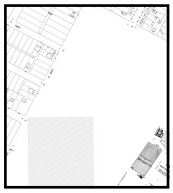
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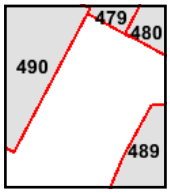


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Client:	Converse Consult Inland Empire
EDR Inquiry:	4609254.3
Order Date:	05/20/2016
Certification #:	36DB-4706-8195
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Volume 4, Sheet 490
Volume 4, Sheet 489

0 Feet 150 300 600

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Roosevelt High School
456 South Mathews Street
Los Angeles, CA 90033

Inquiry Number: 4609254.3
May 20, 2016

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Shelton, CT 06484
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Certified Sanborn® Map Report

05/20/16

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Los Angeles, CA 90033
EDR Inquiry # 4609254.3

Client Name:

Converse Consult Inland Empire
10391 Corporate Drive
Redlands, CA 92374
Contact: Sue Krobthong

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Certified Sanborn Results:

Certification # 36DB-4706-8195

PO # 16-41-126-01

Project Roosevelt High School

Maps Provided:

1970
1949
1921
1906

Sanborn® Library search results

Certification #: 36DB-4706-8195

The Sanborn Library includes more than 1.2 million fire insurance maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow and others which track historical property usage in approximately 12,000 American cities and towns. Collections searched:

- ☑ Library of Congress
- ☑ University Publications of America
- ☑ EDR Private Collection

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Sanborn Sheet Key

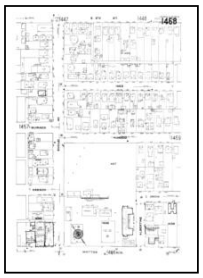
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1970 Source Sheets


Volume 14, Sheet 1446
1970


Volume 14, Sheet 1447
1970


Volume 14, Sheet 1457
1970

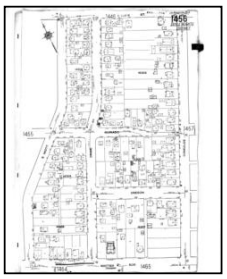

Volume 14, Sheet 1458
1970


Volume 14, Sheet 1456
1970

1949 Source Sheets

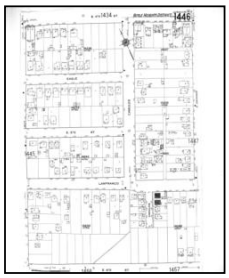

Volume 14, Sheet 1446
1949


Volume 14, Sheet 1447
1949


Volume 14, Sheet 1456
1949

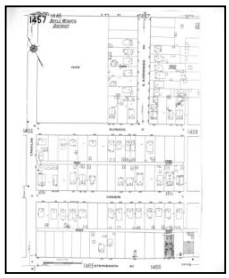

Volume 14, Sheet 1457
1949

1921 Source Sheets


Volume 14, Sheet 1446
1921

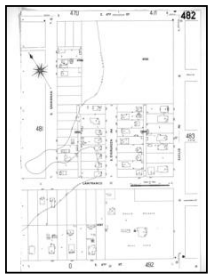

Volume 14, Sheet 1447
1921


Volume 14, Sheet 1456
1921


Volume 14, Sheet 1457
1921

1906 Source Sheets


Volume 4, Sheet 481
1906


Volume 4, Sheet 482
1906


Volume 4, Sheet 492
1906

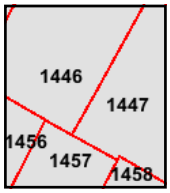


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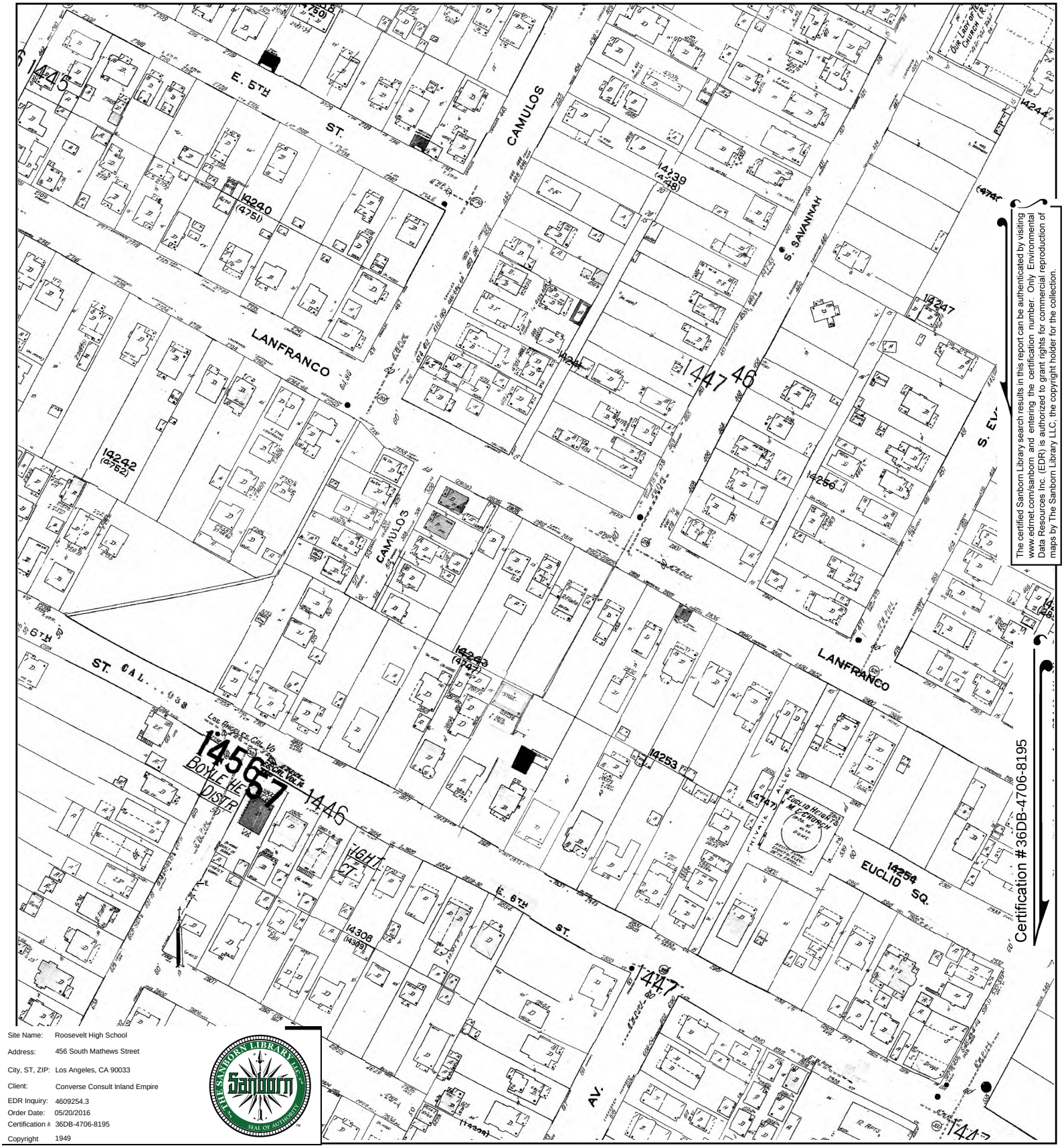




Volume 14, Sheet 1456
Volume 14, Sheet 1458
Volume 14, Sheet 1457
Volume 14, Sheet 1447
Volume 14, Sheet 1446

0 Feet 150 300 600

N



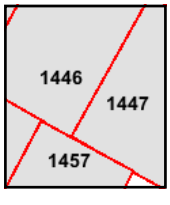
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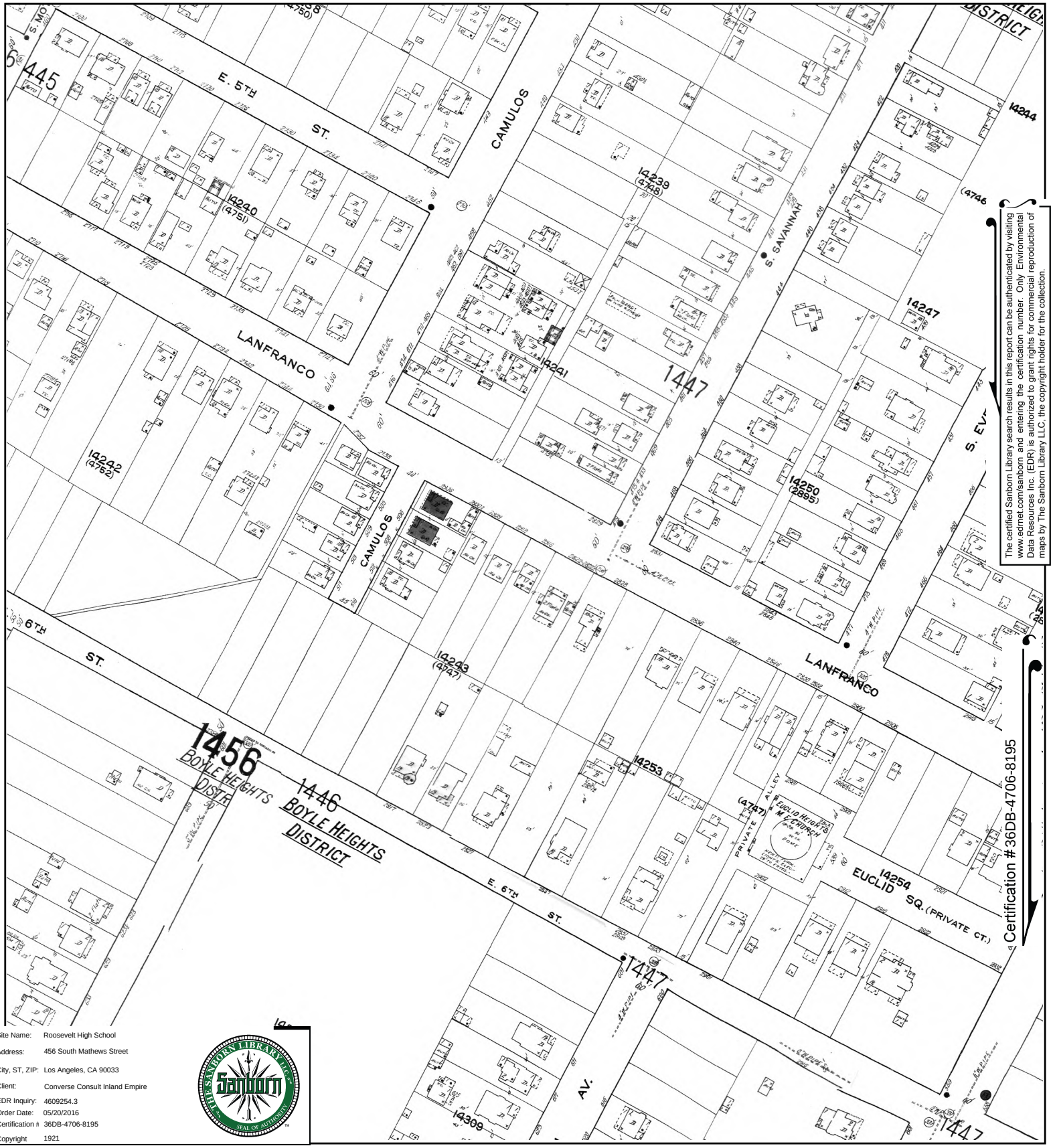




Volume 14, Sheet 1457
Volume 14, Sheet 1456
Volume 14, Sheet 1447
Volume 14, Sheet 1446

0 Feet 150 300 600

N



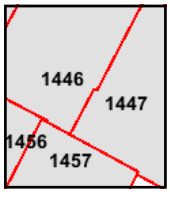
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Client: Converse Consult Inland Empire
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Order Date: 05/20/2016
Certification #: 36DB-4706-8195
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Volume 14, Sheet 1457
Volume 14, Sheet 1456
Volume 14, Sheet 1447
Volume 14, Sheet 1446

0 Feet 150 300 600

N



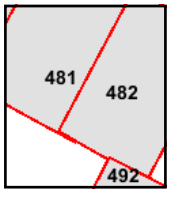
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City, ST, ZIP:	Los Angeles, CA 90033
Client:	Converse Consult Inland Empire
EDR Inquiry:	4609254.3
Order Date:	05/20/2016
Certification #:	36DB-4706-8195
Copyright	1906

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Volume 4, Sheet 492
Volume 4, Sheet 482
Volume 4, Sheet 481

0 Feet 150 300 600

N

Roosevelt High School
456 South Mathews Street
Los Angeles, CA 90033

Inquiry Number: 4609254.3
May 20, 2016

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05/20/16

Site Name:

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456 South Mathews Street
Los Angeles, CA 90033
EDR Inquiry # 4609254.3

Client Name:

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Contact: Sue Krobthong

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Project Roosevelt High School

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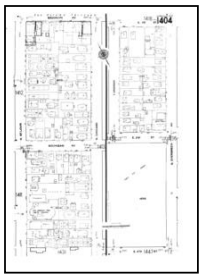
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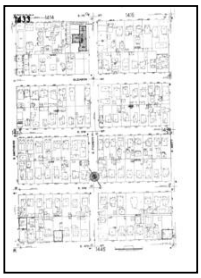
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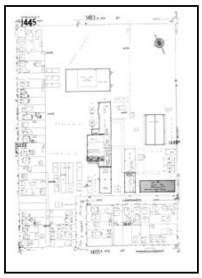
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1970 Source Sheets


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1970

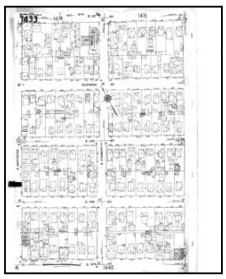

Volume 14, Sheet 1433
1970

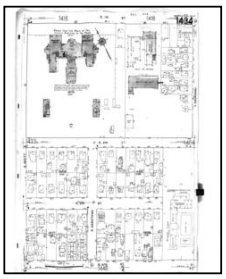

Volume 14, Sheet 1434
1970

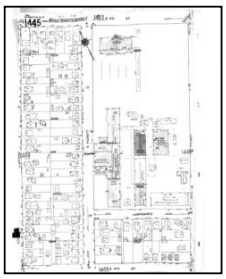

Volume 14, Sheet 1445
1970


Volume 14, Sheet 1446
1970

1949 Source Sheets

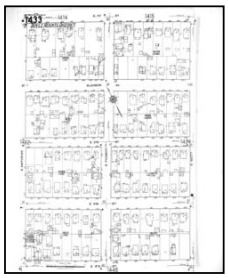

Volume 14, Sheet 1433
1949

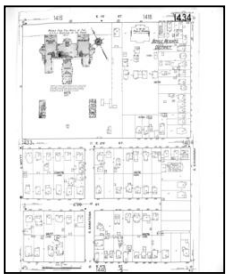

Volume 14, Sheet 1434
1949


Volume 14, Sheet 1445
1949

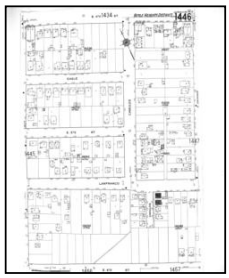

Volume 14, Sheet 1446
1949

1921 Source Sheets

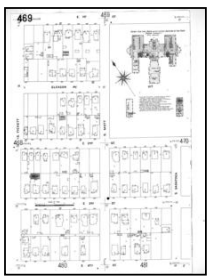

Volume 14, Sheet 1433
1921


Volume 14, Sheet 1434
1921

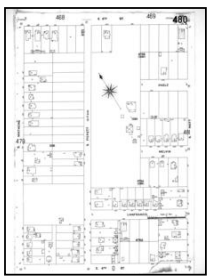

Volume 14, Sheet 1445
1921


Volume 14, Sheet 1446
1921

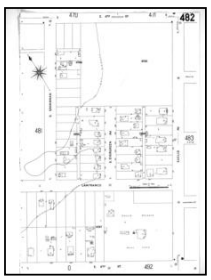
1906 Source Sheets


Volume 4, Sheet 469
1906


Volume 4, Sheet 470
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Volume 4, Sheet 480
1906


Volume 4, Sheet 481
1906


Volume 4, Sheet 482
1906

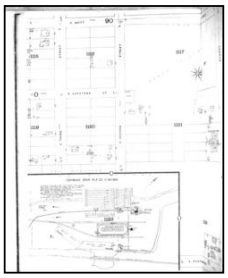
Sanborn Sheet Key

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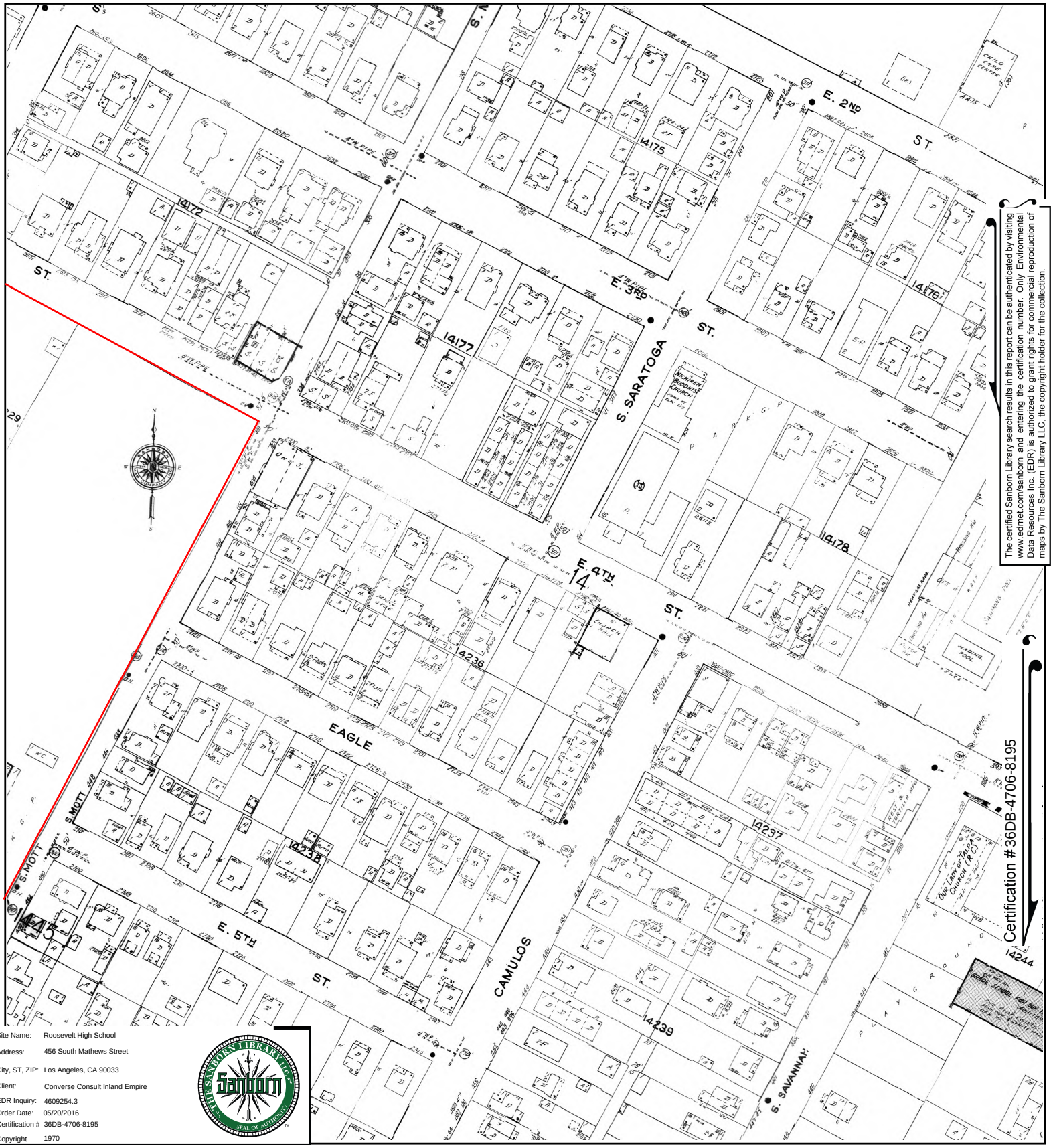
1894 Source Sheets



Volume 2, Sheet 90
1894



Volume 2, Sheet 91
1894

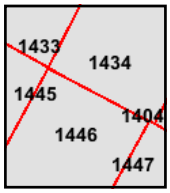


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Client:	Converse Consult Inland Empire
EDR Inquiry:	4609254.3
Order Date:	05/20/2016
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Volume 14, Sheet 1446
Volume 14, Sheet 1445
Volume 14, Sheet 1434
Volume 14, Sheet 1433
Volume 14, Sheet 1404

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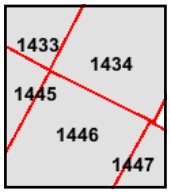


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Copyright	1949

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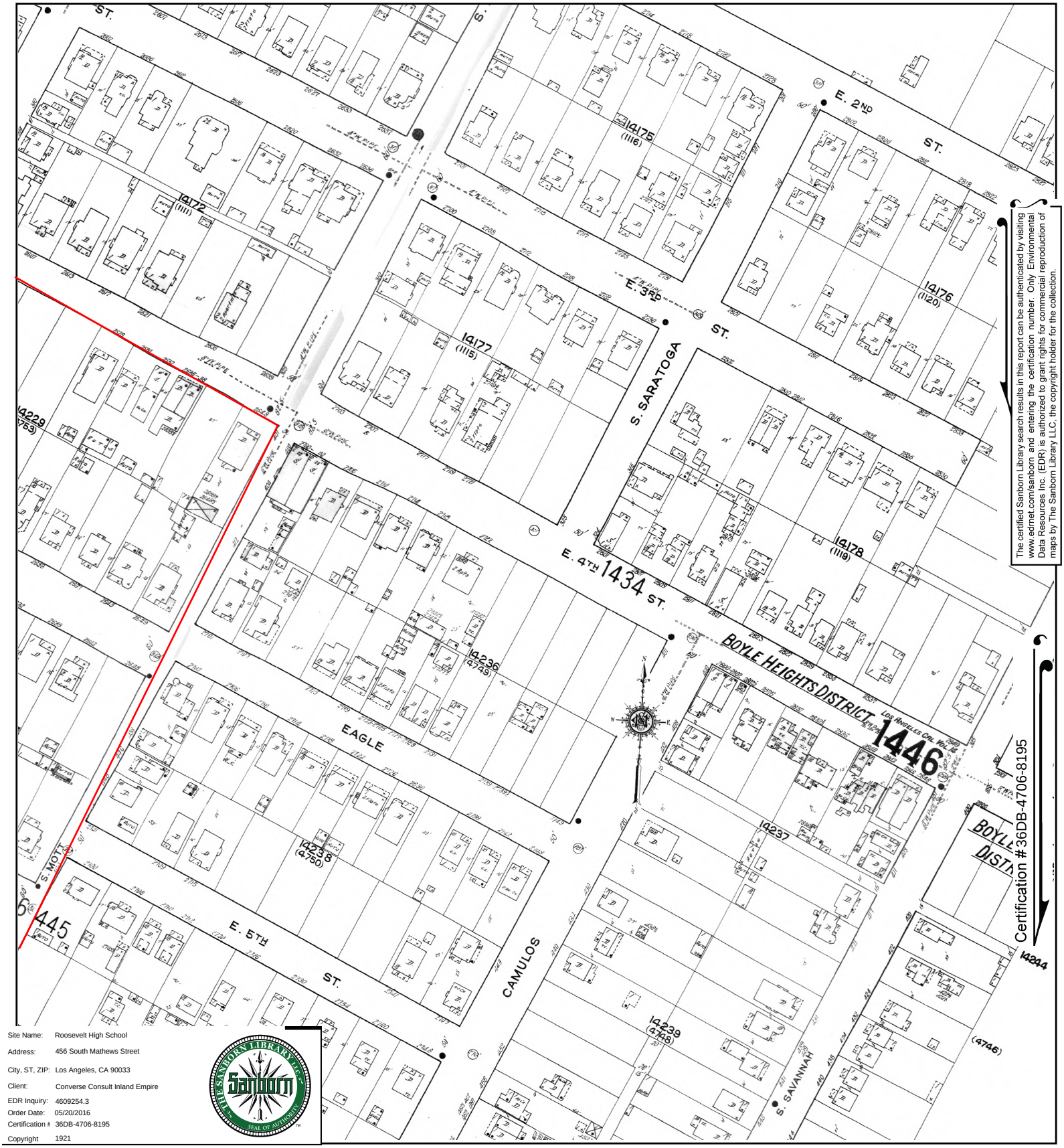




Volume 14, Sheet 1446
Volume 14, Sheet 1445
Volume 14, Sheet 1434
Volume 14, Sheet 1433

0 Feet 150 300 600

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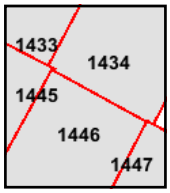


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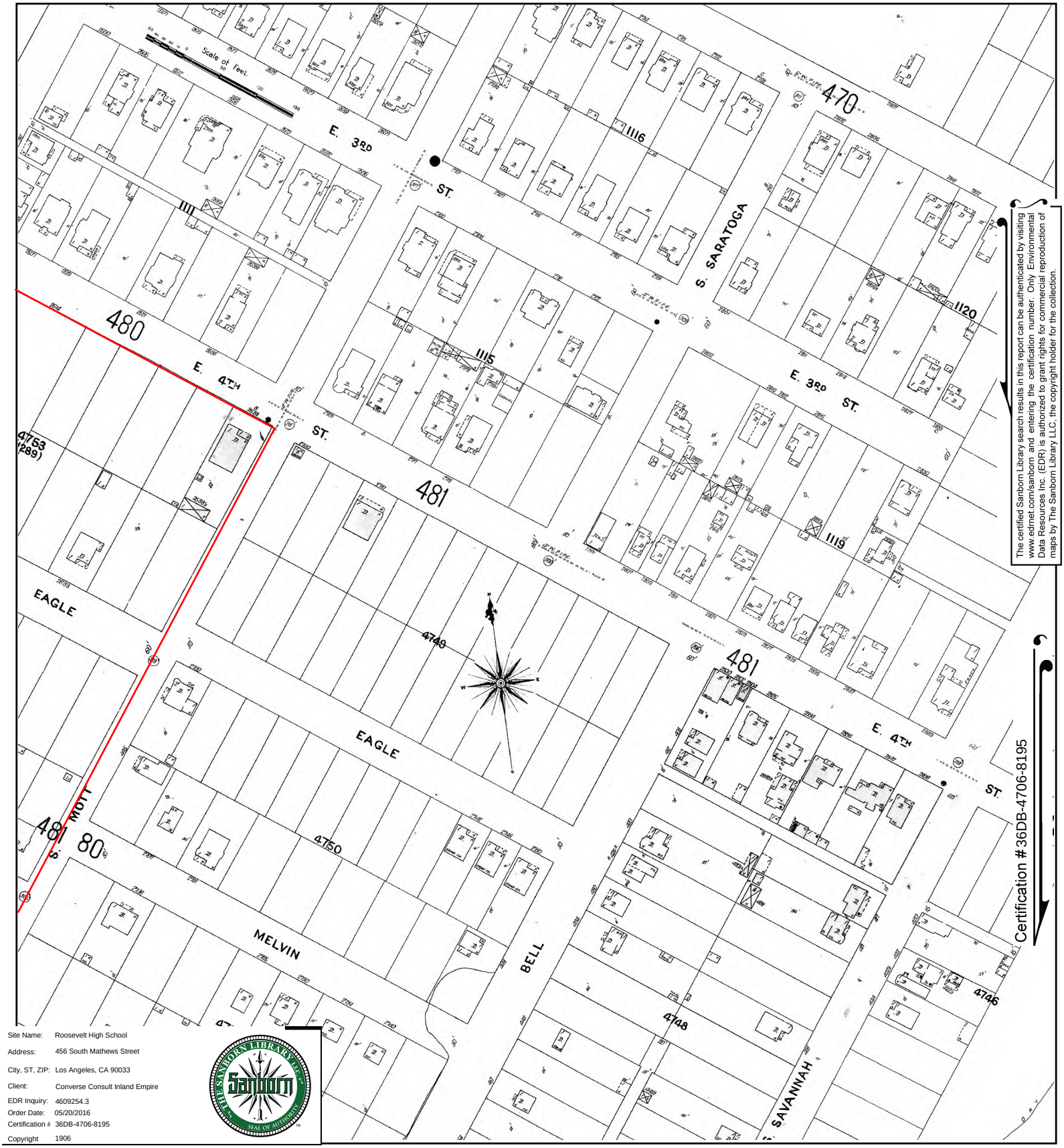




Volume 14, Sheet 1446
Volume 14, Sheet 1445
Volume 14, Sheet 1434
Volume 14, Sheet 1433

0 Feet 150 300 600

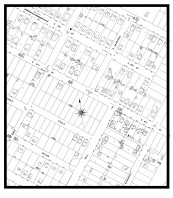
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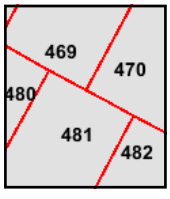


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City, ST, ZIP:	Los Angeles, CA 90033
Client:	Converse Consult Inland Empire
EDR Inquiry:	4609254.3
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Certification #:	36DB-4706-8195
Copyright	1906

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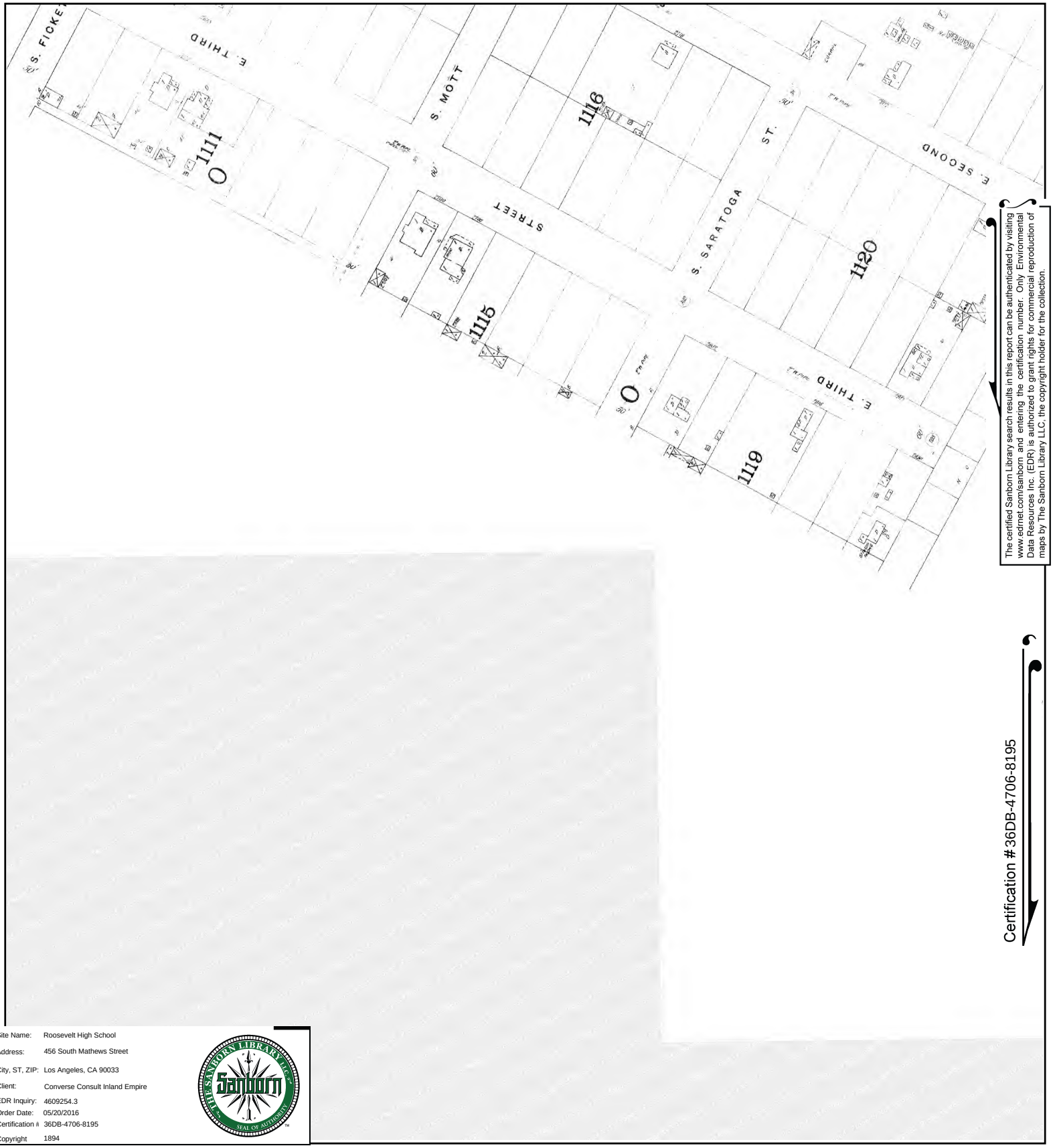




Volume 4, Sheet 482
Volume 4, Sheet 481
Volume 4, Sheet 480
Volume 4, Sheet 470
Volume 4, Sheet 469

0 Feet 150 300 600

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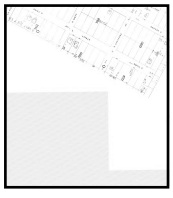


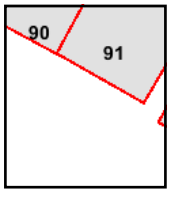
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Client:	Converse Consult Inland Empire
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Order Date:	05/20/2016
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Copyright	1894

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Volume 2, Sheet 91
Volume 2, Sheet 90

0 Feet 150 300 600

N

Roosevelt High School
456 South Mathews Street
Los Angeles, CA 90033

Inquiry Number: 4609254.3
May 20, 2016

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05/20/16

Site Name:

Roosevelt High School
456 South Mathews Street
Los Angeles, CA 90033
EDR Inquiry # 4609254.3

Client Name:

Converse Consult Inland Empire
10391 Corporate Drive
Redlands, CA 92374
Contact: Sue Krobthong

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PO # 16-41-126-01

Project Roosevelt High School

Maps Provided:

1970
1949
1921
1906

Sanborn® Library search results

Certification #: 36DB-4706-8195

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- ☑ Library of Congress
- ☑ University Publications of America
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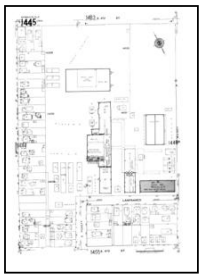
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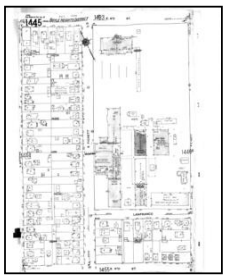

Volume 14, Sheet 1445
1970


Volume 14, Sheet 1446
1970


Volume 14, Sheet 1455
1970


Volume 14, Sheet 1456
1970

1949 Source Sheets


Volume 14, Sheet 1445
1949


Volume 14, Sheet 1446
1949

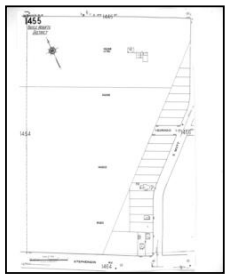

Volume 14, Sheet 1455
1949


Volume 14, Sheet 1456
1949

1921 Source Sheets

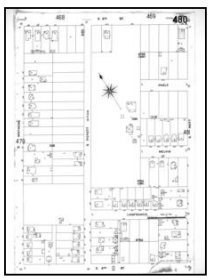

Volume 14, Sheet 1445
1921


Volume 14, Sheet 1446
1921

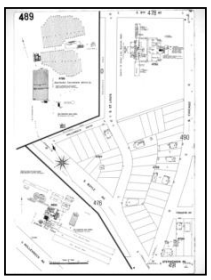

Volume 14, Sheet 1455
1921

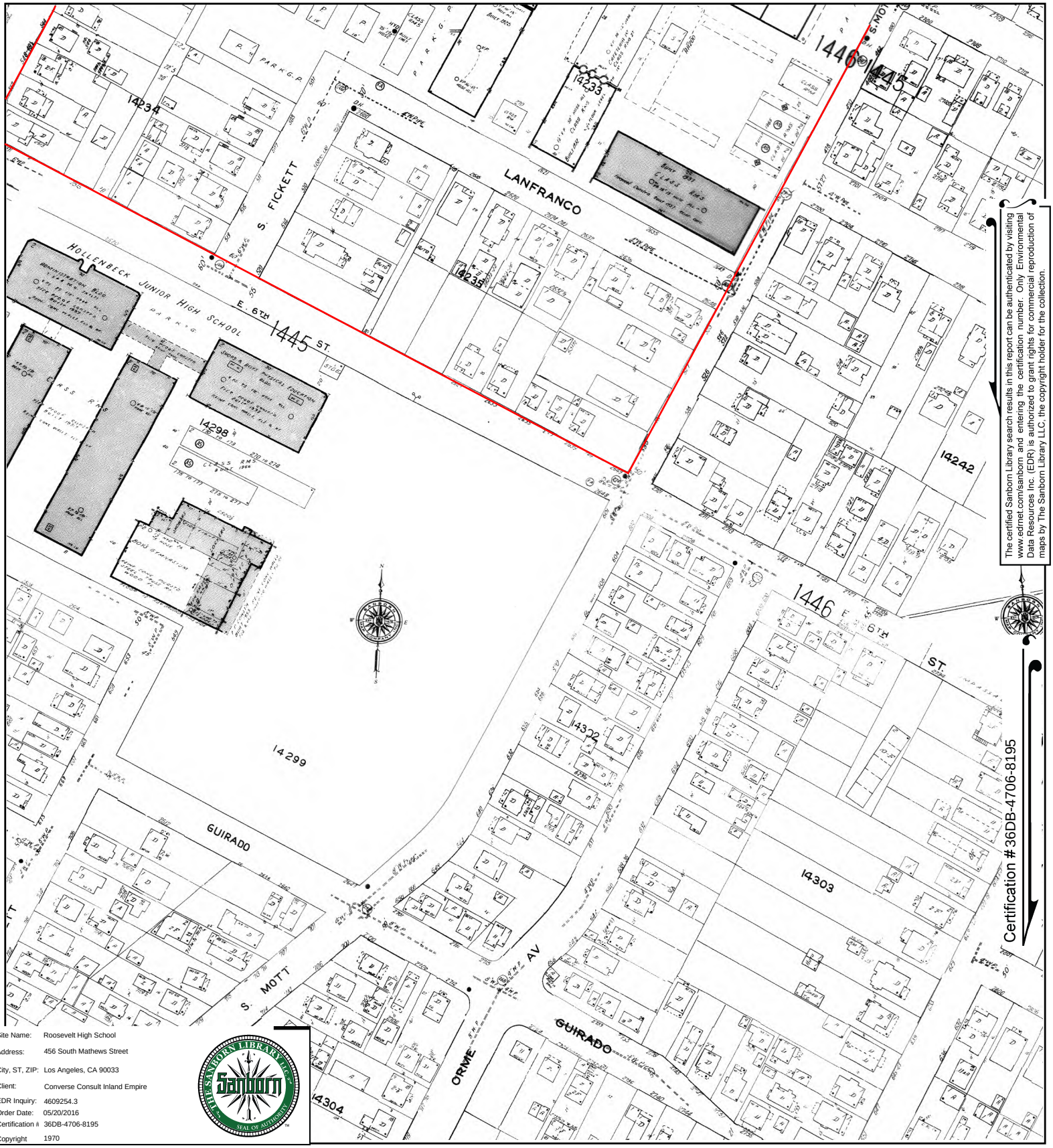

Volume 14, Sheet 1456
1921

1906 Source Sheets


Volume 4, Sheet 480
1906


Volume 4, Sheet 481
1906


Volume 4, Sheet 489
1906



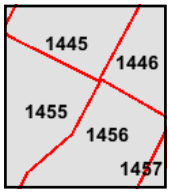
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Address:	456 South Mathews Street
City, ST, ZIP:	Los Angeles, CA 90033
Client:	Converse Consult Inland Empire
EDR Inquiry:	4609254.3
Order Date:	05/20/2016
Certification #:	36DB-4706-8195
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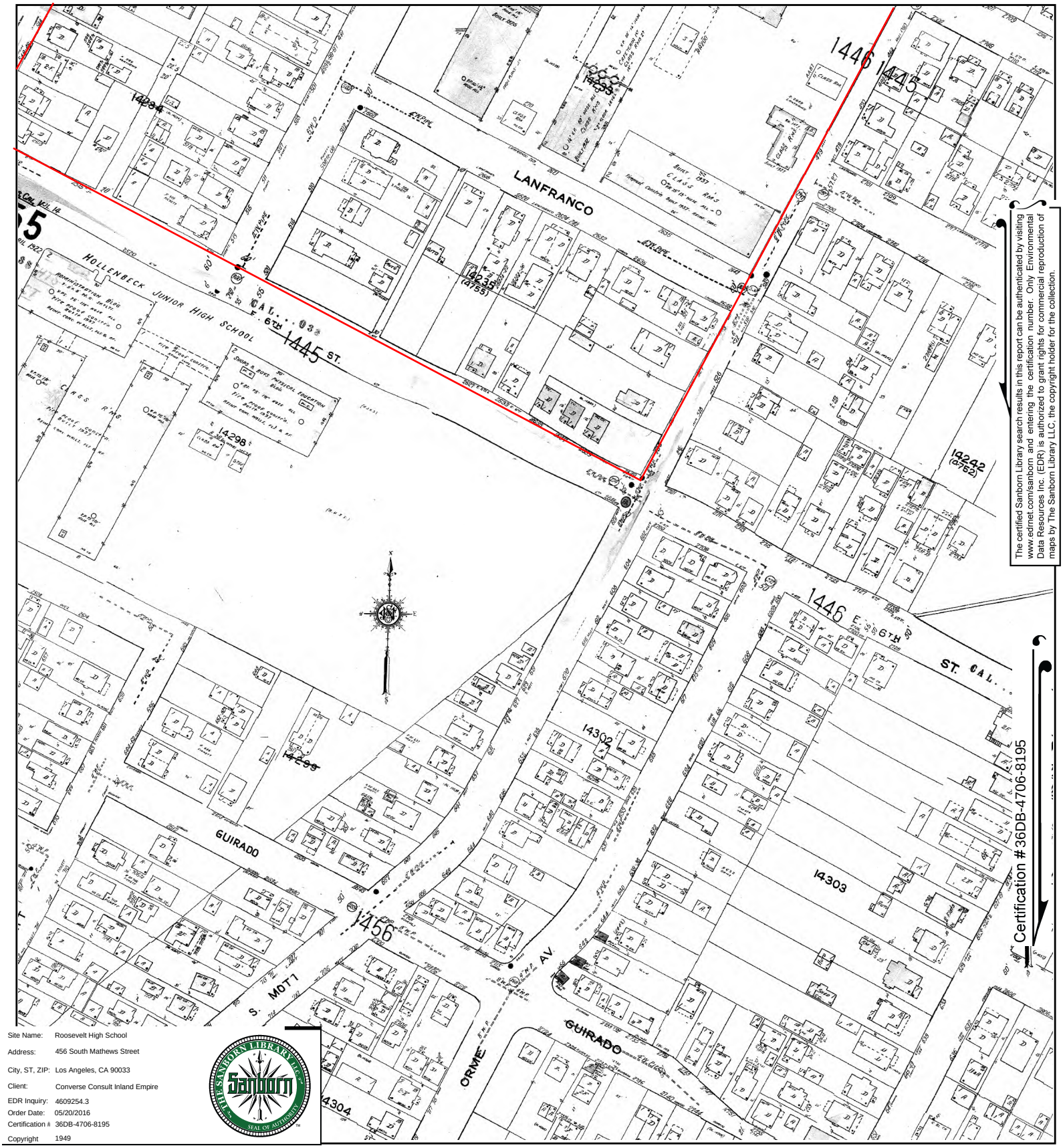




Volume 14, Sheet 1456
Volume 14, Sheet 1455
Volume 14, Sheet 1446
Volume 14, Sheet 1445

0 Feet 150 300 600

N



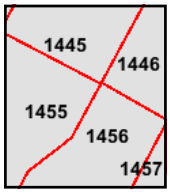
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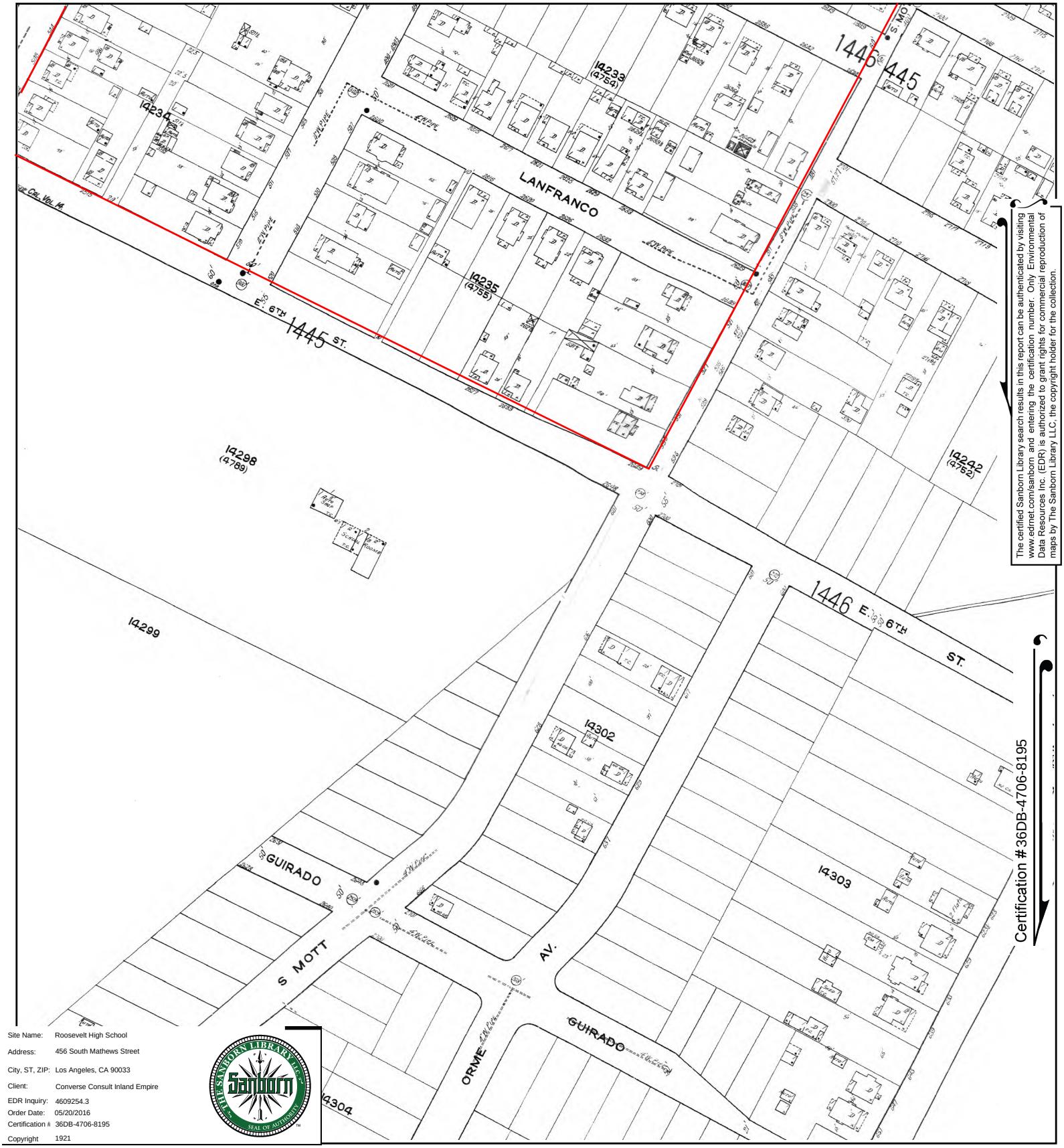




Volume 14, Sheet 1456
Volume 14, Sheet 1455
Volume 14, Sheet 1446
Volume 14, Sheet 1445

0 Feet 150 300 600

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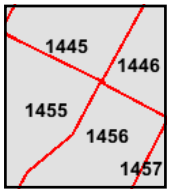
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Order Date:	05/20/2016
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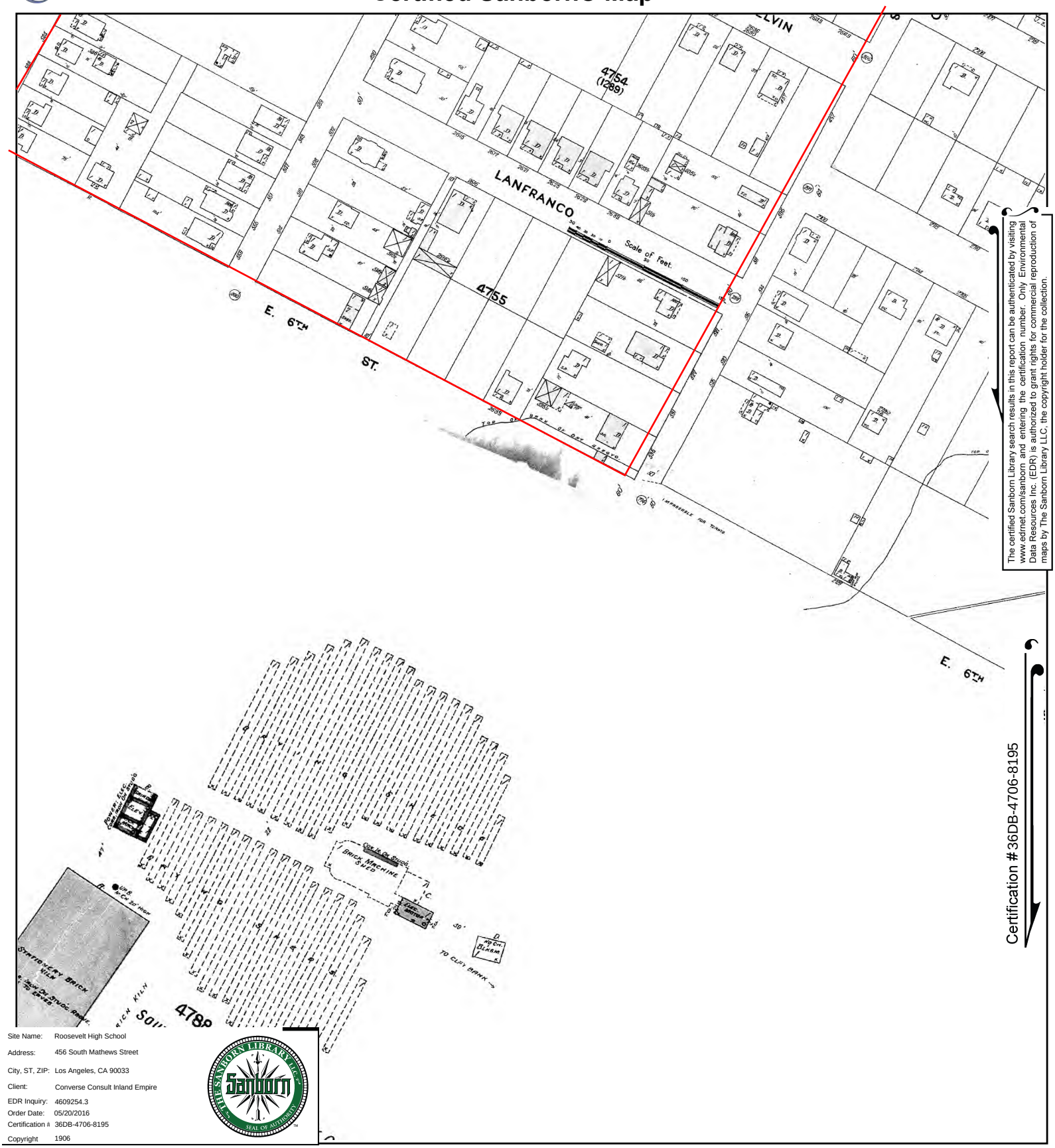




Volume 14, Sheet 1456
Volume 14, Sheet 1455
Volume 14, Sheet 1446
Volume 14, Sheet 1445

0 Feet 150 300 600

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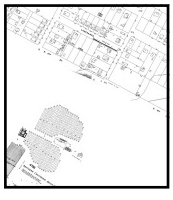


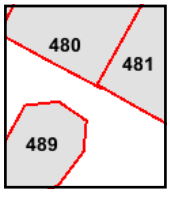
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Volume 4, Sheet 489
Volume 4, Sheet 481
Volume 4, Sheet 480

0 Feet 150 300 600

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Roosevelt High School
456 South Mathews Street
Los Angeles, CA 90033

Inquiry Number: 4609254.3
May 20, 2016

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05/20/16

Site Name:

Roosevelt High School
456 South Mathews Street
Los Angeles, CA 90033
EDR Inquiry # 4609254.3

Client Name:

Converse Consult Inland Empire
10391 Corporate Drive
Redlands, CA 92374
Contact: Sue Krobthong

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Certified Sanborn Results:

Certification # 36DB-4706-8195

PO # 16-41-126-01

Project Roosevelt High School

Maps Provided:

1970
1949
1921
1906

Sanborn® Library search results

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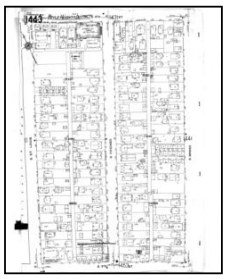

Volume 14, Sheet 1443
1970

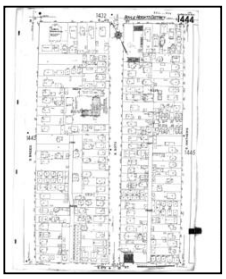

Volume 14, Sheet 1444
1970


Volume 14, Sheet 1453
1970

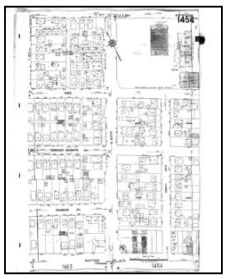

Volume 14, Sheet 1454
1970

1949 Source Sheets


Volume 14, Sheet 1443
1949


Volume 14, Sheet 1444
1949


Volume 14, Sheet 1453
1949

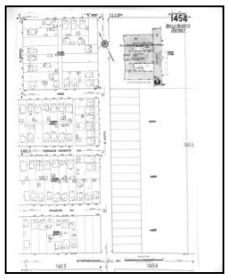

Volume 14, Sheet 1454
1949

1921 Source Sheets


Volume 14, Sheet 1443
1921

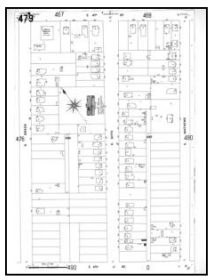

Volume 14, Sheet 1444
1921

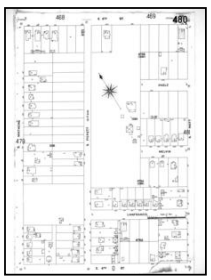

Volume 14, Sheet 1453
1921


Volume 14, Sheet 1454
1921

1906 Source Sheets


Volume 4, Sheet 478
1906


Volume 4, Sheet 479
1906


Volume 4, Sheet 480
1906


Volume 4, Sheet 490
1906

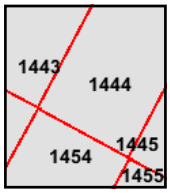


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Client:	Converse Consult Inland Empire
EDR Inquiry:	4609254.3
Order Date:	05/20/2016
Certification #:	36DB-4706-8195
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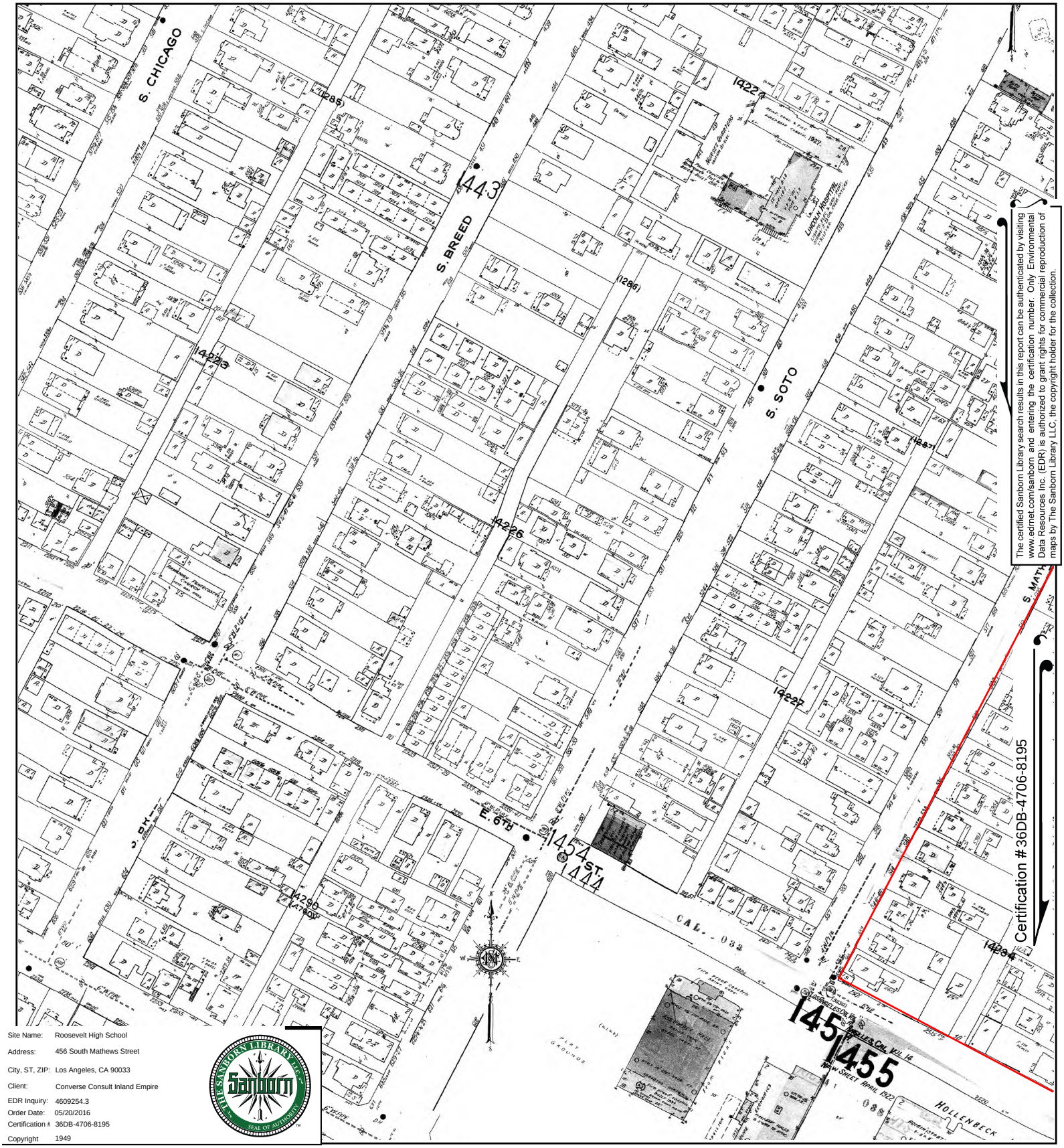




Volume 14, Sheet 1454
Volume 14, Sheet 1453
Volume 14, Sheet 1444
Volume 14, Sheet 1443

0 Feet 150 300 600

N

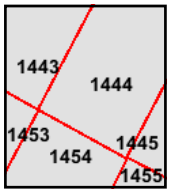


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Site Name:	Roosevelt High School
Address:	456 South Mathews Street
City, ST, ZIP:	Los Angeles, CA 90033
Client:	Converse Consult Inland Empire
EDR Inquiry:	4609254.3
Order Date:	05/20/2016
Certification #:	36DB-4706-8195
Copyright	1949

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Outlined areas indicate map sheets within the collection.

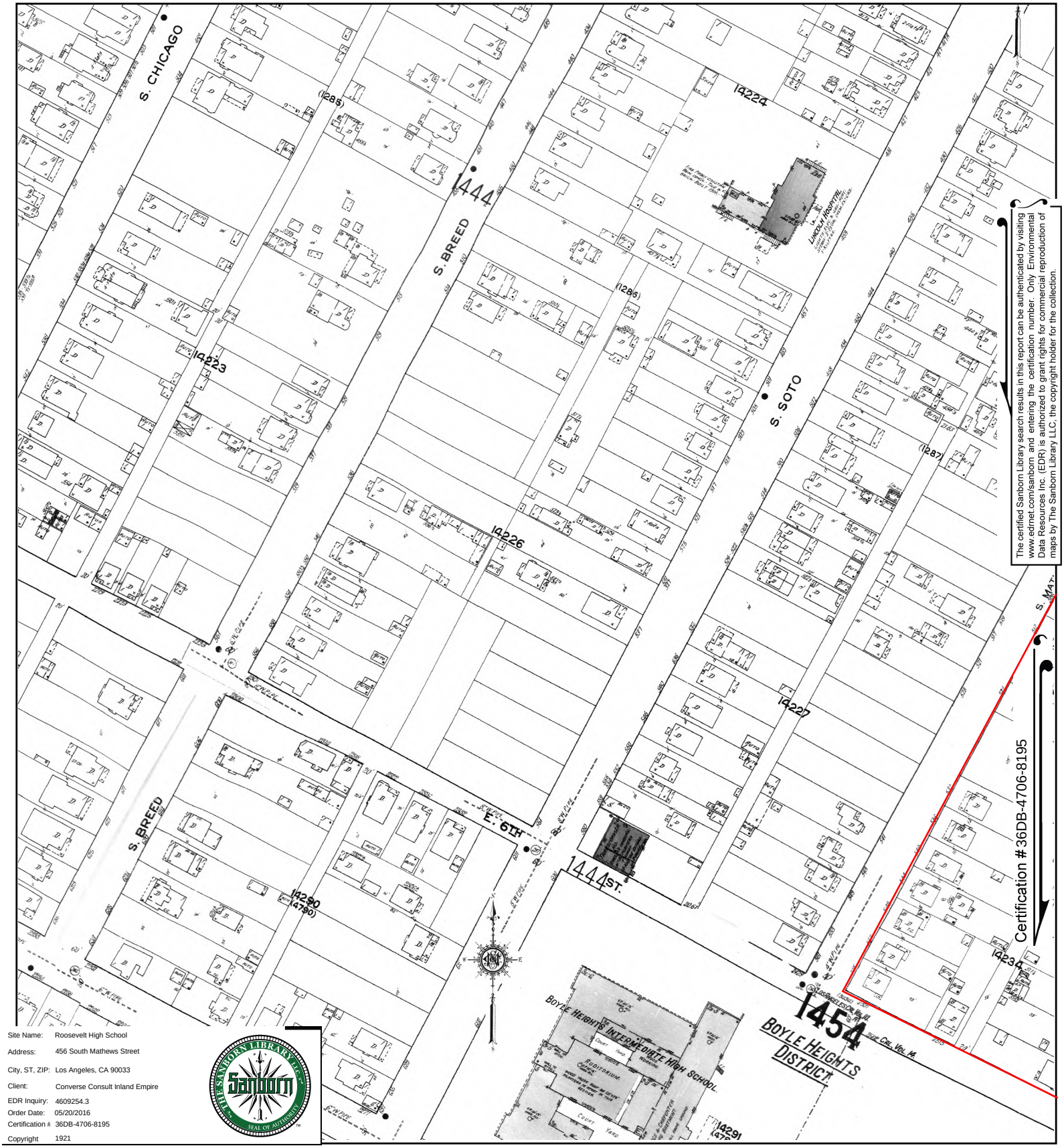




Volume 14, Sheet 1454
Volume 14, Sheet 1453
Volume 14, Sheet 1444
Volume 14, Sheet 1443

0 Feet 150 300 600

N

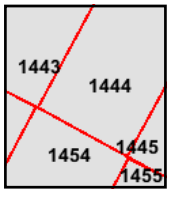


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Site Name:	Roosevelt High School
Address:	456 South Mathews Street
City, ST, ZIP:	Los Angeles, CA 90033
Client:	Converse Consult Inland Empire
EDR Inquiry:	4609254.3
Order Date:	05/20/2016
Certification #:	36DB-4706-8195
Copyright	1921

This Certified Sanborn Map combines the following sheets.
Outlined areas indicate map sheets within the collection.

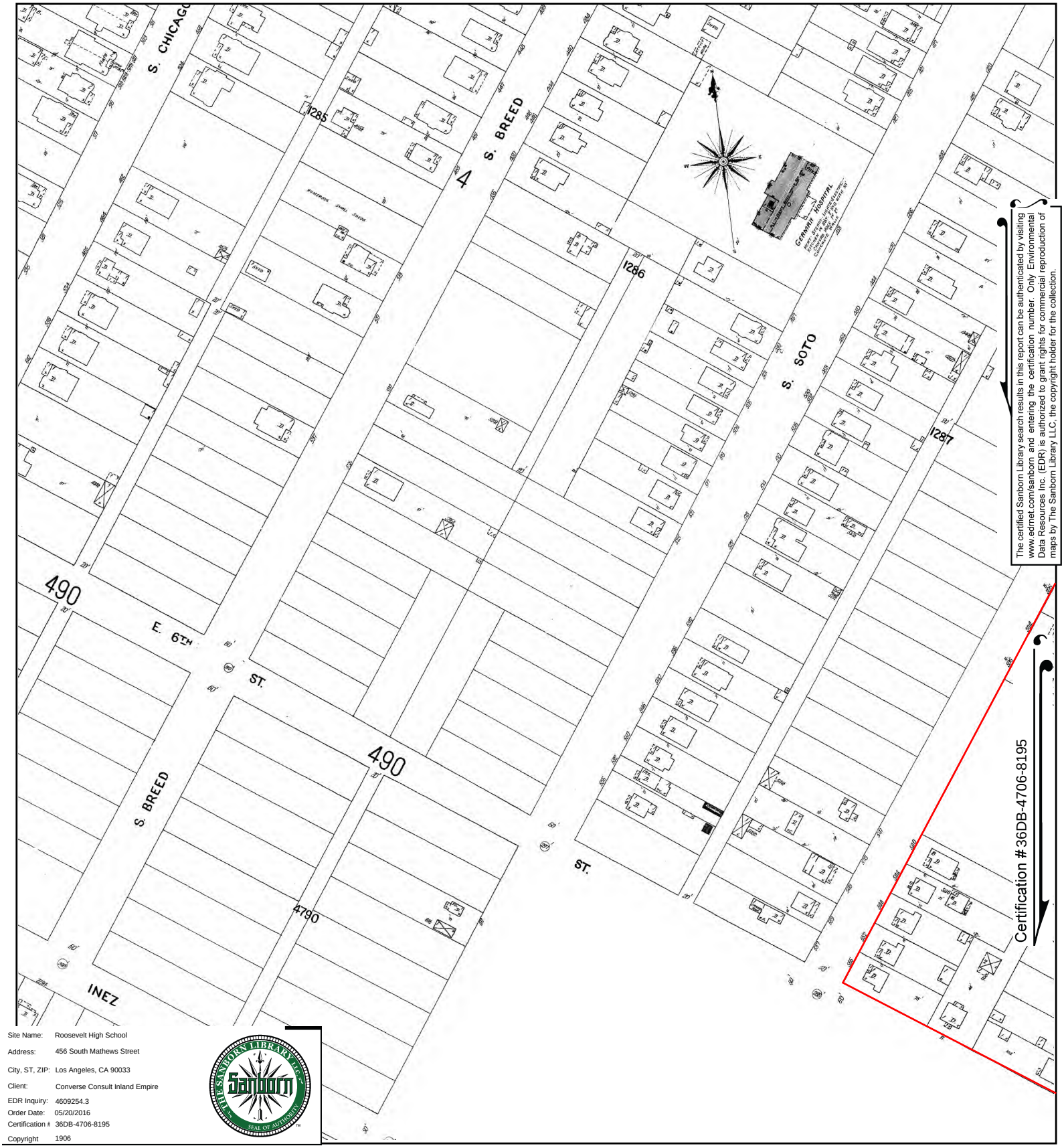




Volume 14, Sheet 1454
Volume 14, Sheet 1453
Volume 14, Sheet 1444
Volume 14, Sheet 1443

0 Feet 150 300 600

N

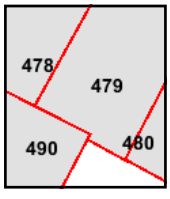


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Site Name:	Roosevelt High School
Address:	456 South Mathews Street
City, ST, ZIP:	Los Angeles, CA 90033
Client:	Converse Consult Inland Empire
EDR Inquiry:	4609254.3
Order Date:	05/20/2016
Certification #:	36DB-4706-8195
Copyright	1906

This Certified Sanborn Map combines the following sheets.
Outlined areas indicate map sheets within the collection.





Volume 4, Sheet 490
Volume 4, Sheet 480
Volume 4, Sheet 479
Volume 4, Sheet 478

0 Feet 150 300 600

N

Roosevelt High School
456 South Mathews Street
Los Angeles, CA 90033

Inquiry Number: 4609254.4
May 03, 2016

EDR Historical Topo Map Report

with QuadMatch™

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

EDR Historical Topo Map Report

05/03/16

Site Name:

Roosevelt High School
456 South Mathews Street
Los Angeles, CA 90033
EDR Inquiry # 4609254.4

Client Name:

Converse Consult Inland Empire
10391 Corporate Drive
Redlands, CA 92374
Contact: Sue Krobthong

EDR Topographic Map Library has been searched by EDR and maps covering the target property location as provided by Converse Consult Inland Empire were identified for the years listed below. EDR's Historical Topo Map Report is designed to assist professionals in evaluating potential liability on a target property resulting from past activities. EDRs Historical Topo Map Report includes a search of a collection of public and private color historical topographic maps, dating back to the late 1800s.

Search Results:

P.O.# 16-41-126-01
Project: Roosevelt High School

Coordinates:

Latitude:	34.038357 34° 2' 18" North
Longitude:	-118.210404 -118° 12' 37" West
UTM Zone:	Zone 11 North
UTM X Meters:	388268.95
UTM Y Meters:	3767069.61
Elevation:	312.91' above sea level

Maps Provided:

2012
1994
1981
1972
1966
1953
1926, 1928
1900
1896
1894

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Topo Sheet Key

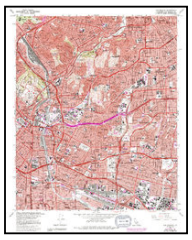
This EDR Topo Map Report is based upon the following USGS topographic map sheets.

2012 Source Sheets



Los Angeles
2012
7.5-minute, 24000

1994 Source Sheets



Los Angeles
1994
7.5-minute, 24000
Photo Revised 1981
Aerial Photo Revised 1978

1981 Source Sheets



Los Angeles
1981
7.5-minute, 24000
Photo Revised 1981
Aerial Photo Revised 1978

1972 Source Sheets



Los Angeles
1972
7.5-minute, 24000
Photo Revised 1972
Aerial Photo Revised 1972

Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

1966 Source Sheets



Los Angeles
1966
7.5-minute, 24000
Aerial Photo Revised 1964

1953 Source Sheets



Los Angeles
1953
7.5-minute, 24000
Aerial Photo Revised 1952

1926, 1928 Source Sheets



Alhambra
1926
7.5-minute, 24000

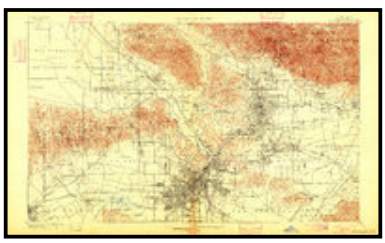


Los Angeles
1928
7.5-minute, 24000

1900 Source Sheets



Pasadena
1900
15-minute, 62500



Los Angeles
1900
15-minute, 62500

Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

1896 Source Sheets



Pasadena
1896
15-minute, 62500

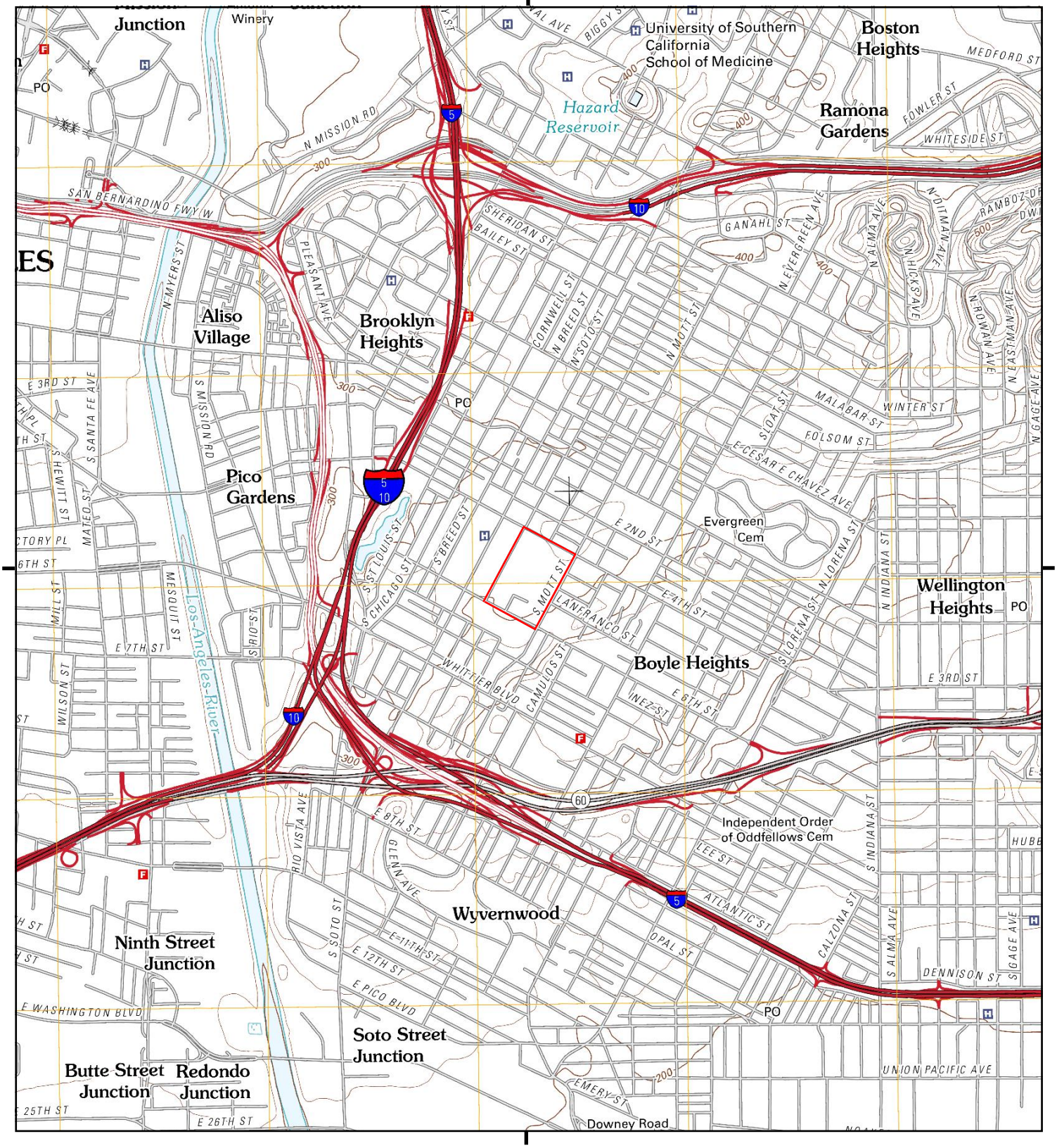
1894 Source Sheets



Los Angeles
1894
15-minute, 62500

Historical Topo Map

2012



This report includes information from the following map sheet(s).

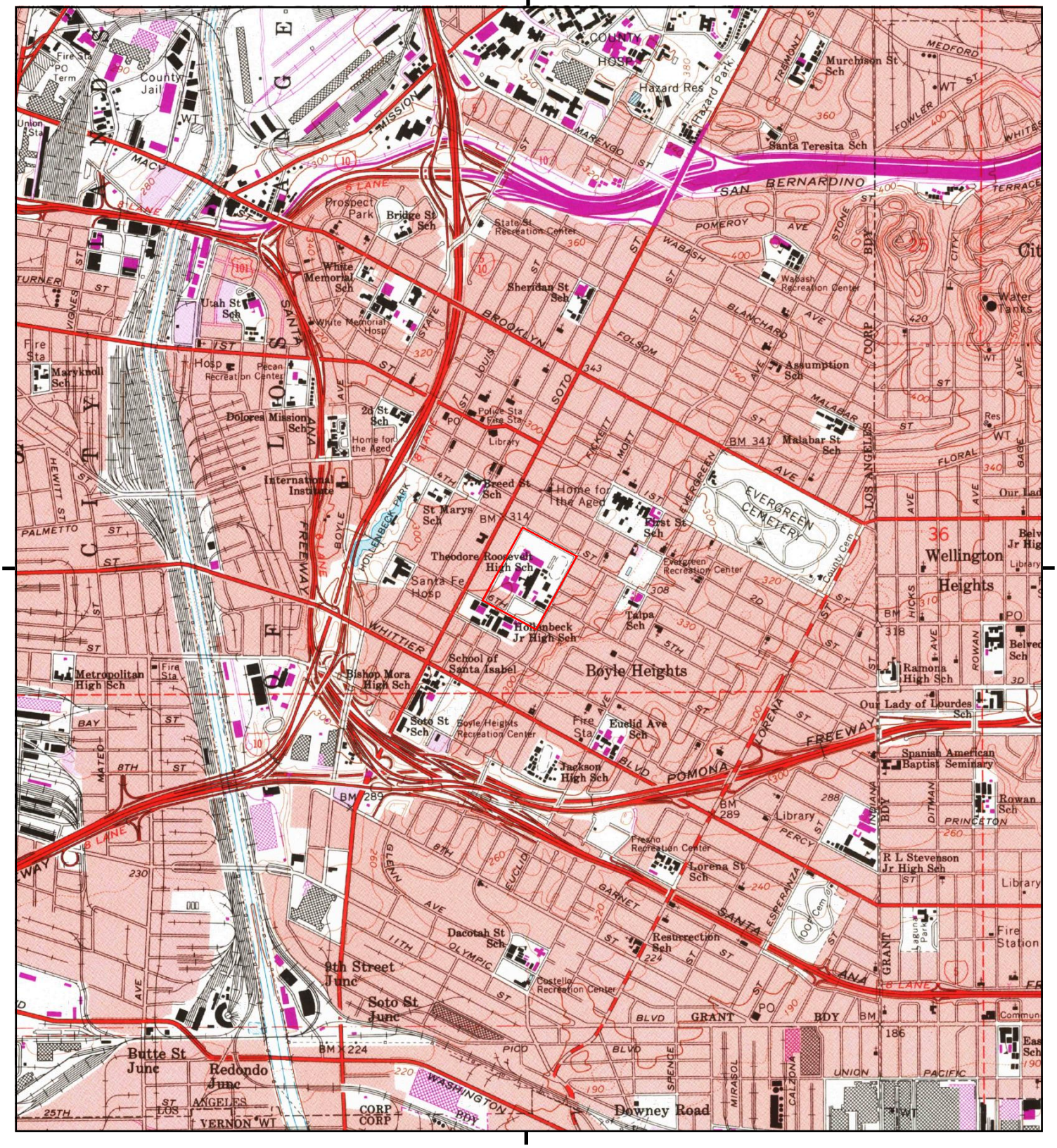
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Los Angeles, 2012, 7.5-minute

SITE NAME: Roosevelt High School
ADDRESS: 456 South Mathews Street
Los Angeles, CA 90033
CLIENT: Converse Consult Inland Empire

N



This report includes information from the following map sheet(s).

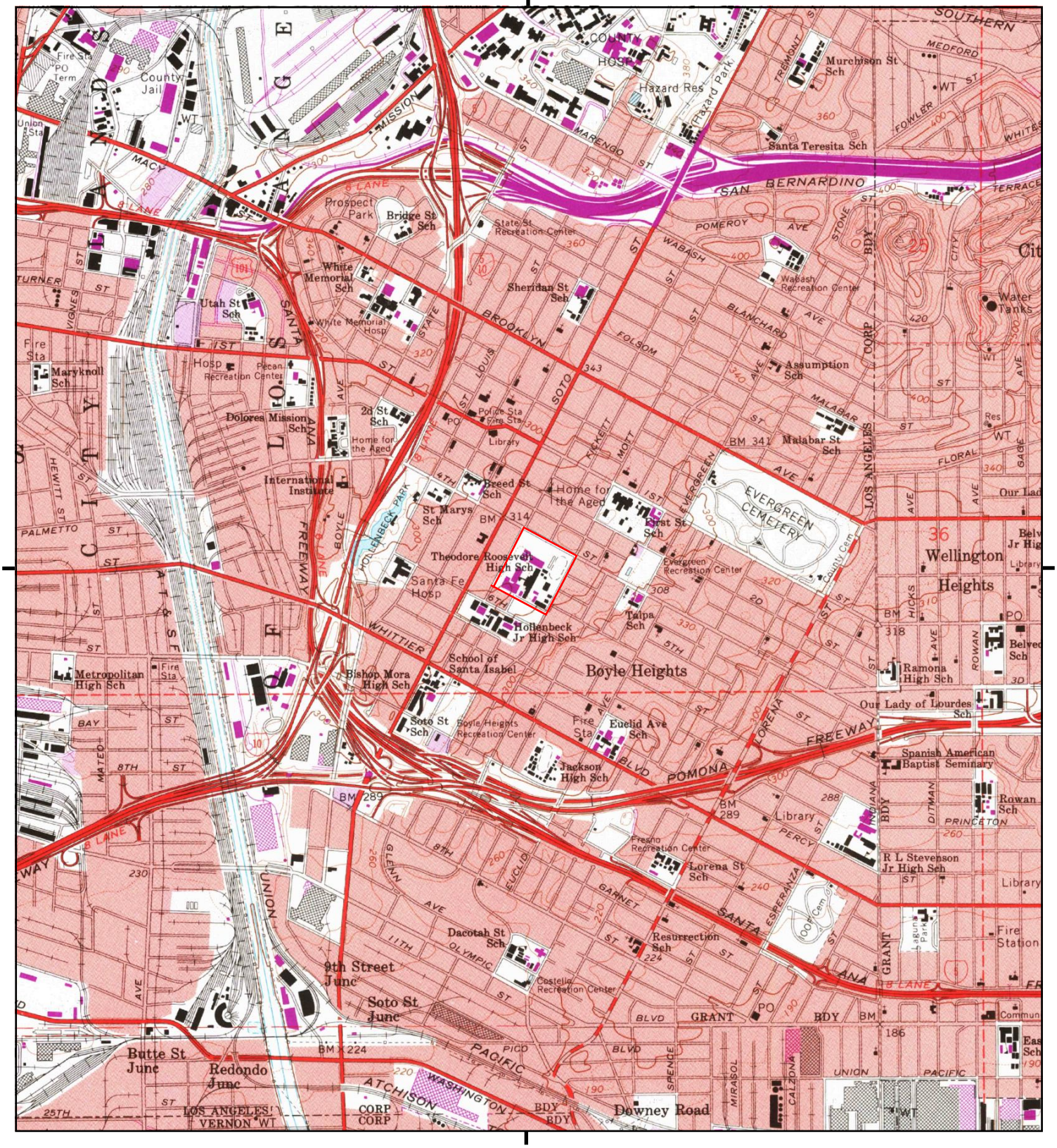
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Los Angeles, 1994, 7.5-minute

SITE NAME: Roosevelt High School
ADDRESS: 456 South Mathews Street
Los Angeles, CA 90033
CLIENT: Converse Consult Inland Empire

N



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

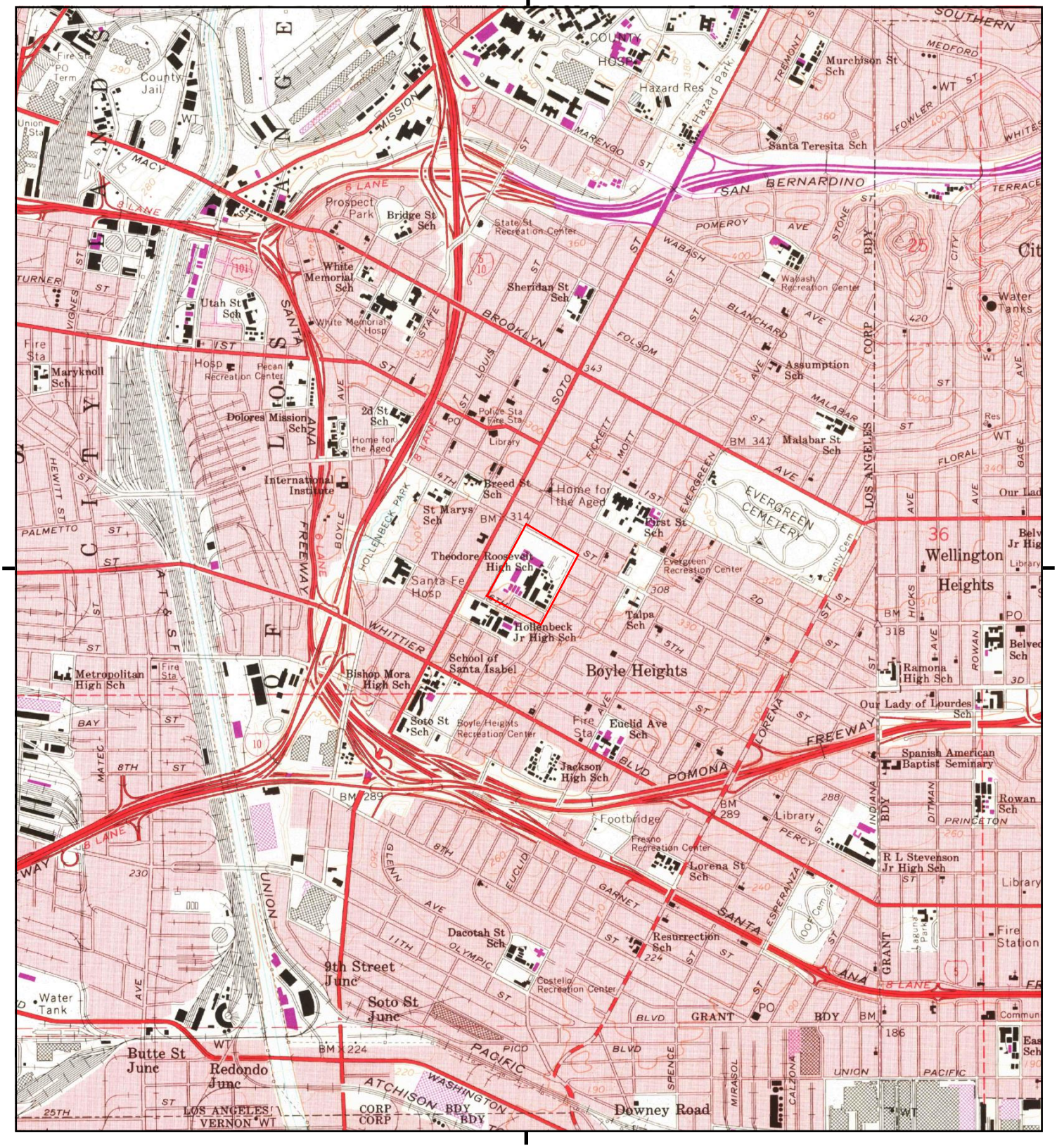
TP, Los Angeles, 1981, 7.5-minute

SITE NAME: Roosevelt High School
ADDRESS: 456 South Mathews Street
Los Angeles, CA 90033
CLIENT: Converse Consult Inland Empire

N

Historical Topo Map

1972



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

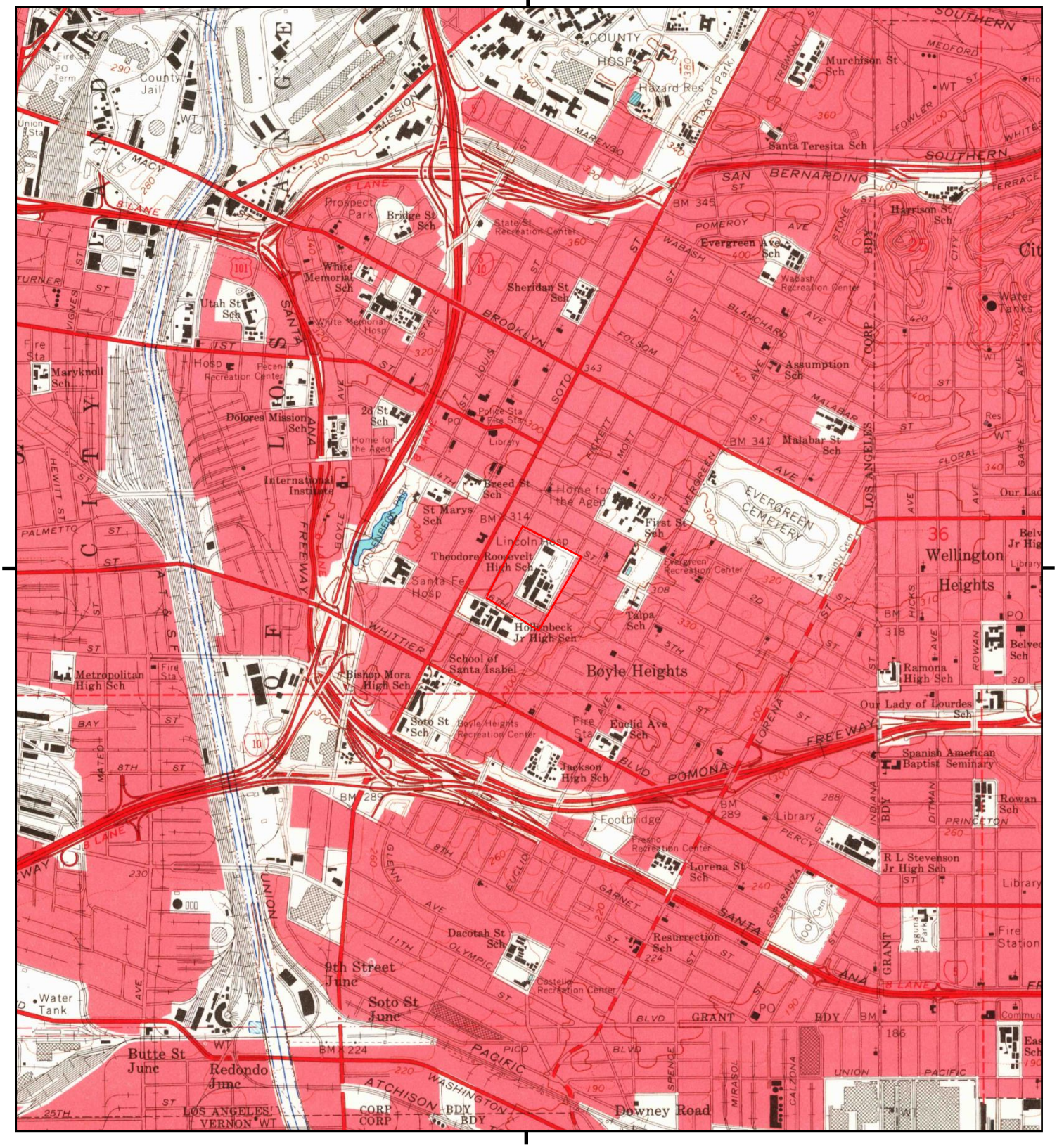
TP, Los Angeles, 1972, 7.5-minute

SITE NAME: Roosevelt High School
ADDRESS: 456 South Mathews Street
Los Angeles, CA 90033
CLIENT: Converse Consult Inland Empire

N

Historical Topo Map

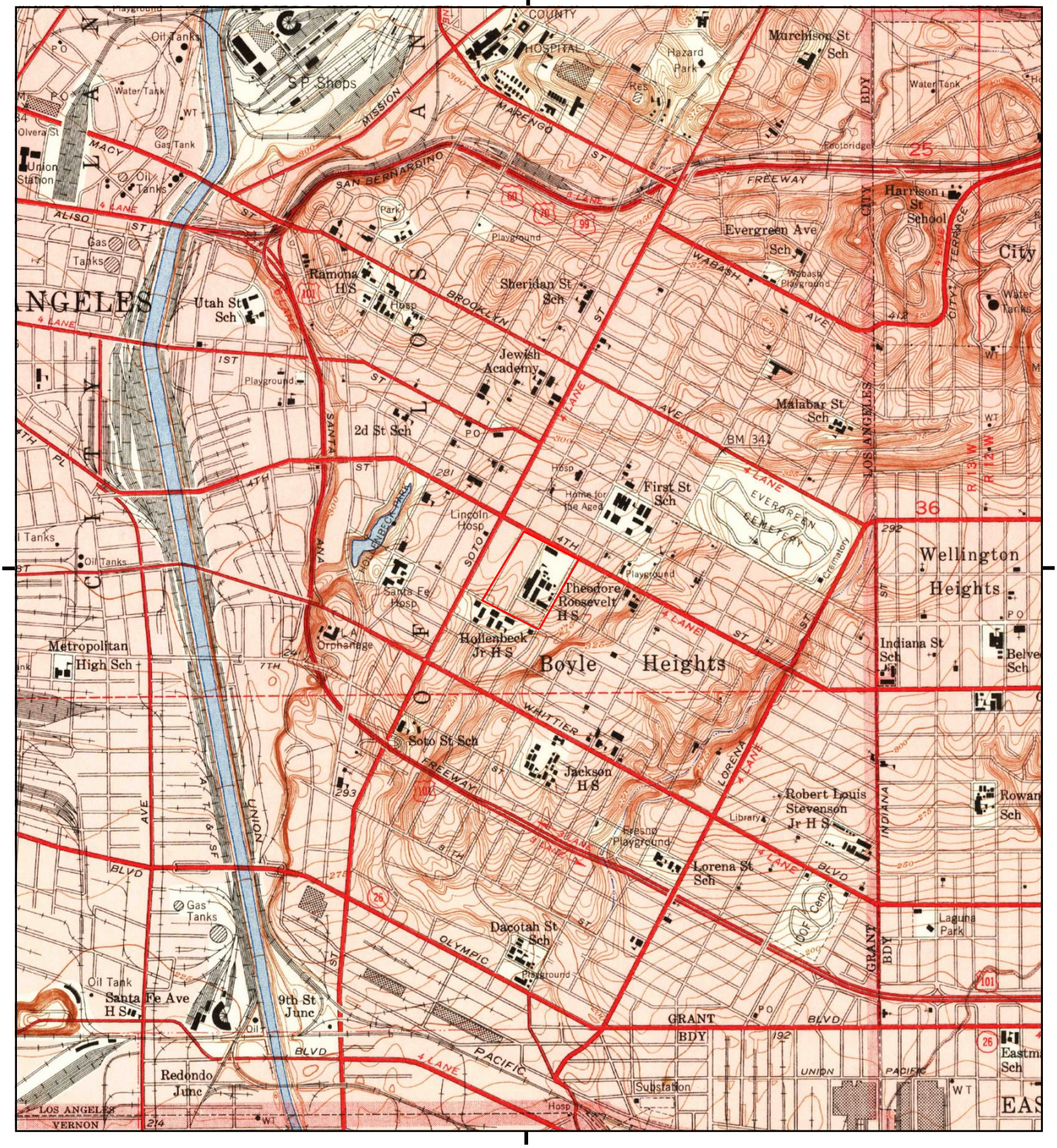
1966



This report includes information from the following map sheet(s).

TP, Los Angeles, 1966, 7.5-minute

SITE NAME: Roosevelt High School
ADDRESS: 456 South Mathews Street
Los Angeles, CA 90033
CLIENT: Converse Consult Inland Empire



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Los Angeles, 1953, 7.5-minute

SITE NAME: Roosevelt High School
ADDRESS: 456 South Mathews Street
Los Angeles, CA 90033
CLIENT: Converse Consult Inland Empire

N

Historical Topo Map

1926, 1928



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

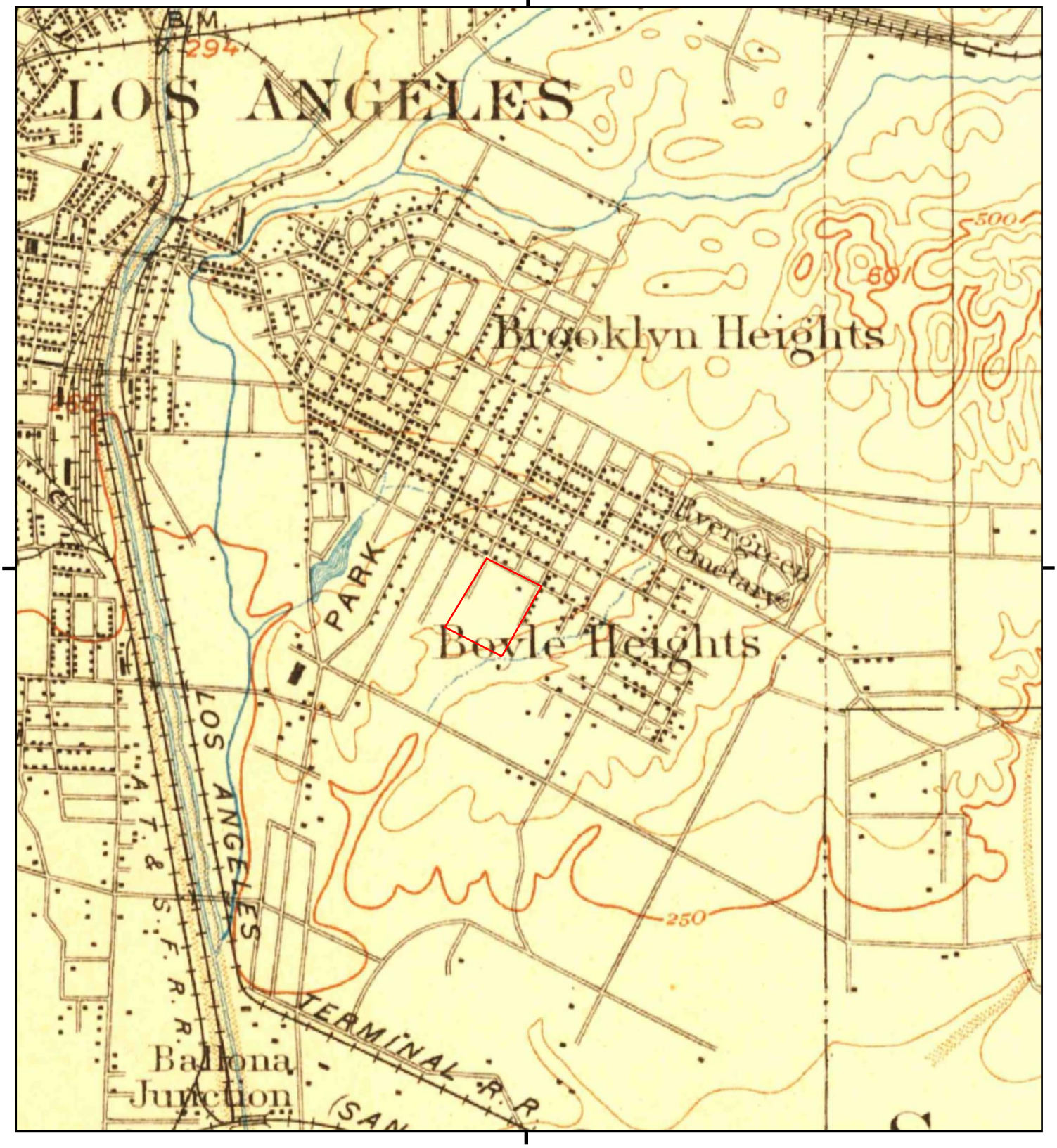
TP, Los Angeles, 1928, 7.5-minute
E, Alhambra, 1926, 7.5-minute

SITE NAME: Roosevelt High School
ADDRESS: 456 South Mathews Street
Los Angeles, CA 90033
CLIENT: Converse Consult Inland Empire

N

Historical Topo Map

1900



This report includes information from the following map sheet(s).

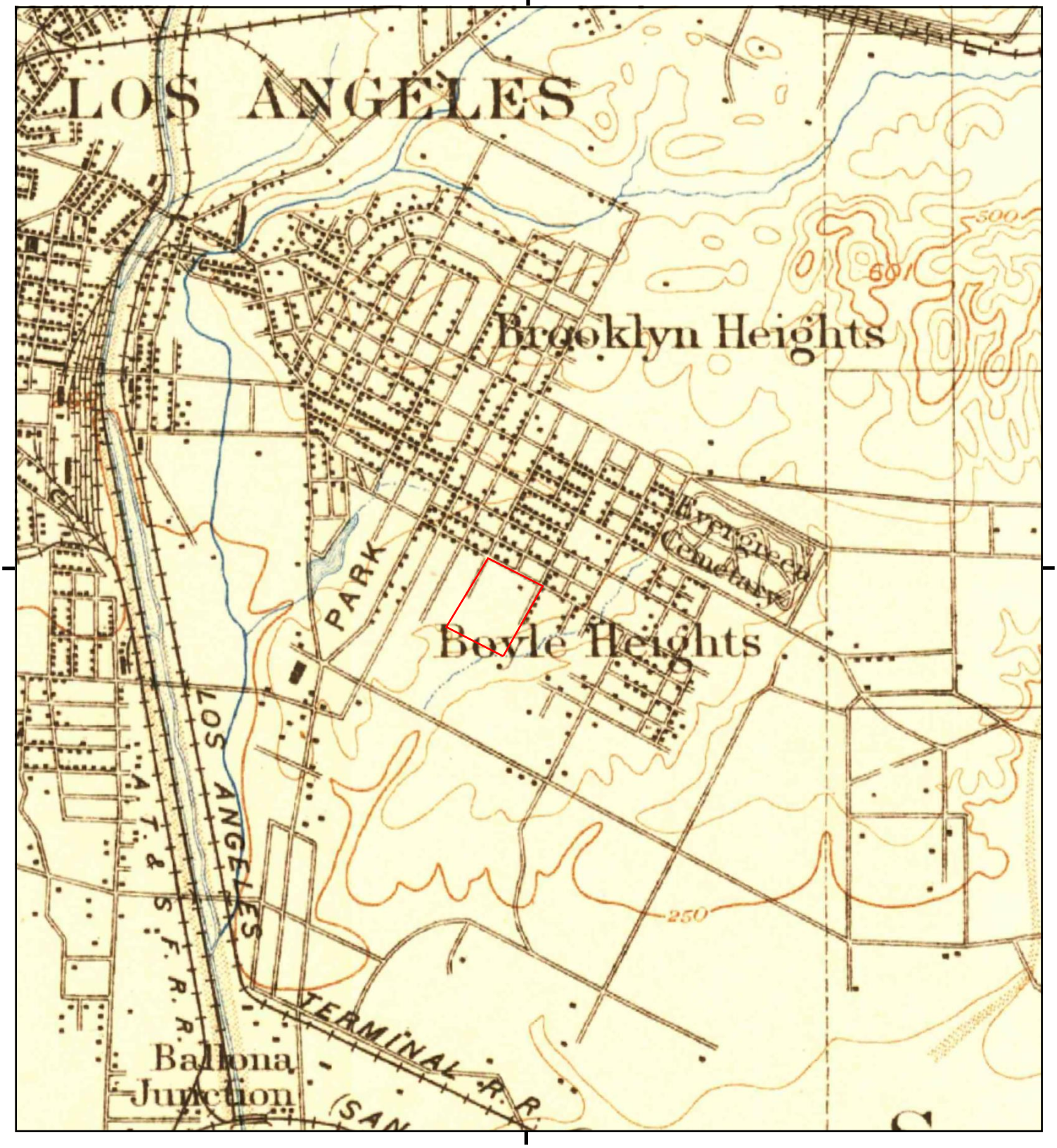
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Pasadena, 1900, 15-minute
TP, Los Angeles, 1900, 15-minute

SITE NAME: Roosevelt High School
ADDRESS: 456 South Mathews Street
Los Angeles, CA 90033
CLIENT: Converse Consult Inland Empire

N



This report includes information from the following map sheet(s).

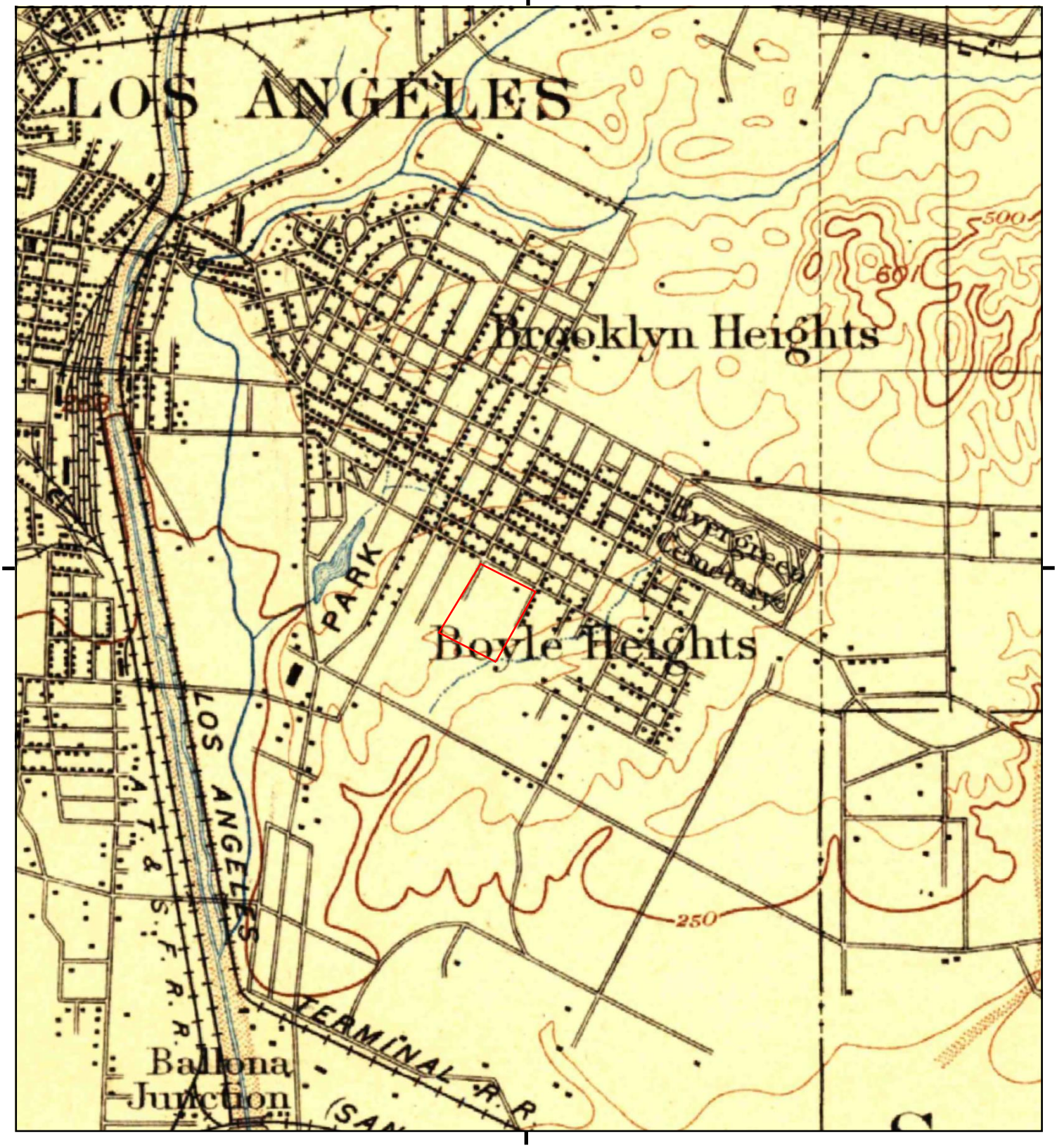
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Pasadena, 1896, 15-minute

SITE NAME: Roosevelt High School
ADDRESS: 456 South Mathews Street
Los Angeles, CA 90033
CLIENT: Converse Consult Inland Empire

N



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Los Angeles, 1894, 15-minute

SITE NAME: Roosevelt High School
ADDRESS: 456 South Mathews Street
Los Angeles, CA 90033
CLIENT: Converse Consult Inland Empire

N

Roosevelt High School
456 South Mathews Street
Los Angeles, CA 90033

Inquiry Number: 4609254.8
May 03, 2016

EDR Building Permit Report

Target Property and Adjoining Properties

Environmental Data Resources Inc

6 Armstrong Road
Shelton, CT 06484
800.352.0050
www.edrnet.com

TABLE OF CONTENTS

SECTION

About This Report

Executive Summary

Findings

Glossary

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EDR BUILDING PERMIT REPORT

About This Report

The EDR Building Permit Report provides a practical and efficient method to search building department records for indications of environmental conditions. Generated via a search of municipal building permit records gathered from more than 1,600 cities nationwide, this report will assist you in meeting the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-13), or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

Building permit data can be used to identify current and/or former operations and structures/features of environmental concern. The data can provide information on a target property and adjoining properties such as the presence of underground storage tanks, pump islands, sumps, drywells, etc., as well as information regarding water, sewer, natural gas, electrical connection dates, and current/former septic tanks.

ASTM and EPA Requirements

ASTM E 1527-13 lists building department records as a "standard historical source," as detailed in § 8.3.4.7: "Building Department Records - The term building department records means those records of the local government in which the property is located indicating permission of the local government to construct, alter, or demolish improvements on the property." ASTM also states that "Uses in the area surrounding the property shall be identified in the report, but this task is required only to the extent that this information is revealed in the course of researching the property itself."

EPA's Standards and Practices for All Appropriate Inquires (AAI) states: "§312.24: Reviews of historical sources of information. (a) Historical documents and records must be reviewed for the purposes of achieving the objectives and performance factors of §312.20(e) and (f). Historical documents and records may include, but are not limited to, aerial photographs, fire insurance maps, building department records, chain of title documents, and land use records."

Methodology

EDR has developed the EDR Building Permit Report through our partnership with BuildFax, the nation's largest repository of building department records. BuildFax collects, updates, and manages building department records from local municipal governments. The database now includes 30 million permits, on more than 10 million properties across 1,600 cities in the United States.

The EDR Building Permit Report comprises local municipal building permit records, gathered directly from local jurisdictions, including both target property and adjoining properties. Years of coverage vary by municipality. Data reported includes (where available): date of permit, permit type, permit number, status, valuation, contractor company, contractor name, and description.

Incoming permit data is checked at seven stages in a regimented quality control process, from initial data source interview, to data preparation, through final auditing. To ensure the building department is accurate, each of the seven quality control stages contains, on average, 15 additional quality checks, resulting in a process of approximately 105 quality control "touch points."

For more information about the EDR Building Permit Report, please contact your EDR Account Executive at (800) 352-0050.

EDR® Environmental Data Resources Inc

BUILDFAX® PROPERTY HISTORY

EXECUTIVE SUMMARY: SEARCH DOCUMENTATION

A search of building department records was conducted by Environmental Data Resources, Inc (EDR) on behalf of Converse Consult Inland Empire on May 03, 2016.

TARGET PROPERTY

456 South Mathews Street
Los Angeles, CA 90033

SEARCH METHODS

EDR searches available lists for both the Target Property and Surrounding Properties.

RESEARCH SUMMARY

Building permits identified: **YES**

The following research sources were consulted in the preparation of this report. An "X" indicates where information was identified in the source and provided in this report.

Los Angeles

Year	*Source*	*TP*	*Adjoining*
2016	City of Los Angeles, Department of Building and Safety		X
2015	City of Los Angeles, Department of Building and Safety		X
2014	City of Los Angeles, Department of Building and Safety		X
2013	City of Los Angeles, Department of Building and Safety		X
2012	City of Los Angeles, Department of Building and Safety		X
2011	City of Los Angeles, Department of Building and Safety		X
2010	City of Los Angeles, Department of Building and Safety		X
2009	City of Los Angeles, Department of Building and Safety		X
2008	City of Los Angeles, Department of Building and Safety		X
2007	City of Los Angeles, Department of Building and Safety		X
2006	City of Los Angeles, Department of Building and Safety		X
2005	City of Los Angeles, Department of Building and Safety		X
2004	City of Los Angeles, Department of Building and Safety		X
2003	City of Los Angeles, Department of Building and Safety		X
2002	City of Los Angeles, Department of Building and Safety		X
2001	City of Los Angeles, Department of Building and Safety		X
2000	City of Los Angeles, Department of Building and Safety		X
1999	City of Los Angeles, Department of Building and Safety		X
1998	City of Los Angeles, Department of Building and Safety		X
1997	City of Los Angeles, Department of Building and Safety		X
1996	City of Los Angeles, Department of Building and Safety		X
1995	City of Los Angeles, Department of Building and Safety		
1994	City of Los Angeles, Department of Building and Safety		
1993	City of Los Angeles, Department of Building and Safety		
1992	City of Los Angeles, Department of Building and Safety		
1991	City of Los Angeles, Department of Building and Safety		
1990	City of Los Angeles, Department of Building and Safety		
1989	City of Los Angeles, Department of Building and Safety		

EXECUTIVE SUMMARY: SEARCH DOCUMENTATION

Year	Source	TP	Adjoining
1988	City of Los Angeles, Department of Building and Safety		

BUILDING DEPARTMENT RECORDS SEARCHED

Name: Los Angeles
Years: 1988-2016
Source: City of Los Angeles, Department of Building and Safety, LOS ANGELES, CA
Phone: (213) 482-6800

Name: Adelanto
Years: 2001-2010
Source: City of Adelanto, Building and Safety, ADELANTO, CA
Phone: (760) 246-2300 x 305

Name: Arcadia
Years: 1988-2011
Source: City of Arcadia, Building Services Division, ARCADIA, CA
Phone: (626) 574-5455

Name: Brentwood
Years: 1998-2012
Source: City of Brentwood, Building and Code Enforcement, LOS ANGELES, CA
Phone: (925) 516-5405

Name: Burbank
Years: 1970-2015
Source: City of Burbank, Building Division, Burbank, CA
Phone: (818) 238-5220

Name: Gardena
Years: 1990-2016
Source: City of Gardena, Community Development, GARDENA, CA
Phone: (310) 217-9530

Name: Hemet
Years: 1989-2012
Source: City of Hemet, Building and Safety, HEMET, CA
Phone: (951) 765-2475

Name: Lakewood
Years: 1988-2014
Source: City of Lakewood, Community Development Department, LAKEWOOD, CA
Phone: (562) 866-9771 x 235

Name: Los Angeles County
Years: 1994-2016
Source: Los Angeles County, Building and Safety, CITY OF INDUSTRY, CA
Phone: (626) 458-6368

Name: Lynwood
Years: 2009-2015
Source: City of Lynwood, Development Services, LYNWOOD, CA
Phone: (310) 603-0220

Name: Pasadena
Years: 1985-2016
Source: City of Pasadena, Permit Center, PASADENA, CA
Phone: (626) 744-6646

Name: Pittsburg
Years: 2000-2010
Source: City of Pittsburg, Building Division , PITTSBURG, CA
Phone: (925) 252-4850

Name: Redding
Years: 1987-2016
Source: City of Redding, Development Services, Building Division, REDDING, CA
Phone: 530-225-4014

Name: Rialto
Years: 2000-2012
Source: City of Rialto, Building and Safety, RIALTO, CA
Phone: (909) 820-2505

Name: San Bernardino County
Years: 2002-2016
Source: San Bernardino County, Land Use, Building & Safety, FONTANA, CA
Phone: (909) 387-8311

Name: Santa Monica
Years: 1979-2016
Source: City of Santa Monica, Building and Safety, SANTA MONICA, CA
Phone: (310) 458-8355

Name: Tulare County
Years: 2006-2015
Source: Tulare County, Community and Development Services Branch, EXETER, CA
Phone: (559) 733-6291

Name: Vacaville
Years: 2009-2016
Source: City of Vacaville, Building Permits, VACAVILLE, CA
Phone: (707) 449-5152

Name: Oakland
Years: 1968-2016
Source: City of Oakland,Building Services Division, OAKLAND, CA
Phone: (510) 238-3891

Name: San Rafael
Years: 1999-2016
Source: City of San Rafael, Code Enforcement, SAN RAFAEL, CA
Phone: (415) 485-3097

Name: Norwalk
Years: 2002-2015
Source: City of Norwalk, Community Development, Building and Safety Division, NORWALK, CA
Phone: (562) 929-5733

Name: Huntington Beach
Years: 1996-2016
Source: Huntington Beach, Dept. of Building and Safety, Huntington Beach, CA
Phone: (714) 536-5241

Name: Huntington Park
Years: 2003-2011
Source: City of Huntington Park, Community Development, HUNTINGTON PARK, CA
Phone: (323) 584-6271

Name: Alhambra
Years: 2000-2015
Source: City of Alhambra, Building Services, ALHAMBRA, CA
Phone: 626-570-5034

Name: Inglewood
Years: 1991-2016
Source: City of Inglewood, Planning Division, INGLEWOOD, CA
Phone: (310) 412-5230

Name: Culver City
Years: 1990-2012
Source: Culver City, Community Development Department, CULVER CITY, CA
Phone: (310) 253-5800

TARGET PROPERTY FINDINGS

TARGET PROPERTY DETAIL

456 South Mathews Street
Los Angeles, CA 90033

No Permits Found

ADJOINING PROPERTY FINDINGS

ADJOINING PROPERTY DETAIL

The following Adjoining Property addresses were researched for this report. Detailed findings are provided for each address.

E 3RD ST

2501 E 3RD ST

Date:	**2/11/2002**
Permit Type:	
Description:	**No Plan Check Reroof: remove old roof-covering; install 1/2"CDX plywood, & install 35 squares Class A fiberglass shingles.**
Permit Description:	**Bldg-Alter/Repair**
Work Class:	
Proposed Use:	1 or 2 Family Dwelling Duplex
Permit Number:	020167000002665
Status:	
Valuation:	$7,700.00
Contractor Company:	
Contractor Name:	KST ROOFING

2506 E 3RD ST

Date:	**9/17/2002**
Permit Type:	
Description:	**No Plan Check SERVICE UPGRADE; OWNER OCCUPIED**
Permit Description:	**Electrical**
Work Class:	
Proposed Use:	1 or 2 Family Dwelling
Permit Number:	020411000020580
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	OWNER-BUILDER

ADJOINING PROPERTY FINDINGS

2507 E 3RD ST

Date:	**11/21/2001**
Permit Type:	
Description:	**No Plan Check RE-ROOF WITH 1/2" CDX PLYWOOD AND COMP. SHINGLES, 700 SQ. FEET.**
Permit Description:	**Bldg-Alter/Repair**
Work Class:	
Proposed Use:	1 or 2 Family Dwelling Single Family Residence
Permit Number:	010161000022606
Status:	
Valuation:	$2,500.00
Contractor Company:	
Contractor Name:	OWNER-BUILDER

2508 E 3RD ST

Date:	**9/5/2008**
Permit Type:	
Description:	**Plan Check Supplmental permit to permit #07010-70000-04459 to change methane design level from V to III based on site testing. **Engineer of record is for the methane site testing only****
Permit Description:	**Bldg-Alter/Repair**
Work Class:	
Proposed Use:	1 or 2 Family Dwelling Single Family Residence
Permit Number:	070107000104459
Status:	
Valuation:	$301.00
Contractor Company:	
Contractor Name:	SAENZ BROS AND CHAVEZ CONSTRUCTION CO

ADJOINING PROPERTY FINDINGS

C.O. Issued Date:	**1/4/2010**
Date:	**3/28/2008**
Permit Type:	
Description:	**Plan Check New 2-story S.F.D. w/attached 2-car garage, (2,245 SQFT SFD & 400 GARAGE)**
Permit Description:	**Bldg-New**
Work Class:	
Proposed Use:	1 or 2 Family Dwelling Single Family Residence
Permit Number:	070101000004459
Status:	
Valuation:	$205,000.00
Contractor Company:	
Contractor Name:	SAENZ BROS AND CHAVEZ CONSTRUCTION CO

2509 E 3RD ST

Date:	**11/21/2001**
Permit Type:	
Description:	**No Plan Check RE-ROOF WITH 1/2" CDX PLYWOOD AND COMP. SHINGLES, 1600 SQ. FEET.**
Permit Description:	**Bldg-Alter/Repair**
Work Class:	
Proposed Use:	1 or 2 Family Dwelling Single Family Residence
Permit Number:	010161000022605
Status:	
Valuation:	$2,500.00
Contractor Company:	
Contractor Name:	OWNER-BUILDER

ADJOINING PROPERTY FINDINGS

2510 E 3RD ST

Date:	**10/26/2006**
Permit Type:	
Description:	**No Plan Check Add sill plate anchor bolts, cripple wall plywood and replace foundation per L.A. City Std. Plan #1 (EQ hazard reduction per Chapter 92).**
Permit Description:	**Bldg-Alter/Repair**
Work Class:	
Proposed Use:	1 or 2 Family Dwelling Single Family Residence
Permit Number:	060169000021686
Status:	
Valuation:	$20,000.00
Contractor Company:	
Contractor Name:	L C CONSTRUCTION

Date:	**8/14/2002**
Permit Type:	
Description:	**No Plan Check TEAR OFF EXISTING ROOF; INSTALL OSB SHEATHING; INSTALL COMPOSITION SHINGLES (25 YRS) 17SQ FT**
Permit Description:	**Bldg-Alter/Repair**
Work Class:	
Proposed Use:	1 or 2 Family Dwelling Single Family Residence
Permit Number:	020161000015866
Status:	
Valuation:	$2,000.00
Contractor Company:	
Contractor Name:	LARES CONSTRUCTION & ROOFING CORPORATION

ADJOINING PROPERTY FINDINGS

2511 E 3RD ST

Date:	**12/15/2015**
Permit Type:	
Description:	**Plan Check TI TO AN EXISTING BUILDING, DIALYSIS CL NIC OSHPD-3. PC FOR POWER. I2.1 OCCUPANCY EXEMPT FROM ENERGY. PERMIT 2 OF 2 OF THE SAME PROJECT. 2ND CONTRACTOR WILL MAKE INSTALLATION FOR DIALYSIS EQUIPMENT. NOTE: PERMIT 1 OF 2 FOR PANEL UPGRADE IS UNDER PERMIT PCIS#15041-20000-42198/E15VN03502**
Permit Description:	**Electrical**
Work Class:	
Proposed Use:	Commercial
Permit Number:	150411000010458
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	JCJ ELECTRIC

Date:	**12/15/2015**
Permit Type:	
Description:	**Plan Check TI TO AN EXISTING BUILDING, DIALYSIS CL NIC OSHPD-3. PC FOR POWER. I2.1 OCCUPANCY EXEMPT FROM ENERGY. PERMIT 1 OF 2 OF THE SAME PROJECT. FOR CONTRACTOR 1, SCOPE INCLUDES MAIN SERVICE UPGRADE AND EXISTING SUBPANEL REPLACEMENT AND RECONNECTING EXISTING LOADS.**
Permit Description:	**Electrical**
Work Class:	
Proposed Use:	Commercial
Permit Number:	150412000042198
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	MOGAB ELECTRIC INC

ADJOINING PROPERTY FINDINGS

Date:	**9/28/2015**
Permit Type:	
Description:	**No Plan Check**
Permit Description:	**HVAC**
Work Class:	
Proposed Use:	Commercial
Permit Number:	150449000010086
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	PATRIOT AIR SYSTEMS INC

Date:	**8/7/2015**
Permit Type:	
Description:	**No Plan Check**
Permit Description:	**Electrical**
Work Class:	
Proposed Use:	Commercial
Permit Number:	150411000025610
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	JCJ ELECTRIC

Date:	**7/28/2015**
Permit Type:	
Description:	**Plan Check NEW DIALYSIS CENTER WITIN EXISTING BUIL ING. INCLUDES WASTE AND WATER SYSTEM ONLY**
Permit Description:	**Plumbing**
Work Class:	
Proposed Use:	Commercial
Permit Number:	150421000007038
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	J - MACK PLUMBING INC

ADJOINING PROPERTY FINDINGS

Date:	**6/30/2015**
Permit Type:	
Description:	**Plan Check T.I. - INSTALLATION OF FIRE SPRINKLER S STEM IN A COMMERCIAL BUILDING. EXISTING 6" FIRE SERVICE METER.**
Permit Description:	**Fire Sprinkler**
Work Class:	
Proposed Use:	Commercial
Permit Number:	150432000002238
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	MAJESTIC FIRE PROTECTION

Date:	**6/23/2015**
Permit Type:	
Description:	**Plan Check INSTALLATION OF (1) CABLE ELEVATORS**
Permit Description:	**Elevator**
Work Class:	
Proposed Use:	Commercial
Permit Number:	150461000000829
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	KONE INC

Date:	**2/1/2000**
Permit Type:	
Description:	**No Plan Check INSTALL GAS HEATER**
Permit Description:	**HVAC**
Work Class:	
Proposed Use:	1 or 2 Family Dwelling
Permit Number:	000441000000976
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	KO PLUMBING

ADJOINING PROPERTY FINDINGS

Date:	**10/28/1996**
Permit Type:	
Description:	**repire hot and cold water to 7 fixtures and install a new garbage disp**
Permit Description:	**Plumbing**
Work Class:	
Proposed Use:	1 or 2 Family Dwelling
Permit Number:	960421000000817
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	KO PLUMBING

2515 E 3RD ST

Date:	**8/21/2001**
Permit Type:	
Description:	**No Plan Check House Only, Tear off, Install 1/2" CDX Plywood, Apply 2 layers, 30 lb. ASTM Felt, Re-roof with Class "A" fiberglass 25 yr shingles.**
Permit Description:	**Bldg-Alter/Repair**
Work Class:	
Proposed Use:	1 or 2 Family Dwelling Single Family Residence
Permit Number:	010167000015925
Status:	
Valuation:	$6,480.00
Contractor Company:	
Contractor Name:	KST ROOFING

ADJOINING PROPERTY FINDINGS

2516 E 3RD ST

Date:	**12/1/2006**
Permit Type:	
Description:	**No Plan Check water heater change out**
Permit Description:	**Plumbing**
Work Class:	
Proposed Use:	Commercial
Permit Number:	060429000027208
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	GENERAL INSTALLATION COMPANY

2517 E 3RD ST

Date:	**11/28/2005**
Permit Type:	
Description:	**No Plan Check INSTALLATION OF SECURITY BARS.**
Permit Description:	**Bldg-Alter/Repair**
Work Class:	
Proposed Use:	1 or 2 Family Dwelling Single Family Residence
Permit Number:	050162000025464
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	OWNER-BUILDER

ADJOINING PROPERTY FINDINGS

Date:	**4/5/2004**
Permit Type:	
Description:	**No Plan Check REAR HOUSE ROOF TEAR OFF TO EXISTING APPLY 2 LAYERS 30LB ASJM FELT RENDER WITH CLASS "A" FIBERGLASS 30 YEAR SHINGLE 12 SQUARES**
Permit Description:	**Bldg-Alter/Repair**
Work Class:	
Proposed Use:	1 or 2 Family Dwelling Single Family Residence
Permit Number:	040167000006162
Status:	
Valuation:	$1,900.00
Contractor Company:	
Contractor Name:	KST ROOFING

2520 E 3RD ST

Date:	**11/5/2007**
Permit Type:	
Description:	**No Plan Check TEAR OFF EXISITNG ROOF RE-ROOF REMOVE EXISTING NEW SOLID SHEATHING AND 30 YRS COMPOSITION SHINGLES CLASS "A". (HOUSE ONLY 20 SQ.).**
Permit Description:	**Bldg-Alter/Repair**
Work Class:	
Proposed Use:	1 or 2 Family Dwelling Single Family Residence
Permit Number:	070161000021120
Status:	
Valuation:	$10,000.00
Contractor Company:	
Contractor Name:	MI SONG CONSTRUCTION

ADJOINING PROPERTY FINDINGS

2521 E 3RD ST

Date:	**8/27/2012**
Permit Type:	
Description:	**No Plan Check two gang service update**
Permit Description:	**Electrical**
Work Class:	
Proposed Use:	1 or 2 Family Dwelling
Permit Number:	120419000020188
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	JOHNSON KEITH DUDLEY

Date:	**7/16/2012**
Permit Type:	
Description:	**No Plan Check Windows (7) change-out (same size & typ e) for residential buildings. Dual glazing, labeled and certified by National Fenestration Rating Council (NFRC), is required for doors and windows replaced in all residential buildings, three stories or less, per Section 152(b) of Title 24. @Unit #2521 1/2.**
Permit Description:	**Bldg-Alter/Repair**
Work Class:	
Proposed Use:	1 or 2 Family Dwelling Duplex
Permit Number:	120161000014050
Status:	
Valuation:	$1,200.00
Contractor Company:	
Contractor Name:	OWNER-BUILDER

ADJOINING PROPERTY FINDINGS

Date: **6/16/2006**
Permit Type:
Description: **No Plan Check REPAIR DAMAGED FRAMING. (LESS THAN 10% DAMAGE)**

Permit Description: **Bldg-Alter/Repair**
Work Class:
Proposed Use: 1 or 2 Family Dwelling Duplex
Permit Number: 060161000011707
Status:
Valuation: $301.00
Contractor Company:
Contractor Name: OWNER-BUILDER

Date: **6/1/2006**
Permit Type:
Description: **No Plan Check 2-GANG METER SERVICE.**

Permit Description: **Electrical**
Work Class:
Proposed Use: 1 or 2 Family Dwelling
Permit Number: 060411000013149
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: JOHNSON KEITH DUDLEY

Date: **5/18/2006**
Permit Type:
Description: **No Plan Check REPLACE/INSTALL FIXTURES FOR BOTH UNITS.**

Permit Description: **Plumbing**
Work Class:
Proposed Use: 1 or 2 Family Dwelling
Permit Number: 060421000011270
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: FUENTES ARMANDO

ADJOINING PROPERTY FINDINGS

Date:	**5/18/2006**
Permit Type:	
Description:	**No Plan Check INSTALL (1) WALL HEATER IN UNIT #2521.**
Permit Description:	**HVAC**
Work Class:	
Proposed Use:	1 or 2 Family Dwelling
Permit Number:	060441000005010
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	FUENTES ARMANDO

Date:	**4/4/2006**
Permit Type:	
Description:	**No Plan Check REMOVE DRYWALL AND REPLACE W/ NEW. NO STRUCTURAL CHANGES. @ UNIT 2521 ONLY.**
Permit Description:	**Bldg-Alter/Repair**
Work Class:	
Proposed Use:	1 or 2 Family Dwelling Duplex
Permit Number:	060161000006115
Status:	
Valuation:	$8,000.00
Contractor Company:	
Contractor Name:	OWNER-BUILDER

Date:	**8/6/2001**
Permit Type:	
Description:	**No Plan Check REPAIR & REPLACE STEPS WITH SAME SIZE & TYPE MEMBERS PER ORDER TO COMPLY ISSUED BY L.A. HOUSING.**
Permit Description:	**Bldg-Alter/Repair**
Work Class:	
Proposed Use:	1 or 2 Family Dwelling Duplex
Permit Number:	010161000014787
Status:	
Valuation:	$1,000.00
Contractor Company:	
Contractor Name:	OWNER-BUILDER

ADJOINING PROPERTY FINDINGS

2530 E 3RD ST

Date:	**3/12/1997**
Permit Type:	
Description:	**No Plan Check t/o (e) reroof w/hot mop - sqs**
Permit Description:	**Bldg-Alter/Repair**
Work Class:	
Proposed Use:	1 or 2 Family Dwelling Single Family Residence
Permit Number:	970164000005662
Status:	
Valuation:	$2,000.00
Contractor Company:	
Contractor Name:	PENNY ROOFING

2531 E 3RD ST

Date:	**4/29/2010**
Permit Type:	
Description:	**Plan Check 8'8" x 12'1" sotrage room addtion at rear with exterior access only. Work in compliance with department order dated 04/22/2009. ceis #260360**
Permit Description:	**Bldg-Addition**
Work Class:	
Proposed Use:	1 or 2 Family Dwelling Single Family Residence
Permit Number:	100147000001355
Status:	
Valuation:	$11,000.00
Contractor Company:	
Contractor Name:	OWNER-BUILDER

ADJOINING PROPERTY FINDINGS

Date:	**3/14/2003**
Permit Type:	
Description:	**No Plan Check INSTALLATION OF A SEISMIC GAS SHUT OFF VALVE; OWNER OCCUPIED**
Permit Description:	**Plumbing**
Work Class:	
Proposed Use:	1 or 2 Family Dwelling
Permit Number:	030421000008277
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	OWNER-BUILDER

Date:	**9/6/2000**
Permit Type:	
Description:	**No Plan Check NEW STUCCO IN THE HOUSE & THE GARAGE.**
Permit Description:	**Bldg-Alter/Repair**
Work Class:	
Proposed Use:	1 or 2 Family Dwelling Single Family Residence
Permit Number:	000161000016855
Status:	
Valuation:	$2,000.00
Contractor Company:	
Contractor Name:	OWNER-BUILDER

ADJOINING PROPERTY FINDINGS

2536 E 3RD ST

Date:	**10/11/2002**
Permit Type:	
Description:	**No Plan Check TEAR OFF ALL EXISTING ROOF, APPLY OSB PLYWOOD & CLASS "A" SHINGLES - 30YRS.**
Permit Description:	**Bldg-Alter/Repair**
Work Class:	
Proposed Use:	1 or 2 Family Dwelling Single Family Residence
Permit Number:	020161000020229
Status:	
Valuation:	$5,500.00
Contractor Company:	
Contractor Name:	OUTZEN ROOF CO

2537 E 3RD ST

Date:	**4/28/2003**
Permit Type:	
Description:	**No Plan Check supplemental to change address from 2537-2537 1/2 E 3rd St./215 S Fickett ST to: 2537-2537 1/2 E 3rd St & to change to 1 or 2 family dwelling & include additional work: water service replacement, & one pressure regulator. Also include one addition inspection fee.**
Permit Description:	**Plumbing**
Work Class:	
Proposed Use:	1 or 2 Family Dwelling
Permit Number:	030427000203820
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	A N R INDUSTRIES

ADJOINING PROPERTY FINDINGS

Date:	**3/25/2003**
Permit Type:	
Description:	**No Plan Check REMOVE EXISTING ROOF INSTALL NEW CALSS "A" COMP. SHINGLES & INSTALL NEW SHEATHINH WITH (OBS).**
Permit Description:	**Bldg-Alter/Repair**
Work Class:	
Proposed Use:	Commercial Single Family Residence
Permit Number:	030167000005520
Status:	
Valuation:	$7,000.00
Contractor Company:	
Contractor Name:	MI SONG CONSTRUCTION

Date:	**1/29/2003**
Permit Type:	
Description:	**No Plan Check Anchor bolting/bracing foundation per L.A. City standard plan.**
Permit Description:	**Bldg-Alter/Repair**
Work Class:	
Proposed Use:	Apartment Apartment
Permit Number:	030169000001786
Status:	
Valuation:	$7,000.00
Contractor Company:	
Contractor Name:	SEISMORE CONSTRUCTION

ADJOINING PROPERTY FINDINGS

Date:	**10/15/1998**
Permit Type:	
Description:	**Plan Check CONVERT 2ND FLR 2UNITS INTO ONE UNIT WITH A TOTAL OF 2 UNITS IN THE BUILDING. REMOVE ONE KITCHEN & CREATE A LAUNDRY ROOM AT 2ND FLOOR. CHANGE USE OF BUILDING FROM 3-UNIT APT. BUILDING TO DUPLEX.**
Permit Description:	**Bldg-Alter/Repair**
Work Class:	
Proposed Use:	1 or 2 Family Dwelling Apartment Duplex
Permit Number:	980161000021498
Status:	
Valuation:	$500.00
Contractor Company:	
Contractor Name:	OWNER-BUILDER

E 3RD ST APT 1 # 4

2525 E 3RD ST APT 1 # 4

Date:	**5/1/2009**
Permit Type:	
Description:	**No Plan Check CHANGE OUT (1) SINGLE WALL FURNACE/VENT 35K**
Permit Description:	**HVAC**
Work Class:	
Proposed Use:	Apartment
Permit Number:	090441000003701
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	MARAVILLA FOUNDATION

ADJOINING PROPERTY FINDINGS

Date:	**2/11/2009**
Permit Type:	
Description:	**No Plan Check C/O SINGLE WALL FURN/VENT.**
Permit Description:	**HVAC**
Work Class:	
Proposed Use:	Apartment
Permit Number:	090441000001189
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	MARAVILLA FOUNDATION

Date:	**2/2/2006**
Permit Type:	
Description:	**No Plan Check BRING WTR. HTRS. UP TO CODE FOR THE APT. BLDG. "the work is deemed NOT to affect the habitability of a rental unit"**
Permit Description:	**Plumbing**
Work Class:	
Proposed Use:	Apartment
Permit Number:	060427000002480
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	DO IT RIGHT PLUMBING

Date:	**2/20/2003**
Permit Type:	
Description:	**No Plan Check Install 5 EQ gas shut-off valves**
Permit Description:	**Plumbing**
Work Class:	
Proposed Use:	Apartment
Permit Number:	030427000005265
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	DAVE'S QUALITY PLUMBING INC

ADJOINING PROPERTY FINDINGS

E 4TH ST

2424 E 4TH ST

Date:	**1/28/2015**
Permit Type:	
Description:	**Plan Check FOUNDATION BOLTING RETROFIT AND ADD FOO ING TO EXISTING APARTMENT BUILDING. PER ENGINEER'S DESIGN.**
Permit Description:	**Bldg-Alter/Repair**
Work Class:	
Proposed Use:	Apartment Apartment
Permit Number:	150161000000697
Status:	
Valuation:	$20,000.00
Contractor Company:	
Contractor Name:	BATEMAN CONSTRUCTION SERVICES

Date:	**1/23/2015**
Permit Type:	
Description:	**No Plan Check**
Permit Description:	**Plumbing**
Work Class:	
Proposed Use:	Apartment
Permit Number:	140421000121152
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	BATEMAN CONSTRUCTION SERVICES

ADJOINING PROPERTY FINDINGS

Date: **1/23/2015**
Permit Type:
Description: **No Plan Check**

Permit Description: **HVAC**
Work Class:
Proposed Use: Apartment
Permit Number: 140441000112476
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: BATEMAN CONSTRUCTION SERVICES

Date: **1/9/2015**
Permit Type:
Description: **No Plan Check**

Permit Description: **Electrical**
Work Class:
Proposed Use: Apartment
Permit Number: 150411000000677
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: BATEMAN CONSTRUCTION SERVICES

Date: **8/29/2012**
Permit Type:
Description: **No Plan Check REPLACE SMOKE DETECTORS @ UNIT #1 & #6. 1 OF 2 (12042-10000-15831)**

Permit Description: **Electrical**
Work Class:
Proposed Use: Apartment
Permit Number: 120411000020483
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: ESTRADA JUAN OLEA

ADJOINING PROPERTY FINDINGS

Date:	**8/29/2012**
Permit Type:	
Description:	**No Plan Check CHANGE BATHROOM (1) SINK @ UNIT #1. 2 O F 2 (12041-10000-20483)**
Permit Description:	**Plumbing**
Work Class:	
Proposed Use:	Apartment
Permit Number:	120421000015831
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	ESTRADA JUAN OLEA

Date:	**2/28/2008**
Permit Type:	
Description:	**No Plan Check INSTALL RELEASE DRAIN & FIX VENT PIPE.**
Permit Description:	**Plumbing**
Work Class:	
Proposed Use:	Commercial
Permit Number:	080421000003833
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	ESTRADA PLUMBING INC

Date:	**2/27/2008**
Permit Type:	
Description:	**No Plan Check FIX DRAINS UNDER SINKS, FIX WATER HEATER VENTS & RELIEF VALVES.**
Permit Description:	**Plumbing**
Work Class:	
Proposed Use:	Apartment
Permit Number:	080421000003730
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	ESTRADA PLUMBING INC

ADJOINING PROPERTY FINDINGS

Date: **5/16/2000**
Permit Type:
Description: **Plan Check REPLACE REAR STAIRS PER ENGINEER DETAILS.**

Permit Description: **Bldg-Alter/Repair**
Work Class:
Proposed Use: Apartment Apartment
Permit Number: 000161000008798
Status:
Valuation: $900.00
Contractor Company:
Contractor Name: C & R CONSTRUCTION

Date: **5/16/2000**
Permit Type:
Description: **No Plan Check INSTALL (3) 100 AMP EXTERIOR PANELS.**

Permit Description: **Electrical**
Work Class:
Proposed Use: Commercial
Permit Number: 000411000009664
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: C & R CONSTRUCTION

Date: **5/16/2000**
Permit Type:
Description: **No Plan Check INSTALL (4) WALL HEATERS.**

Permit Description: **HVAC**
Work Class:
Proposed Use: Commercial
Permit Number: 000441000004069
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: C & R CONSTRUCTION

ADJOINING PROPERTY FINDINGS

Date:	**5/16/2000**
Permit Type:	
Description:	**No Plan Check NEW STUCCO & REPLACE (24) WINDOWS - SAME SIZE & LOCATION.**
Permit Description:	**Bldg-Alter/Repair**
Work Class:	
Proposed Use:	Apartment Apartment
Permit Number:	000161000008808
Status:	
Valuation:	$4,250.00
Contractor Company:	
Contractor Name:	C & R CONSTRUCTION

Date:	**3/14/2000**
Permit Type:	
Description:	**No Plan Check CHANGE OUT SINGLE FURNACE AND VENTING.**
Permit Description:	**HVAC**
Work Class:	
Proposed Use:	Commercial
Permit Number:	000441000002246
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	MARAVILLA FOUNDATION

Date:	**3/1/2000**
Permit Type:	
Description:	**No Plan Check DUAL WALL FURNACE CHANGE OUT AND DIRECT VENT**
Permit Description:	**HVAC**
Work Class:	
Proposed Use:	Commercial
Permit Number:	000441000001816
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	MARAVILLA FOUNDATION

ADJOINING PROPERTY FINDINGS

Date:	**11/9/1999**
Permit Type:	
Description:	**No Plan Check INSTALLING 10 SMOKE DETECTORS, PER HOUSING AUTHORITY ORDER TO COMPLY DATED 10-14-99, INSPECTOR VALMORES.**
Permit Description:	**Electrical**
Work Class:	
Proposed Use:	Commercial
Permit Number:	990411000022195
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	PARK TOW CER

Date:	**11/9/1999**
Permit Type:	
Description:	**No Plan Check INSTALL 2 GAS HEATERS (UNIT #6), AS PER ORDER HOUSING AUTHORITY ORDER TO COMPLY DATED OCTOBER 14, 1999 - INSPECTOR VALMORES.**
Permit Description:	**HVAC**
Work Class:	
Proposed Use:	Commercial
Permit Number:	990441000009836
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	PARK TOW CER

ADJOINING PROPERTY FINDINGS

2425 E 4TH ST

Date:	**4/5/2007**
Permit Type:	
Description:	**Plan Check CONSTRUCT 6'-0" MAX HIGH CMU WALL FENCE, 65'-0" LONG ALONG SOUTH EAST PROPERTY LINE PER CITY STANDARDS. SEE COMMENTS**
Permit Description:	**Nonbldg-New**
Work Class:	
Proposed Use:	Commercial Misc. Bldg or Structure
Permit Number:	070201000001059
Status:	
Valuation:	$3,500.00
Contractor Company:	
Contractor Name:	OWNER-BUILDER

Date:	**5/6/2002**
Permit Type:	
Description:	**No Plan Check REPLACE HYDRAULIC DOOR WITH MANUAL ROLL UP DOOR. (NO CHANGE IN SIZE OF OPENINGS)**
Permit Description:	**Bldg-Alter/Repair**
Work Class:	
Proposed Use:	Commercial Public Garage
Permit Number:	020161000008411
Status:	
Valuation:	$2,700.00
Contractor Company:	
Contractor Name:	OWNER-BUILDER

ADJOINING PROPERTY FINDINGS

2431 E 4TH ST

Date:	**5/26/2004**
Permit Type:	
Description:	**No Plan Check REPLACE EXISTING WINDOWS (SAME SIZE & LOCATION), REPAIR DRYWALL, REPLACE KITCHEN CABINETS, REPAIR CEILING (LESS THAN 10%) & PATCHING.**
Permit Description:	**Bldg-Alter/Repair**
Work Class:	
Proposed Use:	1 or 2 Family Dwelling Single Family Residence
Permit Number:	040161000010024
Status:	
Valuation:	$2,000.00
Contractor Company:	
Contractor Name:	OWNER-BUILDER

Date:	**4/10/2000**
Permit Type:	
Description:	**No Plan Check REPAIR ROOF WITH PLYWOOD. RE-STUCCO SIDE OF HOUSE.**
Permit Description:	**Bldg-Alter/Repair**
Work Class:	
Proposed Use:	1 or 2 Family Dwelling Single Family Residence
Permit Number:	000161000006291
Status:	
Valuation:	$2,000.00
Contractor Company:	
Contractor Name:	OWNER-BUILDER

ADJOINING PROPERTY FINDINGS

Date:	**7/29/1998**
Permit Type:	
Description:	**No Plan Check DEMOLISH 34' X 45' GARAGE. NO SEWER CAP REQUIRED.**
Permit Description:	**Bldg-Demolition**
Work Class:	
Proposed Use:	1 or 2 Family Dwelling Private Garage Misc. Bldg or Structure
Permit Number:	980191000000832
Status:	
Valuation:	$500.00
Contractor Company:	
Contractor Name:	OWNER-BUILDER

Date:	**10/25/1996**
Permit Type:	
Description:	**STUCCO AROUND HOUSE**
Permit Description:	**Bldg-Alter/Repair**
Work Class:	
Proposed Use:	1 or 2 Family Dwelling
Permit Number:	960161000003003
Status:	
Valuation:	$2,500.00
Contractor Company:	
Contractor Name:	

ADJOINING PROPERTY FINDINGS

2501 E 4TH ST

Date:	**6/12/2002**
Permit Type:	
Description:	**No Plan Check REMOVE & REPLACE FRONT ENTRANCE DOOR. (INSPECTOR TO VERIFY SAME SIZE & TYPE).**
Permit Description:	**Bldg-Alter/Repair**
Work Class:	
Proposed Use:	Commercial Retail
Permit Number:	020169100010961
Status:	
Valuation:	$650.00
Contractor Company:	
Contractor Name:	OWNER-BUILDER

Date:	**8/6/1997**
Permit Type:	
Description:	**Plan Check FIRE DAMAGE: R & R DRYWALL & POSTS LESS THAN 10% DAMAGED, INSTALL NEW DOOR.**
Permit Description:	**Bldg-Alter/Repair**
Work Class:	
Proposed Use:	Commercial Apartment
Permit Number:	970161000015976
Status:	
Valuation:	$20,000.00
Contractor Company:	
Contractor Name:	SERVPRO OF SAN GABRIEL VALLEY

ADJOINING PROPERTY FINDINGS

Date:	**7/31/1997**
Permit Type:	
Description:	**No Plan Check NEW SERVICE & WIRING FOR MARKET PERMIT APPROVED BY ENG GEORGE C**
Permit Description:	**Electrical**
Work Class:	
Proposed Use:	Commercial
Permit Number:	970411000011618
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	STAR ELECTRIC

2507 E 4TH ST

Date:	**2/27/2007**
Permit Type:	
Description:	**No Plan Check SERVICE UPGRADE FOR F2507, 2507A, 2507 1/2 & 2509 1/2 E. 4TH STREET**
Permit Description:	**Electrical**
Work Class:	
Proposed Use:	Commercial
Permit Number:	070414000004826
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	BOYSEN ELECTRICAL INC

ADJOINING PROPERTY FINDINGS

2509 E 4TH ST

Date:	**2/17/2006**
Permit Type:	
Description:	**No Plan Check INSTALL WATER HEATER**
Permit Description:	**Plumbing**
Work Class:	
Proposed Use:	Commercial
Permit Number:	060424000003844
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	AMERICAN ROOTER

Date:	**10/25/2005**
Permit Type:	
Description:	**No Plan Check SUPPLEMENTAL PERMIT TO 05042-10000-04627 FOR (1) EXTRA TRIP.**
Permit Description:	**Plumbing**
Work Class:	
Proposed Use:	Commercial
Permit Number:	050421000204627
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	OMOHUNDRO ROBERT E JR

ADJOINING PROPERTY FINDINGS

Date:	**9/28/2005**
Permit Type:	
Description:	**No Plan Check UPGRADE 1-180 COMMERCIAL METER BOX W/ LOAD CENTER.**
Permit Description:	**Electrical**
Work Class:	
Proposed Use:	Commercial
Permit Number:	050411000023749
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	B B B ELECTRIC

Date:	**6/2/2005**
Permit Type:	
Description:	**Plan Check CHANGE OF USE FROM (E) RETAIL TO COFFEE SHOP. NO PHYSICAL CONSTRUCTION. NO CHANGE IN PARKING (SEE COMMENT)**
Permit Description:	**Bldg-Alter/Repair**
Work Class:	
Proposed Use:	Commercial Retail Restaurant
Permit Number:	050161000004599
Status:	
Valuation:	$6,000.00
Contractor Company:	
Contractor Name:	OWNER-BUILDER

Date:	**3/8/2005**
Permit Type:	
Description:	**No Plan Check SUPPL. PERMIT TO PERMIT #05042-10000-04627 FOR (1) EXTRA TRIP.**
Permit Description:	**Plumbing**
Work Class:	
Proposed Use:	Commercial
Permit Number:	050421000104627
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	OMOHUNDRO ROBERT E JR

ADJOINING PROPERTY FINDINGS

Date: **2/24/2005**
Permit Type:
Description: **No Plan Check REPLACE (1) OUTLETS. 1 OF 2 (05042-10000-04627).**

Permit Description: **Electrical**
Work Class:
Proposed Use: Commercial
Permit Number: 050411000004140
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: OMOHUNDRO ROBERT E JR

Date: **2/24/2005**
Permit Type:
Description: **No Plan Check INSTALL FLOOR SINK, MOP SINK, HAND SINK & THREE CARPMENT SINK. 2 OF 2 (05041-10000-04140).**

Permit Description: **Plumbing**
Work Class:
Proposed Use: Commercial
Permit Number: 050421000004627
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: OMOHUNDRO ROBERT E JR

Date: **8/25/1997**
Permit Type:
Description: **No Plan Check t/o (e) w/1/2" cdx plywood, felt & comp - 19sqs-SFD only.**

Permit Description: **Bldg-Alter/Repair**
Work Class:
Proposed Use: 1 or 2 Family Dwelling Single Family Residence
Permit Number: 970164000019042
Status:
Valuation: $4,000.00
Contractor Company:
Contractor Name: FREDERICK ROOFING

ADJOINING PROPERTY FINDINGS

2511 E 4TH ST

Date:	**2/18/1999**
Permit Type:	
Description:	**No Plan Check TEAR OFF OLD SHINGLES RE SHEATH NEW 20 YR COMP 20 SQS CHANGE WINDOWS LATH & PLASTER STUCCO**
Permit Description:	**Bldg-Alter/Repair**
Work Class:	
Proposed Use:	1 or 2 Family Dwelling Duplex
Permit Number:	990161000002897
Status:	
Valuation:	$8,000.00
Contractor Company:	
Contractor Name:	FREEDOM GENERAL CONSTRUCTION CO

2513 E 4TH ST

Date:	**11/29/2011**
Permit Type:	
Description:	**No Plan Check REPLACE SUB-PANEL.**
Permit Description:	**Electrical**
Work Class:	
Proposed Use:	1 or 2 Family Dwelling
Permit Number:	110411000025381
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	PEREZ PLUMBING & ELECTRIC

ADJOINING PROPERTY FINDINGS

Date: **2/18/1999**
Permit Type:
Description: **No Plan Check CHANGE WINDOWS TO DUAL GLAZE LATH, PLASTER, & STUCCO**

Permit Description: **Bldg-Alter/Repair**
Work Class:
Proposed Use: 1 or 2 Family Dwelling Single Family Residence
Permit Number: 990161000002899
Status:
Valuation: $4,000.00
Contractor Company:
Contractor Name: FREEDOM GENERAL CONSTRUCTION CO

2515 E 4TH ST

Date: **12/5/2002**
Permit Type:
Description: **No Plan Check INSTALL ONE ADDITIONAL SMOKE DETECTOR (HARD WIRED)**

Permit Description: **Electrical**
Work Class:
Proposed Use: 1 or 2 Family Dwelling
Permit Number: 020411000026840
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: A K ELECTRIC

ADJOINING PROPERTY FINDINGS

Date:	**9/15/2000**
Permit Type:	
Description:	**Plan Check FENCE WALL @ N.W. PROPERTY LINE. 6" CMU, 6' MAX HT PER L.A. CITY STANDARD DETAIL. L=55'**
Permit Description:	**Nonbldg-New**
Work Class:	
Proposed Use:	1 or 2 Family Dwelling Misc. Bldg or Structure
Permit Number:	000201000002548
Status:	
Valuation:	$2,640.00
Contractor Company:	
Contractor Name:	OWNER-BUILDER

2527 E 4TH ST

Date:	**1/20/2004**
Permit Type:	
Description:	**No Plan Check T/O, PUT ON 1/2"PLYWOOD AND CLASS 'A' COMP. SHING.**
Permit Description:	**Bldg-Alter/Repair**
Work Class:	
Proposed Use:	1 or 2 Family Dwelling Single Family Residence
Permit Number:	040164000001043
Status:	
Valuation:	$7,500.00
Contractor Company:	
Contractor Name:	H L ROOFING

ADJOINING PROPERTY FINDINGS

2529 E 4TH ST

Date:	**4/12/2011**
Permit Type:	
Description:	**No Plan Check Re-roof with Class A or B material weighing less than 6 pound per sq. ft. (Shingles - no plywood involved) TO COMPLY W/ DEPT. ORDER DATED 03-15-10. PERMIT WILL EXPIRE 30 DAYS FROM ISSUANCE DATE.**
Permit Description:	**Bldg-Alter/Repair**
Work Class:	
Proposed Use:	1 or 2 Family Dwelling Single Family Residence
Permit Number:	110161000006574
Status:	
Valuation:	$4,000.00
Contractor Company:	
Contractor Name:	MENDOZA CONTRACTING

Date:	**4/12/2011**
Permit Type:	
Description:	**No Plan Check UPGRADE SERVICE. INSTALL (14) NEW CIRCUITS AND SMOKE DETECTORS. (1 OF 2 W/ PERMIT #11042-10000-06230) TO COMPLY W/ DEPT. ORDER DATED 03-15-10. PERMIT WILL EXPIRE 30 DAYS FROM ISSUANCE DATE.**
Permit Description:	**Electrical**
Work Class:	
Proposed Use:	1 or 2 Family Dwelling
Permit Number:	110411000007238
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	MENDOZA CONTRACTING

ADJOINING PROPERTY FINDINGS

Date:	**4/12/2011**
Permit Type:	
Description:	**No Plan Check REPIPE HOT/COLD LINES THROUGHOUT. REPLACE (1) KITCHEN SINK. (2 OF 2 W/ PERMIT #11041-10000-07238) TO COMPLY W/ DEPT. ORDER DATED 03-15-10. PERMIT WILL EXPIRE 30 DAYS FROM ISSUANCE DATE.**
Permit Description:	**Plumbing**
Work Class:	
Proposed Use:	1 or 2 Family Dwelling
Permit Number:	110421000006230
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	MENDOZA CONTRACTING

Date:	**9/27/2010**
Permit Type:	
Description:	**Plan Check PROPOSED 19'-2" X 26'-10" IRREG-SHAPED ADDITION TO REAR UNIT OF (E) DUPLEX. INCLUDES INTERIOR REMODEL AND REPLACEMENT OF PORTIONS OF EXTERIOR WALL FRAMING AND CONTINUOUS FOUNDATION. CONVENTIONAL FRAMING PER TYPE V SHEET. **COMPLY WITH DEPARTMENT ORDER effective date 03/15/2010. PERMIT WILL EXPIRE 30 DAYS FROM ISSUANCE DATE****
Permit Description:	**Bldg-Addition**
Work Class:	
Proposed Use:	1 or 2 Family Dwelling Duplex
Permit Number:	100141000001458
Status:	
Valuation:	$54,000.00
Contractor Company:	
Contractor Name:	OWNER-BUILDER

ADJOINING PROPERTY FINDINGS

2537 E 4TH ST

Date:	**1/18/2007**
Permit Type:	
Description:	**No Plan Check INSTALL NEW WATER HEATER.**
Permit Description:	**Plumbing**
Work Class:	
Proposed Use:	1 or 2 Family Dwelling
Permit Number:	070421000001312
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	OWNER-BUILDER

Date:	**9/5/2006**
Permit Type:	
Description:	**No Plan Check RE-ROOF W/ SHINGLES. INSTALL NEW PLYWOOD SHEATHING.**
Permit Description:	**Bldg-Alter/Repair**
Work Class:	
Proposed Use:	1 or 2 Family Dwelling Single Family Residence
Permit Number:	060161000017562
Status:	
Valuation:	$9,000.00
Contractor Company:	
Contractor Name:	OWNER-BUILDER

Date:	**9/5/2006**
Permit Type:	
Description:	**No Plan Check UPGRADE ELECTRICAL METER TO 220 AMPS.**
Permit Description:	**Electrical**
Work Class:	
Proposed Use:	1 or 2 Family Dwelling
Permit Number:	060411000022216
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	OWNER-BUILDER

ADJOINING PROPERTY FINDINGS

Date: **2/10/2003**
Permit Type:
Description: **No Plan Check Seismic gas valve installation**

Permit Description: **Plumbing**
Work Class:
Proposed Use: 1 or 2 Family Dwelling
Permit Number: 030429000004412
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: STRUHS COMPANY

Date: **1/22/1999**
Permit Type:
Description: **No Plan Check NEW STUCCO**

Permit Description: **Bldg-Alter/Repair**
Work Class:
Proposed Use: 1 or 2 Family Dwelling Single Family Residence
Permit Number: 990161000001285
Status:
Valuation: $6,750.00
Contractor Company:
Contractor Name: OWNER-BUILDER

2601 E 4TH ST

Date: **2/10/2011**
Permit Type:
Description: **Plan Check REPAIR TO VEHICLE DAMAGED WALL, 3 STUDS, STUCCO PATCH**

Permit Description: **Bldg-Alter/Repair**
Work Class:
Proposed Use: Commercial Retail
Permit Number: 110161000000774
Status:
Valuation: $5,000.00
Contractor Company:
Contractor Name: BELFOR USA GROUP INC

ADJOINING PROPERTY FINDINGS

2607 E 4TH ST

Date:	**12/10/2003**
Permit Type:	
Description:	**No Plan Check REPLACE FURNACE FOR ROOM HEATER.**
Permit Description:	**HVAC**
Work Class:	
Proposed Use:	1 or 2 Family Dwelling
Permit Number:	030441000012183
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	RAMOS RAMON

2613 E 4TH ST

Date:	**8/27/2008**
Permit Type:	
Description:	**No Plan Check GAS LINE FOR FURANCES.**
Permit Description:	**Plumbing**
Work Class:	
Proposed Use:	1 or 2 Family Dwelling
Permit Number:	080421000016513
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	MOR - AIRE HEATING AND AIR CONDITIONING

ADJOINING PROPERTY FINDINGS

Date: **8/27/2008**
Permit Type:
Description: **No Plan Check INSTALLATION OF (2) WALL FURANCE & VENTS.**

Permit Description: **HVAC**
Work Class:
Proposed Use: 1 or 2 Family Dwelling
Permit Number: 080441000008664
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: MOR - AIRE HEATING AND AIR CONDITIONING

Date: **4/3/2002**
Permit Type:
Description: **No Plan Check INSTALL 6 SMOKE DETECTORS IN THE DUPLEX**

Permit Description: **Electrical**
Work Class:
Proposed Use: 1 or 2 Family Dwelling
Permit Number: 020411000006826
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: BARRAZA OSCAR ROBERTO

2617 E 4TH ST

Date: **12/21/2000**
Permit Type:
Description: **No Plan Check 100AMP UPGRADE 4 CIRCUITS.**

Permit Description: **Electrical**
Work Class:
Proposed Use: 1 or 2 Family Dwelling
Permit Number: 000411000025853
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: AVILA R ELECTRIC

ADJOINING PROPERTY FINDINGS

Date:	**6/17/1999**
Permit Type:	
Description:	**No Plan Check change out wall furnace**
Permit Description:	**HVAC**
Work Class:	
Proposed Use:	1 or 2 Family Dwelling
Permit Number:	990444000005223
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	RELIABLE ENERGY MANAGEMENT

Date:	**6/3/1998**
Permit Type:	
Description:	**Plan Check 6' garden wall per city std.**
Permit Description:	**Nonbldg-New**
Work Class:	
Proposed Use:	1 or 2 Family Dwelling Misc. Bldg or Structure
Permit Number:	980203000001236
Status:	
Valuation:	$2,250.00
Contractor Company:	
Contractor Name:	SAM - VAN CONSTRUCTION INC

ADJOINING PROPERTY FINDINGS

E 4TH ST # 8-9

2420 E 4TH ST # 8-9

Date:	**5/13/2008**
Permit Type:	
Description:	**No Plan Check SUPPLEMENTAL PERMIT TO 08042-10000-08120 TO CHANGE ADDRESS FROM 2420 E. 4TH ST. TO 2420-2424 E. 4TH ST. , REPLACE (6) WATER HEATER & (1) DRAIN LINE.**
Permit Description:	**Plumbing**
Work Class:	
Proposed Use:	Commercial
Permit Number:	080421000108120
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	GOURGINS PLUMBING CO

Date:	**4/29/2008**
Permit Type:	
Description:	**No Plan Check INSTALL PRESSURE REGULATING VALVE & REPIPE SEGMENT OF WATER LINE TO WATER HEATER.**
Permit Description:	**Plumbing**
Work Class:	
Proposed Use:	Commercial
Permit Number:	080421000008120
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	GOURGINS PLUMBING CO

ADJOINING PROPERTY FINDINGS

Date:	**2/27/2008**
Permit Type:	
Description:	**No Plan Check REPLACE WATER HEATERS & VENTS. REPLACE DRAIN UNDER SINK & VENT PIPE.**
Permit Description:	**Plumbing**
Work Class:	
Proposed Use:	Apartment
Permit Number:	080421000003728
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	ESTRADA PLUMBING INC

Date:	**1/18/2006**
Permit Type:	
Description:	**No Plan Check INSTALL WALL HEATERS IN UNITS 8 & 9.**
Permit Description:	**HVAC**
Work Class:	
Proposed Use:	Apartment
Permit Number:	060441000000493
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	HA YONG TAEK

Date:	**7/10/2000**
Permit Type:	
Description:	**No Plan Check SUPPLEMENTAL PERMIT TO 00041-10000-09663. UPGRADE METER.**
Permit Description:	**Electrical**
Work Class:	
Proposed Use:	Commercial
Permit Number:	000411000109663
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	C & R CONSTRUCTION

ADJOINING PROPERTY FINDINGS

Date: **5/16/2000**
Permit Type:
Description: **Plan Check REPLACE REAR STAIRS PER ENGINEER DETAILS.**

Permit Description: **Bldg-Alter/Repair**
Work Class:
Proposed Use: Apartment Apartment
Permit Number: 000161000008801
Status:
Valuation: $900.00
Contractor Company:
Contractor Name: C & R CONSTRUCTION

Date: **5/16/2000**
Permit Type:
Description: **No Plan Check NEW STUCCO & REPLACE (24) WINDOWS - SAME SIZE & LOCATION.**

Permit Description: **Bldg-Alter/Repair**
Work Class:
Proposed Use: Apartment Apartment
Permit Number: 000161000008804
Status:
Valuation: $4,250.00
Contractor Company:
Contractor Name: C & R CONSTRUCTION

Date: **5/16/2000**
Permit Type:
Description: **No Plan Check INSTALL (2) 100 AMP EXT. PANELS**

Permit Description: **Electrical**
Work Class:
Proposed Use: Commercial
Permit Number: 000411000009663
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: C & R CONSTRUCTION

ADJOINING PROPERTY FINDINGS

Date:	**5/16/2000**
Permit Type:	
Description:	**No Plan Check NEW FIXTURES & WATER HEATER UNDER STAIRS.**
Permit Description:	**Plumbing**
Work Class:	
Proposed Use:	Commercial
Permit Number:	000421000007343
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	C & R CONSTRUCTION

Date:	**11/9/1999**
Permit Type:	
Description:	**No Plan Check GENERAL REHAB. PER HOUSING AUTHORITY ORDER TO COMPLY DATED 10-14-99, INSPECTOR VALMORES.**
Permit Description:	**Bldg-Alter/Repair**
Work Class:	
Proposed Use:	Apartment Apartment
Permit Number:	990161000021203
Status:	
Valuation:	$1,200.00
Contractor Company:	
Contractor Name:	PARK TOW CER

ADJOINING PROPERTY FINDINGS

Date:	**11/9/1999**
Permit Type:	
Description:	**No Plan Check INSTALL 1 LAVATORY, AND 1 SINK KITCHEN (UNIT #6), AS PER HOUSING AUTHORITY ORDER TO COMPLY DATED 10-14-99, INSPECTOR VALMORES.**
Permit Description:	**Plumbing**
Work Class:	
Proposed Use:	Commercial
Permit Number:	990421000015515
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	PARK TOW CER

Date:	**5/4/1998**
Permit Type:	
Description:	**No Plan Check SUPPLEMENTAL PERMIT REPAIR SERVICE PANEL**
Permit Description:	**Electrical**
Work Class:	
Proposed Use:	Commercial
Permit Number:	980411000107519
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	ORNELAS ELECTRIC

Date:	**4/24/1998**
Permit Type:	
Description:	**No Plan Check Water heater circuit.**
Permit Description:	**Electrical**
Work Class:	
Proposed Use:	Commercial
Permit Number:	980411000007519
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	ORNELAS ELECTRIC

ADJOINING PROPERTY FINDINGS

Date: **4/24/1998**
Permit Type:
Description: **No Plan Check ADD NEW FIXTURES**

Permit Description: **Plumbing**
Work Class:
Proposed Use: Commercial
Permit Number: 980421000005236
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: ABEL PLUMBING

E 4TH ST APT 3 # 5

2621 E 4TH ST APT 3 # 5

Date: **3/30/2010**
Permit Type:
Description: **No Plan Check CHANGE OUT (25K) DIRECT VENT FURN FOR UNIT #5.**

Permit Description: **HVAC**
Work Class:
Proposed Use: Apartment
Permit Number: 100441000002955
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: MARAVILLA FOUNDATION

ADJOINING PROPERTY FINDINGS

Date: **9/15/2009**
Permit Type:
Description: **No Plan Check C/O SINGLE WALL FURN VENT 35K.**

Permit Description: **HVAC**
Work Class:
Proposed Use: Apartment
Permit Number: 090441000008445
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: MARAVILLA FOUNDATION

Date: **8/31/2009**
Permit Type:
Description: **No Plan Check CHANGE OUT (1) SINGLE WALL FURN. AND VENT FOR UNIT #4. (25K)**

Permit Description: **HVAC**
Work Class:
Proposed Use: Apartment
Permit Number: 090441000007951
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: MARAVILLA FOUNDATION

Date: **6/30/2009**
Permit Type:
Description: **No Plan Check CHANGE OUT (1) SINGLE WALL FURN. AND VENT FOR UNIT #2.**

Permit Description: **HVAC**
Work Class:
Proposed Use: Apartment
Permit Number: 090441000005698
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: MARAVILLA FOUNDATION

ADJOINING PROPERTY FINDINGS

S FICKETT ST

310 S FICKETT ST

Date:	**3/28/2011**
Permit Type:	
Description:	**No Plan Check Install 100 amp service**
Permit Description:	**Electrical**
Work Class:	
Proposed Use:	1 or 2 Family Dwelling
Permit Number:	110419000006011
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	D M T ELECTRIC

314 S FICKETT ST

Date:	**9/18/2014**
Permit Type:	
Description:	**No Plan Check UPGRADE MAIN ELECTRIC WIRE FROM A 100AM TO A 200AMP**
Permit Description:	**Electrical**
Work Class:	
Proposed Use:	1 or 2 Family Dwelling
Permit Number:	140411000025699
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	OWNER-BUILDER

ADJOINING PROPERTY FINDINGS

Date:	**6/11/2010**
Permit Type:	
Description:	**No Plan Check Window and door change-out (same size, type, and location) for residential buildings. Dual glazing, labeled and certified by National Fenestration Rating Council (NFRC), is required for doors and windows replaced in all residential buildings, three stories or less, per Section 152(b) of Title 24. No structural changes. Valuation to be verified by the field inspector. Re-stucco, replace drywall**
Permit Description:	**Bldg-Alter/Repair**
Work Class:	
Proposed Use:	1 or 2 Family Dwelling Single Family Residence
Permit Number:	100162000010459
Status:	
Valuation:	$3,900.00
Contractor Company:	
Contractor Name:	OWNER-BUILDER

S MATHEWS ST

413 S MATHEWS ST

Date:	**2/14/1997**
Permit Type:	
Description:	**No Plan Check BUILD A NEW BLCK WALL FENCE 6' HIGH' 6"X8" X 16" BLOCK. PER CITY STD**
Permit Description:	**Nonbldg-New**
Work Class:	
Proposed Use:	1 or 2 Family Dwelling Single Family Residence
Permit Number:	970201000000365
Status:	
Valuation:	$1,800.00
Contractor Company:	
Contractor Name:	MASTER BUILDERS GENERAL CONTRACTOR

ADJOINING PROPERTY FINDINGS

415 S MATHEWS ST

Date:	**6/29/2009**
Permit Type:	
Description:	**No Plan Check Replace wall heater (E) SFD.**
Permit Description:	**HVAC**
Work Class:	
Proposed Use:	1 or 2 Family Dwelling
Permit Number:	090447000005581
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	F S Z BROS GENERAL CONTRACTORS INC

Date:	**5/5/2009**
Permit Type:	
Description:	**No Plan Check MISC. WIRING REPAIRS AND INSTALL (10) PLUGS UNDER EXISTING CIRCUITS. (5 in each unit)**
Permit Description:	**Electrical**
Work Class:	
Proposed Use:	1 or 2 Family Dwelling
Permit Number:	090417000008142
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	F S Z BROS GENERAL CONTRACTORS INC

ADJOINING PROPERTY FINDINGS

Date: **5/5/2009**
Permit Type:
Description: **No Plan Check BRING (2) WATER HEATERS UP TO CODE**

Permit Description: **Plumbing**
Work Class:
Proposed Use: 1 or 2 Family Dwelling
Permit Number: 090427000007205
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: F S Z BROS GENERAL CONTRACTORS INC

Date: **9/12/2008**
Permit Type:
Description: **No Plan Check INSTALL EQ VALVES**

Permit Description: **Plumbing**
Work Class:
Proposed Use: Apartment
Permit Number: 080422000017802
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: DISCOUNT RETROFITTER

417 S MATHEWS ST

Date: **6/29/2009**
Permit Type:
Description: **No Plan Check Shower/Bath Replacement.**

Permit Description: **Plumbing**
Work Class:
Proposed Use: 1 or 2 Family Dwelling
Permit Number: 090427000010677
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: F S Z BROS GENERAL CONTRACTORS INC

ADJOINING PROPERTY FINDINGS

Date: **6/29/2009**
Permit Type:
Description: **No Plan Check Replace wall heater (E) SFD.**

Permit Description: **HVAC**
Work Class:
Proposed Use: 1 or 2 Family Dwelling
Permit Number: 090447000005582
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: F S Z BROS GENERAL CONTRACTORS INC

Date: **5/5/2009**
Permit Type:
Description: **No Plan Check CHANGE OUT EXTERIOR KITCHEN DOOR SAME SIZE AND LOCATION**

Permit Description: **Bldg-Alter/Repair**
Work Class:
Proposed Use: 1 or 2 Family Dwelling Single Family Residence
Permit Number: 090167000006509
Status:
Valuation: $500.00
Contractor Company:
Contractor Name: F S Z BROS GENERAL CONTRACTORS INC

Date: **5/5/2009**
Permit Type:
Description: **No Plan Check CHANGE OUT WATER HEATER**

Permit Description: **Plumbing**
Work Class:
Proposed Use: 1 or 2 Family Dwelling
Permit Number: 090427000007203
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: F S Z BROS GENERAL CONTRACTORS INC

ADJOINING PROPERTY FINDINGS

Date: **9/16/2008**
Permit Type:
Description: **No Plan Check REPLACE A FURNACE.**

Permit Description: **HVAC**
Work Class:
Proposed Use: 1 or 2 Family Dwelling
Permit Number: 080441000009272
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: PEREZ PLUMBING

429 S MATHEWS ST

Date: **11/7/2011**
Permit Type:
Description: **No Plan Check Change out Wall Heater. 1 vent**

Permit Description: **HVAC**
Work Class:
Proposed Use: 1 or 2 Family Dwelling
Permit Number: 110449000012995
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: STEPHAN JACK PLUMBING AND HEATING INC

ADJOINING PROPERTY FINDINGS

431 S MATHEWS ST

Date:	**5/7/2002**
Permit Type:	
Description:	**No Plan Check REPLACE WALL FURNACE IN THE DUPLEX**
Permit Description:	**HVAC**
Work Class:	
Proposed Use:	1 or 2 Family Dwelling
Permit Number:	020441000004409
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	ANDRADE PLUMBING A PARTNERSHIP

435 S MATHEWS ST

Date:	**12/9/2014**
Permit Type:	
Description:	**No Plan Check WATER LINES TO 2 UNITS**
Permit Description:	**Plumbing**
Work Class:	
Proposed Use:	Apartment
Permit Number:	140423000024024
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	SUPERIOR 1 PLUMBING INC

ADJOINING PROPERTY FINDINGS

Date: **1/21/2004**
Permit Type:
Description: **No Plan Check install new water service for each unit**

Permit Description: **Plumbing**
Work Class:
Proposed Use: Commercial
Permit Number: 040429000001666
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: SAFECO PLUMBING & REMODELING

Date: **1/5/2004**
Permit Type:
Description: **No Plan Check install new water service for each unit**

Permit Description: **Plumbing**
Work Class:
Proposed Use: Commercial
Permit Number: 040429000000207
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: SAFECO PLUMBING & REMODELING

Date: **12/22/2003**
Permit Type:
Description: **No Plan Check install separate gas meters for each apartment unit**

Permit Description: **Plumbing**
Work Class:
Proposed Use: Commercial
Permit Number: 030429000039592
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: SAFECO PLUMBING & REMODELING

ADJOINING PROPERTY FINDINGS

439 S MATHEWS ST

Date:	**9/18/2002**
Permit Type:	
Description:	**No Plan Check Installation of earthquake gas shut-off valve.**
Permit Description:	**Plumbing**
Work Class:	
Proposed Use:	1 or 2 Family Dwelling
Permit Number:	020429000028239
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	SEISMIC SERVICES SPECIALISTS

441 S MATHEWS ST

Date:	**1/13/2009**
Permit Type:	
Description:	**No Plan Check CHANGE OUT DIRECT VENT FURNACE. 35K.**
Permit Description:	**HVAC**
Work Class:	
Proposed Use:	Apartment
Permit Number:	090441000000321
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	MARAVILLA FOUNDATION

ADJOINING PROPERTY FINDINGS

445 S MATHEWS ST

Date:	**8/10/2007**
Permit Type:	
Description:	**No Plan Check CHANGE OUT DIRECT VENT & FURANCE.**
Permit Description:	**HVAC**
Work Class:	
Proposed Use:	1 or 2 Family Dwelling
Permit Number:	070441000008433
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	MARAVILLA FOUNDATION

Date:	**5/29/2001**
Permit Type:	
Description:	**No Plan Check RE-ROOF WITH 30 YEARS SHINGLES.**
Permit Description:	**Bldg-Alter/Repair**
Work Class:	
Proposed Use:	1 or 2 Family Dwelling Single Family Residence
Permit Number:	010161000009739
Status:	
Valuation:	$500.00
Contractor Company:	
Contractor Name:	OWNER-BUILDER

ADJOINING PROPERTY FINDINGS

451 S MATHEWS ST

Date:	**5/16/2001**
Permit Type:	
Description:	**No Plan Check REROOFING WITH 1/2" CDX PLYWOOD & 30-YR COMPOSITION SHINGLES.**
Permit Description:	**Bldg-Alter/Repair**
Work Class:	
Proposed Use:	1 or 2 Family Dwelling Duplex
Permit Number:	010161000008890
Status:	
Valuation:	$2,500.00
Contractor Company:	
Contractor Name:	OWNER-BUILDER

453 S MATHEWS ST

Date:	**2/18/2016**
Permit Type:	
Description:	**No Plan Check**
Permit Description:	**Electrical**
Work Class:	
Proposed Use:	1 or 2 Family Dwelling
Permit Number:	160411000005791
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	C GALDAMEZ ELECTRIC

ADJOINING PROPERTY FINDINGS

Date: **9/17/2008**
Permit Type:
Description: **No Plan Check C/O WALL FURN & VENT**

Permit Description: **HVAC**
Work Class:
Proposed Use: 1 or 2 Family Dwelling
Permit Number: 080441000009311
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: MARAVILLA FOUNDATION

Date: **2/12/2007**
Permit Type:
Description: **No Plan Check CHANGE OUT SINGLE WALL FURNACE AND VENT.**

Permit Description: **HVAC**
Work Class:
Proposed Use: Apartment
Permit Number: 070441000001497
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: MARAVILLA FOUNDATION

Date: **1/26/2007**
Permit Type:
Description: **No Plan Check INSTALL 1 SINGLE WALL FURNACE AND VENT.**

Permit Description: **HVAC**
Work Class:
Proposed Use: 1 or 2 Family Dwelling
Permit Number: 070441000000970
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: MARAVILLA FOUNDATION

ADJOINING PROPERTY FINDINGS

455 S MATHEWS ST

Date:	**2/18/2016**
Permit Type:	
Description:	**No Plan Check**
Permit Description:	**Electrical**
Work Class:	
Proposed Use:	1 or 2 Family Dwelling
Permit Number:	160411000005788
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	C GALDAMEZ ELECTRIC

Date:	**8/10/2007**
Permit Type:	
Description:	**No Plan Check CHANGE OUT DIRECT VENT & FURANCE.**
Permit Description:	**HVAC**
Work Class:	
Proposed Use:	1 or 2 Family Dwelling
Permit Number:	070441000008434
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	MARAVILLA FOUNDATION

ADJOINING PROPERTY FINDINGS

Date:	**5/29/2001**
Permit Type:	
Description:	**No Plan Check TEAR OFF OLD ROOF AND RE-ROOF WITH 30 YRS COMP. SHINGLES.**
Permit Description:	**Bldg-Alter/Repair**
Work Class:	
Proposed Use:	1 or 2 Family Dwelling Single Family Residence
Permit Number:	010161000009742
Status:	
Valuation:	$500.00
Contractor Company:	
Contractor Name:	OWNER-BUILDER

505 S MATHEWS ST

Date:	**12/21/2015**
Permit Type:	
Description:	**No Plan Check**
Permit Description:	**Electrical**
Work Class:	
Proposed Use:	1 or 2 Family Dwelling
Permit Number:	150412000042939
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	ANDERSON'S CONSTRUCTION

ADJOINING PROPERTY FINDINGS

Date:	**7/14/2005**
Permit Type:	
Description:	**No Plan Check REMOVE EXISTING WOOD SIDING. APPLY NEW STUCCO. CHANGE OUT (7) WINDOWS AND (1) SLIDING GLASS DOOR. (SAME SIZE AND LOC.)**
Permit Description:	**Bldg-Alter/Repair**
Work Class:	
Proposed Use:	1 or 2 Family Dwelling Single Family Residence
Permit Number:	050161000014278
Status:	
Valuation:	$10,000.00
Contractor Company:	
Contractor Name:	OWNER-BUILDER

513 S MATHEWS ST

Date:	**2/27/2012**
Permit Type:	
Description:	**No Plan Check Replace 9 window(s). Same size, location number, type.**
Permit Description:	**Bldg-Alter/Repair**
Work Class:	
Proposed Use:	1 or 2 Family Dwelling Duplex
Permit Number:	120169000003804
Status:	
Valuation:	$2,250.00
Contractor Company:	
Contractor Name:	ARCICON

ADJOINING PROPERTY FINDINGS

Date: **2/27/2012**
Permit Type:
Description: **No Plan Check install gfi outlets**

Permit Description: **Electrical**
Work Class:
Proposed Use: 1 or 2 Family Dwelling
Permit Number: 120419000004275
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: ARCICON

Date: **2/27/2012**
Permit Type:
Description: **No Plan Check install Earthquake gas shutoff valve**

Permit Description: **Plumbing**
Work Class:
Proposed Use: 1 or 2 Family Dwelling
Permit Number: 120429000003464
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: ARCICON

Date: **2/11/2002**
Permit Type:
Description: **No Plan Check C/O S. WALL FURN & VENT.**

Permit Description: **HVAC**
Work Class:
Proposed Use: 1 or 2 Family Dwelling
Permit Number: 020441000001291
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: MARAVILLA FOUNDATION

ADJOINING PROPERTY FINDINGS

Date: **12/28/2001**
Permit Type:
Description: **No Plan Check CHANGE OUT WATER HEATER.**

Permit Description: **Plumbing**
Work Class:
Proposed Use: 1 or 2 Family Dwelling
Permit Number: 010421000019896
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: MARAVILLA FOUNDATION

Date: **12/28/2001**
Permit Type:
Description: **No Plan Check CHANGE OUT WALL FURNACE & VENT.**

Permit Description: **HVAC**
Work Class:
Proposed Use: 1 or 2 Family Dwelling
Permit Number: 010441000012643
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: MARAVILLA FOUNDATION

Date: **11/21/2001**
Permit Type:
Description: **No Plan Check UPGRADE SERVICE**

Permit Description: **Electrical**
Work Class:
Proposed Use: 1 or 2 Family Dwelling
Permit Number: 010411000024376
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: GAYTAN RAYMOND DAVID

ADJOINING PROPERTY FINDINGS

Date: **11/16/2001**
Permit Type:
Description: **No Plan Check CHANGE OUT WATER HEATER**

Permit Description: **Plumbing**
Work Class:
Proposed Use: 1 or 2 Family Dwelling
Permit Number: 010421000017728
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: MARAVILLA FOUNDATION

Date: **9/27/2001**
Permit Type:
Description: **No Plan Check CHANGE OUT FAU.**

Permit Description: **HVAC**
Work Class:
Proposed Use: 1 or 2 Family Dwelling
Permit Number: 010441000009445
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: MARAVILLA FOUNDATION

517 S MATHEWS ST

Date: **6/15/2010**
Permit Type:
Description: **No Plan Check REWIRE AND INSTALL 2 SUB PANELS**

Permit Description: **Electrical**
Work Class:
Proposed Use: 1 or 2 Family Dwelling
Permit Number: 100412000011331
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: YES ELECTRIC & CONSTRUCTION

ADJOINING PROPERTY FINDINGS

521 S MATHEWS ST

C.O. Issued Date:	**6/23/2010**
Date:	**10/17/2008**
Permit Type:	
Description:	**Plan Check NEW 12' X 14' STORAGE SHED AT REAR OF LOT. CONSTRUCTION PER CITY STANDARD (TYPE V SHEET).**
Permit Description:	**Bldg-New**
Work Class:	
Proposed Use:	1 or 2 Family Dwelling Warehouse
Permit Number:	080101000002589
Status:	
Valuation:	$5,000.00
Contractor Company:	
Contractor Name:	OWNER-BUILDER

Date:	**11/4/2002**
Permit Type:	
Description:	**No Plan Check RE-ROOF - COMPOSITION, NO PLYWOOD**
Permit Description:	**Bldg-Alter/Repair**
Work Class:	
Proposed Use:	1 or 2 Family Dwelling Single Family Residence
Permit Number:	020161000021871
Status:	
Valuation:	$3,500.00
Contractor Company:	
Contractor Name:	OWNER-BUILDER

ADJOINING PROPERTY FINDINGS

Date: **1/28/1999**
Permit Type:
Description: **No Plan Check SERVICE UPGRADE**

Permit Description: **Electrical**
Work Class:
Proposed Use: 1 or 2 Family Dwelling
Permit Number: 990411000001695
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: B B B ELECTRIC

Date: **12/1/1997**
Permit Type:
Description: **No Plan Check REPLACE FLOOR HEATER 50,000 BTU. APPROVED BY D.T.**

Permit Description: **HVAC**
Work Class:
Proposed Use: 1 or 2 Family Dwelling
Permit Number: 970441000008641
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: INTER-CITY ENERGY SYSTEMS

537 S MATHEWS ST

Date: **6/17/1997**
Permit Type:
Description: **No Plan Check CHANGE/OUT WALL UNIT 35K**

Permit Description: **HVAC**
Work Class:
Proposed Use: 1 or 2 Family Dwelling
Permit Number: 970441000003620
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: MARAVILLA FOUNDATION

ADJOINING PROPERTY FINDINGS

Date: **4/23/1997**
Permit Type:
Description: **No Plan Check CHANGE/OUT WALL HEATER**

Permit Description: **HVAC**
Work Class:
Proposed Use: 1 or 2 Family Dwelling
Permit Number: 970441000002139
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: MARAVILLA FOUNDATION

Date: **4/11/1997**
Permit Type:
Description: **No Plan Check CHANGE OUT WALL HTR.**

Permit Description: **HVAC**
Work Class:
Proposed Use: 1 or 2 Family Dwelling
Permit Number: 970441000001975
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: MARAVILLA FOUNDATION

ADJOINING PROPERTY FINDINGS

545 S MATHEWS ST

Date:	**10/17/2001**
Permit Type:	
Description:	**No Plan Check Change out 8 windows with the same existing sizes; stucco; reroof with new plywood and composition shingles; replace kitchen and bath cabinets & replace drywall.**
Permit Description:	**Bldg-Alter/Repair**
Work Class:	
Proposed Use:	1 or 2 Family Dwelling Single Family Residence
Permit Number:	010167000019965
Status:	
Valuation:	$8,000.00
Contractor Company:	
Contractor Name:	JASSO'S GENERAL CONTRACTING

Date:	**10/17/2001**
Permit Type:	
Description:	**No Plan Check INSTALL 5-20AMP CIRCUITS**
Permit Description:	**Electrical**
Work Class:	
Proposed Use:	1 or 2 Family Dwelling
Permit Number:	010417000021789
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	JASSO'S GENERAL CONTRACTING

ADJOINING PROPERTY FINDINGS

Date:	**10/17/2001**
Permit Type:	
Description:	**No Plan Check Replace toilet, shower, kitchen sink, lavatory and water heater; Repipe 6 fixtures**
Permit Description:	**Plumbing**
Work Class:	
Proposed Use:	1 or 2 Family Dwelling
Permit Number:	010427000015910
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	JASSO'S GENERAL CONTRACTING

Date:	**10/17/2001**
Permit Type:	
Description:	**No Plan Check REPLACE WALL HEATER**
Permit Description:	**HVAC**
Work Class:	
Proposed Use:	1 or 2 Family Dwelling
Permit Number:	010447000010135
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	JASSO'S GENERAL CONTRACTING

ADJOINING PROPERTY FINDINGS

551 S MATHEWS ST

Date:	**7/5/2005**
Permit Type:	
Description:	**No Plan Check CHANGE OUT SINGLE WALL FURNACE & VENT.**
Permit Description:	**HVAC**
Work Class:	
Proposed Use:	Apartment
Permit Number:	050441000006576
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	MARAVILLA FOUNDATION

Date:	**6/27/2005**
Permit Type:	
Description:	**No Plan Check C/O SINGLE WALL FURNACE & VENT.**
Permit Description:	**HVAC**
Work Class:	
Proposed Use:	1 or 2 Family Dwelling
Permit Number:	050441000006284
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	MARAVILLA FOUNDATION

ADJOINING PROPERTY FINDINGS

553 S MATHEWS ST

Date:	**5/24/2013**
Permit Type:	
Description:	**No Plan Check WALL HEATER CUT IN.**
Permit Description:	**HVAC**
Work Class:	
Proposed Use:	1 or 2 Family Dwelling
Permit Number:	130449000005351
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	QUALITY CONSERVATION SERVICES INC

557 S MATHEWS ST

Date:	**7/23/1999**
Permit Type:	
Description:	**No Plan Check UPGRADE SERVICE TO 200 AMP.**
Permit Description:	**Electrical**
Work Class:	
Proposed Use:	1 or 2 Family Dwelling
Permit Number:	990412000014265
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	ALLSPARK

ADJOINING PROPERTY FINDINGS

S MATHEWS ST #

425 S MATHEWS ST #

Date:	**10/24/2005**
Permit Type:	
Description:	**No Plan Check INSTALL HARD WIRED SMOKE DETECTORS W/ BATTERY B/ UP FOR UNIT #425 OF THE DUPLEX. **SEE COMMENTS*****
Permit Description:	**Electrical**
Work Class:	
Proposed Use:	1 or 2 Family Dwelling
Permit Number:	050417000025999
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	CALIFORNIA ELECTRIC

Date:	**7/23/2002**
Permit Type:	
Description:	**No Plan Check Reroof with 15 sqrs COMP SHINGLE roofing over new solid sheathing.**
Permit Description:	**Bldg-Alter/Repair**
Work Class:	
Proposed Use:	Apartment Apartment
Permit Number:	020169000014278
Status:	
Valuation:	$4,500.00
Contractor Company:	
Contractor Name:	OWNER-BUILDER

ADJOINING PROPERTY FINDINGS

Date: **4/16/2002**
Permit Type:
Description: **No Plan Check REPLACE 10 WINDOWS SAME SIZE & TYPE, RE-STUCCO.**

Permit Description: **Bldg-Alter/Repair**
Work Class:
Proposed Use: 1 or 2 Family Dwelling Duplex
Permit Number: 020161000007070
Status:
Valuation: $2,000.00
Contractor Company:
Contractor Name: OWNER-BUILDER

Date: **3/28/2002**
Permit Type:
Description: **Plan Check ADD SFD TO CREATE 2 FAMILY DWELLING. INCLUDES ELECT, PLUMBING, AND HVAC PERMITS. EQSO REQUIRED.**

Permit Description: **Bldg-Addition**
Work Class:
Proposed Use: 1 or 2 Family Dwelling Single Family Residence Duplex
Permit Number: 020102000000608
Status:
Valuation: $105,000.00
Contractor Company:
Contractor Name: OWNER-BUILDER

Date: **3/28/2002**
Permit Type:
Description: **Plan Check NEW 4-CAR GARAGE.**

Permit Description: **Bldg-New**
Work Class:
Proposed Use: 1 or 2 Family Dwelling Private Garage
Permit Number: 020102000000609
Status:
Valuation: $12,880.00
Contractor Company:
Contractor Name: OWNER-BUILDER

ADJOINING PROPERTY FINDINGS

Date: **2/24/1997**
Permit Type:
Description: **No Plan Check REPLACE WINDOWS (SAME SIZE) DRYWALL REPAIR AND REPLACEMENT**

Permit Description: **Bldg-Alter/Repair**
Work Class:
Proposed Use: 1 or 2 Family Dwelling Single Family Residence
Permit Number: 970161000004275
Status:
Valuation: $2,000.00
Contractor Company:
Contractor Name:

Date: **2/24/1997**
Permit Type:
Description: **No Plan Check UPGRADING NEW SERVICE, REMODEL BATHROOM & WASH ROOM.**

Permit Description: **Electrical**
Work Class:
Proposed Use: 1 or 2 Family Dwelling
Permit Number: 970411000001857
Status:
Valuation: $0.00
Contractor Company:
Contractor Name:

Date: **2/24/1997**
Permit Type:
Description: **No Plan Check OWNER INSTALLATION OF TOILET, LAV, CLOTHES WASHER**

Permit Description: **Plumbing**
Work Class:
Proposed Use: 1 or 2 Family Dwelling
Permit Number: 970421000000894
Status:
Valuation: $0.00
Contractor Company:
Contractor Name:

ADJOINING PROPERTY FINDINGS

S MATHEWS ST # 1 # 2

509 S MATHEWS ST # 1 # 2

Date:	**10/10/2014**
Permit Type:	
Description:	**No Plan Check SUPPLEMENTAL TO PERMIT #14042-10000-193 6 FOR (1) BATHTUB.**
Permit Description:	**Plumbing**
Work Class:	
Proposed Use:	Apartment
Permit Number:	140421000119386
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	SUBURBAN PLUMBING

Date:	**10/7/2014**
Permit Type:	
Description:	**No Plan Check SEWER REPAIR AND SEWER LINER. SEWER EN INEER # S-20533-22**
Permit Description:	**Plumbing**
Work Class:	
Proposed Use:	Apartment
Permit Number:	140421000019386
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	SUBURBAN PLUMBING

ADJOINING PROPERTY FINDINGS

Date: **9/29/2014**
Permit Type:
Description: **No Plan Check Sewer Repair on property and drain unde unit #1.**

Permit Description: **Plumbing**
Work Class:
Proposed Use: Apartment
Permit Number: 140427000018885
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: PAYLESS 4 PLUMBING INC

Date: **4/26/2002**
Permit Type:
Description: **No Plan Check PERMIT TO ADD 3 SMOKE ALARM OUTLETS IN EACH UNIT.**

Permit Description: **Electrical**
Work Class:
Proposed Use: Apartment
Permit Number: 020411000008841
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: HERNANDEZ R C ELECTRICAL SERVICE

ADJOINING PROPERTY FINDINGS

S MATHEWS ST # 3

437 S MATHEWS ST # 3

Date:	**9/18/2008**
Permit Type:	
Description:	**No Plan Check REPLACE WATER HEATER AT UNIT #3.**
Permit Description:	**Plumbing**
Work Class:	
Proposed Use:	Apartment
Permit Number:	080421000018304
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	E & R REASONABLE PLUMBING PRICES

Date:	**1/5/2004**
Permit Type:	
Description:	**No Plan Check install new water service for each unit**
Permit Description:	**Plumbing**
Work Class:	
Proposed Use:	Commercial
Permit Number:	040429000000208
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	SAFECO PLUMBING & REMODELING

ADJOINING PROPERTY FINDINGS

447 S MATHEWS ST # 3

Date:	**1/25/2007**
Permit Type:	
Description:	**No Plan Check C/O S/W FURN & VENT.**
Permit Description:	**HVAC**
Work Class:	
Proposed Use:	1 or 2 Family Dwelling
Permit Number:	070441000000908
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	MARAVILLA FOUNDATION

S MATHEWS ST APT A # 4

449 S MATHEWS ST APT A # 4

Date:	**2/18/2016**
Permit Type:	
Description:	**No Plan Check**
Permit Description:	**Electrical**
Work Class:	
Proposed Use:	1 or 2 Family Dwelling
Permit Number:	160411000005787
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	C GALDAMEZ ELECTRIC

ADJOINING PROPERTY FINDINGS

Date: **10/22/2008**
Permit Type:
Description: **No Plan Check C/O S/W FURN & VENT.**

Permit Description: **HVAC**
Work Class:
Proposed Use: Apartment
Permit Number: 080441000010478
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: MARAVILLA FOUNDATION

Date: **1/25/2007**
Permit Type:
Description: **No Plan Check C/O S/W FURN & VENT.**

Permit Description: **HVAC**
Work Class:
Proposed Use: 1 or 2 Family Dwelling
Permit Number: 070441000000909
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: MARAVILLA FOUNDATION

Date: **3/16/2000**
Permit Type:
Description: **No Plan Check CHANGE OUT SINGLE WALL UNIT AND VENTING 35 K**

Permit Description: **HVAC**
Work Class:
Proposed Use: 1 or 2 Family Dwelling
Permit Number: 000445000002340
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: MARAVILLA FOUNDATION

ADJOINING PROPERTY FINDINGS

S MATHEWS ST UNIT 1

525 S MATHEWS ST UNIT 1

Date:	**3/15/2002**
Permit Type:	
Description:	**No Plan Check supplemental to 01041-10000-23516 for extra trip fee**
Permit Description:	**Electrical**
Work Class:	
Proposed Use:	Apartment
Permit Number:	010414000123516
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	PICKRED PLUMBING

Date:	**11/7/2001**
Permit Type:	
Description:	**No Plan Check INSTALL 10 SMOKE DETECTORS IN UNITS 1,2,3 ; 9 GFI OUTLETS**
Permit Description:	**Electrical**
Work Class:	
Proposed Use:	Apartment
Permit Number:	010411000023516
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	PICKRED PLUMBING

ADJOINING PROPERTY FINDINGS

S SOTO ST

400 S SOTO ST

Date:	**12/9/2013**
Permit Type:	
Description:	**No Plan Check Supplemental permit to collect fees for (1) additional inspection. This permit does not authorize any additional work or extend the expiration date of the original permit. (2) CIRCUITS FOR BATHROOM.**
Permit Description:	**Electrical**
Work Class:	
Proposed Use:	Commercial
Permit Number:	120411000119056
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	PAUL & CLARA CONSTRUCTION

Date:	**8/14/2012**
Permit Type:	
Description:	**No Plan Check 200 AMP METER CAN REPAIR.**
Permit Description:	**Electrical**
Work Class:	
Proposed Use:	Commercial
Permit Number:	120411000019056
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	PAUL & CLARA CONSTRUCTION

ADJOINING PROPERTY FINDINGS

Date: **5/10/2004**
Permit Type:
Description: **Plan Check USE OF LAND FOR USED CAR SALES LOT.**

Permit Description: **Nonbldg-New**
Work Class:
Proposed Use: Commercial
Permit Number: 040201000000746
Status:
Valuation: $2,000.00
Contractor Company:
Contractor Name: OWNER-BUILDER

Date: **12/4/2001**
Permit Type:
Description: **Plan Check Remove Gas tank and backfill. 180 cu yds. Compaction report required. (see Fire Dept. Tank removal permit no. 9964)**

Permit Description: **Grading**
Work Class:
Proposed Use: Commercial Grading/Hillside
Permit Number: 010301000002816
Status:
Valuation: $180.00
Contractor Company:
Contractor Name: L & M LOADER SERVICE INC

Date: **12/3/2001**
Permit Type:
Description: **Plan Check DEMO CANOPY NO SEWER CAP REQ'D.**

Permit Description: **Bldg-Demolition**
Work Class:
Proposed Use: Commercial Gas Service Station Misc. Bldg or Structure
Permit Number: 010191000001404
Status:
Valuation: $3,500.00
Contractor Company:
Contractor Name: L & M LOADER SERVICE INC

ADJOINING PROPERTY FINDINGS

Date: **3/3/1997**
Permit Type:
Description: **No Plan Check TI**

Permit Description: **Electrical**
Work Class:
Proposed Use: Commercial
Permit Number: 970411000002220
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: JAE YOUNG KOOK

Date: **1/28/1997**
Permit Type:
Description: **No Plan Check SEI & SERVICE CHANGE**

Permit Description: **Electrical**
Work Class:
Proposed Use: Commercial
Permit Number: 970411000000816
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: JAE YOUNG KOOK

Date: **12/20/1996**
Permit Type:
Description: **ADD TWO (2) 2'6" X 16' WALL SIGNS**

Permit Description: **Sign**
Work Class:
Proposed Use: Onsite
Permit Number: 960481000000440
Status:
Valuation: $2,400.00
Contractor Company:
Contractor Name: NAMIL SIGNS

ADJOINING PROPERTY FINDINGS

Date:	**11/4/1996**
Permit Type:	
Description:	**change portion (30'x60') of auto repair garage to retail. see permit,**
Permit Description:	**Bldg-Alter/Repair**
Work Class:	
Proposed Use:	Commercial
Permit Number:	960161000003305
Status:	
Valuation:	$11,700.00
Contractor Company:	
Contractor Name:	JAE YOUNG KOOK

Date:	**11/4/1996**
Permit Type:	
Description:	**TI**
Permit Description:	**Electrical**
Work Class:	
Proposed Use:	Commercial
Permit Number:	960411000001661
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	JAE YOUNG KOOK

Date:	**11/4/1996**
Permit Type:	
Description:	**WATER STORE. INSTALL 2 FLOOR SINKS, 9 FAUCETS, 1ICE MAKER AND 1 WATER**
Permit Description:	**Plumbing**
Work Class:	
Proposed Use:	Commercial
Permit Number:	960421000000906
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	JAE YOUNG KOOK

ADJOINING PROPERTY FINDINGS

401 S SOTO ST

Date:	**11/8/2010**
Permit Type:	
Description:	**Plan Check REFACES (2) CANOPY LOGO SIGNS AND CANOPY WRAP ON EXISTING CANOPY;**
Permit Description:	**Sign**
Work Class:	
Proposed Use:	Onsite Signs
Permit Number:	100481000002090
Status:	
Valuation:	$8,000.00
Contractor Company:	
Contractor Name:	PROMOTION PLUS SIGN CO INC

Date:	**7/19/2010**
Permit Type:	
Description:	**Plan Check 2-20" x 51' WALL SIGNS (SIGNS WILL READ "ARCO"), 3- 21"X 53' LOGO SIGNS ON EXISTING STEEL CANOPY.**
Permit Description:	**Sign**
Work Class:	
Proposed Use:	Onsite Signs
Permit Number:	100481000001395
Status:	
Valuation:	$10,000.00
Contractor Company:	
Contractor Name:	OWNER-BUILDER

ADJOINING PROPERTY FINDINGS

Date: **7/16/2010**
Permit Type:
Description: **No Plan Check LOW VOLTAGE PUMP TOPPER.**

Permit Description: **Electrical**
Work Class:
Proposed Use: Commercial
Permit Number: 100411000013748
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: DONCO & SONS INC

Date: **8/12/1998**
Permit Type:
Description: **No Plan Check RECONNECT METER**

Permit Description: **Electrical**
Work Class:
Proposed Use: Commercial
Permit Number: 980411000017370
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: THOMAS CHARLES E COMPANY

Date: **3/3/1998**
Permit Type:
Description: **Plan Check INSTALL NEW CANOPY FASCIA. INSTALL NEW COLUMN WRAP AT THE CANOPY.**

Permit Description: **Bldg-Alter/Repair**
Work Class:
Proposed Use: Commercial Gas Service Station
Permit Number: 980161000003450
Status:
Valuation: $7,000.00
Contractor Company:
Contractor Name: OWNER-BUILDER

ADJOINING PROPERTY FINDINGS

Date: **3/3/1998**
Permit Type:
Description: **Plan Check INSTALL ARCO LOGOS AT EACH CORNER OF THE CANOPY.**

Permit Description: **Sign**
Work Class:
Proposed Use: Onsite Signs
Permit Number: 980481000000114
Status:
Valuation: $1,000.00
Contractor Company:
Contractor Name: OWNER-BUILDER

420 S SOTO ST

Date: **2/22/2007**
Permit Type:
Description: **Plan Check INSTALL 4 ILLUMINATED CHANNEL LETTER WALL SIGNS. SIGNS "1" AND "4" ARE 64 SQ. FT. SIGNS "2" AND "3" ARE 38 SQ. FT. WATTAGE PER SIGN NOT TO EXCEED 12 WATTS/SQ. FT. OF SIGNAGE AREA. USE NON-COMBUSTIBLE MATERIALS OR APPROVED PLASTICS ONLY.**

Permit Description: **Sign**
Work Class:
Proposed Use: Onsite Signs
Permit Number: 070481000000303
Status:
Valuation: $5,000.00
Contractor Company:
Contractor Name: VISIBLE GRAPHICS

ADJOINING PROPERTY FINDINGS

Date:	**5/12/2005**
Permit Type:	
Description:	**Plan Check Propose duplex resulting in 4-bdrm/2-bath each unit**
Permit Description:	**Bldg-New**
Work Class:	
Proposed Use:	1 or 2 Family Dwelling Duplex
Permit Number:	050107000000388
Status:	
Valuation:	$150,000.00
Contractor Company:	
Contractor Name:	BAKSH CONSTRUCTION

422 S SOTO ST

Date:	**7/21/1999**
Permit Type:	
Description:	**Plan Check DEMOLISH 1 STORY SFD 20'* 48', CLEAR THE LOT, SEWER CAP IS REQUIRED. DEMOLITION BY HANDWRECK.**
Permit Description:	**Bldg-Demolition**
Work Class:	
Proposed Use:	1 or 2 Family Dwelling Single Family Residence Misc. Bldg or Structure
Permit Number:	990191000000581
Status:	
Valuation:	$2,880.00
Contractor Company:	
Contractor Name:	J B S ENGINEERING INC

ADJOINING PROPERTY FINDINGS

Date:	**7/21/1999**
Permit Type:	
Description:	**Plan Check DEMO 1 STORY SFD; CLEAR THE LOT; SEWER CAP IS REQD. DEMOLITION BY HANDWRECK, 20' X 44', 880 SQ. FT.**
Permit Description:	**Bldg-Demolition**
Work Class:	
Proposed Use:	1 or 2 Family Dwelling Single Family Residence Misc. Bldg or Structure
Permit Number:	990191000000583
Status:	
Valuation:	$2,640.00
Contractor Company:	
Contractor Name:	J B S ENGINEERING INC

Date:	**7/21/1999**
Permit Type:	
Description:	**No Plan Check SEWER CAP.**
Permit Description:	**Plumbing**
Work Class:	
Proposed Use:	1 or 2 Family Dwelling
Permit Number:	990421000009764
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	J B S ENGINEERING INC

ADJOINING PROPERTY FINDINGS

424 S SOTO ST

Date:	**5/12/2005**
Permit Type:	
Description:	**Plan Check Propose duplex resulting in 4-bdrm/2-bath each unit**
Permit Description:	**Bldg-New**
Work Class:	
Proposed Use:	1 or 2 Family Dwelling Duplex
Permit Number:	050107000000389
Status:	
Valuation:	$150,000.00
Contractor Company:	
Contractor Name:	BAKSH CONSTRUCTION

Date:	**7/21/1999**
Permit Type:	
Description:	**Plan Check DEMO 1 STORY SFD, CLEAR THE LOT, SEWER CAP IS REQUIRED DEMOLITION BY HANDWRECK. 27' X 37', 999 SQ. FT.**
Permit Description:	**Bldg-Demolition**
Work Class:	
Proposed Use:	1 or 2 Family Dwelling Single Family Residence Misc. Bldg or Structure
Permit Number:	990191000000582
Status:	
Valuation:	$2,997.00
Contractor Company:	
Contractor Name:	J B S ENGINEERING INC

ADJOINING PROPERTY FINDINGS

Date:	**7/21/1999**
Permit Type:	
Description:	**Plan Check DEMO 1 STORY GARAGE, CLEAR THE LOT; SEWER CAP IS NOT REQD. DEMOLITION BY HANDWRECK, 15' X 20', 300 SQ. FT.**
Permit Description:	**Bldg-Demolition**
Work Class:	
Proposed Use:	1 or 2 Family Dwelling Private Garage Misc. Bldg or Structure
Permit Number:	990191000000585
Status:	
Valuation:	$900.00
Contractor Company:	
Contractor Name:	J B S ENGINEERING INC

425 S SOTO ST

Date:	**11/7/2013**
Permit Type:	
Description:	**No Plan Check SUPPLEMENTAL PERMIT TO ADD (2) TRAP PRIM ERS**
Permit Description:	**Plumbing**
Work Class:	
Proposed Use:	Commercial
Permit Number:	130421000205524
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	KIRKLEY CORPORATION INC

ADJOINING PROPERTY FINDINGS

Date:	**8/1/2013**
Permit Type:	
Description:	**Plan Check PLAN CHECK AND PERMIT FEES TO CAPTURE ME DIUM PRESSURE GAS SYSTEM. PLANS HAVE BEEN UDATED TO SHOW AS BUILT CONDITIONS FOR THE MEDIUM PRESSURE SYSTEM.**
Permit Description:	**Plumbing**
Work Class:	
Proposed Use:	Commercial
Permit Number:	130421000105524
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	KIRKLEY CORPORATION INC

Date:	**7/16/2013**
Permit Type:	
Description:	**Plan Check ONE-TO-ONE RELOCATION OF 39 HEADS. SEE A PPLICATION COMMENTS.**
Permit Description:	**Fire Sprinkler**
Work Class:	
Proposed Use:	Commercial
Permit Number:	130432000002245
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	A K M FIRE INC

ADJOINING PROPERTY FINDINGS

Date:	**7/11/2013**
Permit Type:	
Description:	**Plan Check UPGRADING AN EXISTING MONITORING FIRE AL ARM SYSTEM IN A COMMERCIAL AREA.**
Permit Description:	**Electrical**
Work Class:	
Proposed Use:	Commercial
Permit Number:	130411000018320
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	STANLEY CONVERGENT SECURITY SOLUTIONS INC

Date:	**6/21/2013**
Permit Type:	
Description:	**Plan Check INTERIOR REMODEL TO (E) MARKET: WORK TO INCLUDE REMODEL OF EXISTING DELI SECTION, REBUILD EXISTING RESTROOMS AND CREATE OFFICE SPACES, REMODEL EXISTING OFFICES AREA TO CREATE NEW BAKERY SECTION ACCESSORY TO (E) MARKET.**
Permit Description:	**Bldg-Alter/Repair**
Work Class:	
Proposed Use:	Commercial Retail
Permit Number:	130161000005541
Status:	
Valuation:	$192,000.00
Contractor Company:	
Contractor Name:	KIRKLEY CORPORATION INC

ADJOINING PROPERTY FINDINGS

Date:	**6/21/2013**
Permit Type:	
Description:	**No Plan Check TENANT IMPROVEMENT T-24 PLAN CHECK ONLY UNDER PCIS #13041-10000-07123**
Permit Description:	**Electrical**
Work Class:	
Proposed Use:	Commercial
Permit Number:	130412000016477
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	KIRKLEY CORPORATION INC

Date:	**6/21/2013**
Permit Type:	
Description:	**Plan Check TENANT IMPROVMENT ON EXISTING NORTHGATE MARKET TO INCLUDE (1) CONCERSION OF AN OFFICE AREA TO BAKERY DPARTMENT, ()2) REMODEL OF EXISTING DELI DEPARTMENT, AND (3) NEW RESTROOM AT REAR OF STORE. THIS ENTAIL NEW PLUMBING SYSTEMS AT REMOPDEL AREAS TO CONNECT TO EXISTING. NEW GREASE INTERCEPTOR. PLAN CHECK FOR POTABLE WATER, WASTE/VENT, FUEL GAS AND GREASE INTERCEPTOR.**
Permit Description:	**Plumbing**
Work Class:	
Proposed Use:	Commercial
Permit Number:	130421000005524
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	KIRKLEY CORPORATION INC

ADJOINING PROPERTY FINDINGS

Date:	**6/21/2013**
Permit Type:	
Description:	**Plan Check 3 Type II hood with individual duct work for a bakery/market. To include fan coil units and make up air units. Main floor/sales area HVAC is existing.**
Permit Description:	**HVAC**
Work Class:	
Proposed Use:	Commercial
Permit Number:	130441000003060
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	KIRKLEY CORPORATION INC

Date:	**6/19/2013**
Permit Type:	
Description:	**No Plan Check WASTE HOOK-UP AND FIXTURE CHANGE OUT.**
Permit Description:	**Plumbing**
Work Class:	
Proposed Use:	Commercial
Permit Number:	130422000011918
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	SANTA FE PLUMBING

ADJOINING PROPERTY FINDINGS

Date:	**10/10/2012**
Permit Type:	
Description:	**Plan Check PROPOSED (5) ILLUMINATED INDIVIDUAL CHAN NEL LETTER WALL SIGN. SIGN (A) 6'-11" X 49'-1" (339 SQ FT) "NORTHGATE MARKET" WITH LOGO, SIGN (B) 1'-6" X 13'-1" (20 SQ FT) "CARNICERIA, SIGN (C) 1'-6" X 121 (18 SQ FT) "PANADERIA", SIGN (D) 1'-6" X 8'-1" (12 S QFT) "COCINA", SIGN (E) 1'-6" X 14' (21 SQ FT) "TORTILLERIA".**
Permit Description:	**Sign**
Work Class:	
Proposed Use:	Onsite Signs
Permit Number:	120484000002207
Status:	
Valuation:	$23,000.00
Contractor Company:	
Contractor Name:	PROMOTIONAL SIGNS UNLIMITED

Date:	**4/23/2010**
Permit Type:	
Description:	**Plan Check Plan check T-24 energy (general/emergency lighting) for new lighting work in an existing Carl's Jr.**
Permit Description:	**Electrical**
Work Class:	
Proposed Use:	Commercial
Permit Number:	100411000002641
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	LEVICA BUILDERS INC

ADJOINING PROPERTY FINDINGS

Date:	**9/12/2006**
Permit Type:	
Description:	**Plan Check 2-TYPE I HOOD SYSTEM (UL LISTED) FOR New 1-story Restaurant with Drive Thru.**
Permit Description:	**HVAC**
Work Class:	
Proposed Use:	Commercial
Permit Number:	050441000000646
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	CAL SELECT BUILDERS INC

Date:	**9/7/2006**
Permit Type:	
Description:	**No Plan Check Supplemental permit to collect fees for (1) of Additional Inspection (s) per inspection Correction Notice # _ _ _ _ _ _ and (date).This permit does not authorize any additional work or extend the expiration date of the original permit.**
Permit Description:	**Electrical**
Work Class:	
Proposed Use:	Commercial
Permit Number:	040411000228820
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	THREE - WIRE ELECTRIC INC

ADJOINING PROPERTY FINDINGS

Date:	**7/17/2006**
Permit Type:	
Description:	**Plan Check INSTALL (2) 4'-8 3/4" X 4'-11 1/2" ILLUM. INFORMATION SIGN FOR MENU BOARDS AT 6'-4" OVER ALL HEIGHT AS PER APPROVED PLAN. MAX. LIGHTING POWER 12 WATTS PER SQ.FT.**
Permit Description:	**Sign**
Work Class:	
Proposed Use:	Offsite Signs
Permit Number:	060481000001107
Status:	
Valuation:	$5,000.00
Contractor Company:	
Contractor Name:	SWAIN SIGN INC

Date:	**7/17/2006**
Permit Type:	
Description:	**Plan Check INSTALL (2) 16" X 31" ILLUM. INFORMATION SIGN "THANK YOU" AND DIRECTION , AT 3' OVERALL HEIGHT AS PER APPROVED PLAN. MAX. LIGHTING POWER 12 WATTS PER SQ.FT.**
Permit Description:	**Sign**
Work Class:	
Proposed Use:	Offsite Signs
Permit Number:	060481000001109
Status:	
Valuation:	$5,000.00
Contractor Company:	
Contractor Name:	SWAIN SIGN INC

ADJOINING PROPERTY FINDINGS

Date:	**6/28/2006**
Permit Type:	
Description:	**Plan Check INSTALL 3 ILLUMINATED AWNINGS ; (1) 5' DROP X 4' PROJECTION X 8' 8" LENGTH ; (1) 5' DROP X 4' PROJECTION X 9' 2" LENGTH ; (1) 5' DROP X 4' PROJECTION X 4' LENGTH**
Permit Description:	**Bldg-Alter/Repair**
Work Class:	
Proposed Use:	Commercial Restaurant
Permit Number:	060161000012549
Status:	
Valuation:	$1,500.00
Contractor Company:	
Contractor Name:	CANVAS AWNING CO INC THE

Date:	**6/27/2006**
Permit Type:	
Description:	**No Plan Check h.v.ac.**
Permit Description:	**HVAC**
Work Class:	
Proposed Use:	Commercial
Permit Number:	060449000006582
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	MAGNUM MECHANICAL INC

ADJOINING PROPERTY FINDINGS

Date:	**5/10/2006**
Permit Type:	
Description:	**Plan Check INSTALL 4 ILLUMINATED WALL SIGNS (3) @ 44.3 SQ. FT. & (1) @ 24.9 SQFT. MAXIMUM WATTAGE PER SIGN NOT TO EXCEEDS 12 WATTS PER SQ. FT. OF SIGN AREA.**
Permit Description:	**Sign**
Work Class:	
Proposed Use:	Onsite Signs
Permit Number:	060481000000598
Status:	
Valuation:	$8,000.00
Contractor Company:	
Contractor Name:	SWAIN SIGN INC

Date:	**2/27/2006**
Permit Type:	
Description:	**Plan Check A NEW FAST FOOD POLLO CAMPERO RESTAURANT**
Permit Description:	**Electrical**
Work Class:	
Proposed Use:	Commercial
Permit Number:	040411000028820
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	THREE - WIRE ELECTRIC

ADJOINING PROPERTY FINDINGS

Date:	**2/23/2006**
Permit Type:	
Description:	**No Plan Check NEW RESTAURANT-GROUND UP PLUS SITE WORK. WATER SERVICE PIPE SIZE IS 1/2".**
Permit Description:	**Plumbing**
Work Class:	
Proposed Use:	Commercial
Permit Number:	060421000004275
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	NOEL PLUMBING

Date:	**9/29/2003**
Permit Type:	
Description:	**Plan Check MOBILE RECYCLING CENTER IN CONJUCTION WITH GROCERY MARKET.**
Permit Description:	**Nonbldg-New**
Work Class:	
Proposed Use:	Commercial Misc. Bldg or Structure
Permit Number:	030201000002742
Status:	
Valuation:	$301.00
Contractor Company:	
Contractor Name:	OWNER-BUILDER

Date:	**3/5/2001**
Permit Type:	
Description:	**Plan Check Add sprinklers in new loading dock canopy.**
Permit Description:	**Fire Sprinkler**
Work Class:	
Proposed Use:	Commercial
Permit Number:	010431000000547
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	KILIAN FIRE SPRINKLER CORPORATION

ADJOINING PROPERTY FINDINGS

Date: **2/9/2001**
Permit Type:
Description: **Plan Check ADD 20' X 28' METAL ROOF COVER OVER EXISTING LOADING DOCK.**

Permit Description: **Bldg-Addition**
Work Class:
Proposed Use: Commercial Retail
Permit Number: 010141000000238
Status:
Valuation: $7,000.00
Contractor Company:
Contractor Name: MILLER E W CONSTRUCTION

Date: **2/8/2001**
Permit Type:
Description: **No Plan Check SUPPLEMENTAL PERMIT TO 00041*10000*24599, FAN COILS, BAILER, & MIXER NEEDED FOR THE GROCERY STORE REMODELING.**

Permit Description: **Electrical**
Work Class:
Proposed Use: Commercial
Permit Number: 000411000124599
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: BUTLER ELECTRIC INC

Date: **1/8/2001**
Permit Type:
Description: **Plan Check BUILD (2) PLATFORMS FOR AIR CONDITIONING & REFRIGERATION EQUIPMENT.**

Permit Description: **Bldg-Alter/Repair**
Work Class:
Proposed Use: Commercial Retail
Permit Number: 000161000024865
Status:
Valuation: $35,000.00
Contractor Company:
Contractor Name: COMMERCIAL REFRIGERATION CO

ADJOINING PROPERTY FINDINGS

Date: **12/27/2000**
Permit Type:
Description: **No Plan Check INSTALL 2 AIR CODED CONDENSERS TO REPLACE EXISTING CONDENSERS.**

Permit Description: **HVAC**
Work Class:
Proposed Use: Commercial
Permit Number: 000441000011244
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: NATIONAL REFRIGERATION SERVICES

Date: **12/4/2000**
Permit Type:
Description: **No Plan Check TENANT IMPROVEMENT - SUPERMARKET SMALL CORNER.**

Permit Description: **Electrical**
Work Class:
Proposed Use: Commercial
Permit Number: 000411000024599
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: BUTLER ELECTRIC INC

Date: **11/28/2000**
Permit Type:
Description: **Plan Check install 2 illuminated wall signs (SUPER A FOODS, 49.5 ft x 8 ft; CARNICERIA, 14 ft x 2.24 ft) Reface existing pole sign.**

Permit Description: **Sign**
Work Class:
Proposed Use: Onsite Signs
Permit Number: 000481000002083
Status:
Valuation: $11,400.00
Contractor Company:
Contractor Name: P L S LIGHTING INC

ADJOINING PROPERTY FINDINGS

Date: **11/20/2000**
Permit Type:
Description: **Plan Check INSTALL ONE TYPE-I HOOD.**

Permit Description: **HVAC**
Work Class:
Proposed Use: Commercial
Permit Number: 000441000010018
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: RIVERA ENTERPRISES

Date: **11/13/2000**
Permit Type:
Description: **Plan Check T.I. AT THE BAKERY/DELI 1020 SF IN THE EXISTING SUPERMARKET (REMOVE AND REPLACE WALKING COOLER AND CREATE STORAGE ROOM)**

Permit Description: **Bldg-Alter/Repair**
Work Class:
Proposed Use: Commercial Retail
Permit Number: 000161000020201
Status:
Valuation: $30,000.00
Contractor Company:
Contractor Name: OWNER-BUILDER

Date: **10/31/2000**
Permit Type:
Description: **No Plan Check REROUTE GAS PIPING.**

Permit Description: **Plumbing**
Work Class:
Proposed Use: Commercial
Permit Number: 000421000016935
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: RIVERSIDE DRIVE ENTERPRISES INC

ADJOINING PROPERTY FINDINGS

Date: **10/30/2000**
Permit Type:
Description: **Plan Check RELOCATE EXISTING PENDENT HEADS AND REMODEL HOOD EXHAUST DUCT SPRINKLERS .**

Permit Description: **Fire Sprinkler**
Work Class:
Proposed Use: Commercial
Permit Number: 000431000002847
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: KILIAN FIRE SPRINKLER CORPORATION

Date: **10/26/2000**
Permit Type:
Description: **Plan Check EARLY START PERMIT FOR NON-STRUCTURAL REMOVAL OF PARTITIONS & SOFFIT DRYWALL @ S.E. CNR DELI AREA, 1980 SQ. FT.**

Permit Description: **Bldg-Alter/Repair**
Work Class:
Proposed Use: Commercial Retail
Permit Number: 000161000020821
Status:
Valuation: $3,000.00
Contractor Company:
Contractor Name: WESTSIDE DEMOLITION INC

Date: **9/23/1998**
Permit Type:
Description: **Plan Check Temporary carnival. From Sep. 24 thru 29, 1998 (120 days maximum)**

Permit Description: **Nonbldg-New**
Work Class:
Proposed Use: Commercial
Permit Number: 980201000002332
Status:
Valuation: $301.00
Contractor Company:
Contractor Name: OWNER-BUILDER

ADJOINING PROPERTY FINDINGS

Date: **9/23/1998**
Permit Type:
Description: **No Plan Check CHANGE ADDRESS FROM 1831 W. 3RD STREET TO 425 S. SOTO. (SUPPLEMENTAL)**

Permit Description: **Electrical**
Work Class:
Proposed Use: Special Equipment
Permit Number: 980411000117831
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: A D AND S ELECTRIC

Date: **4/2/1997**
Permit Type:
Description: **Plan Check One 15"x15' illum wall sign**

Permit Description: **Sign**
Work Class:
Proposed Use: Onsite Signs
Permit Number: 970487000000420
Status:
Valuation: $1,500.00
Contractor Company:
Contractor Name: MSI

Date: **3/20/1997**
Permit Type:
Description: **No Plan Check CIRCUIT FOR KIDDY RIDE OUTSIDE STORE**

Permit Description: **Electrical**
Work Class:
Proposed Use: Commercial
Permit Number: 970412000003267
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: EVANS E J ELECTRIC

ADJOINING PROPERTY FINDINGS

Date:	**2/10/1997**
Permit Type:	
Description:	**Plan Check 5'x20' temp banner sign(Wells Fargo Bank in Vons)for 60 days. Conditional use permit is waived by Jon Perica of City Planning on 2/4/97.**
Permit Description:	**Sign**
Work Class:	
Proposed Use:	Onsite Signs
Permit Number:	970484000000149
Status:	
Valuation:	$300.00
Contractor Company:	
Contractor Name:	MSI

Date:	**11/26/1996**
Permit Type:	
Description:	**T. I. WORK ONLY CONST. A NEW DELIVERY RAMP. VONS GROCERY STORE #259**
Permit Description:	**Bldg-Alter/Repair**
Work Class:	
Proposed Use:	Commercial
Permit Number:	960161000002327
Status:	
Valuation:	$5,000.00
Contractor Company:	
Contractor Name:	PHOENIX ENTERPRISES

ADJOINING PROPERTY FINDINGS

426 S SOTO ST

Date:	**7/21/1999**
Permit Type:	
Description:	**Plan Check DEMOLITION 1 STORY SFD; CLEAR THE LOT; SEWER CAP IS REQD; DEMOLITION BY HANDWRECK, 20' X 48', 960 SQ. FT.**
Permit Description:	**Bldg-Demolition**
Work Class:	
Proposed Use:	1 or 2 Family Dwelling Single Family Residence Misc. Bldg or Structure
Permit Number:	990191000000584
Status:	
Valuation:	$2,880.00
Contractor Company:	
Contractor Name:	J B S ENGINEERING INC

430 S SOTO ST

Date:	**7/8/2014**
Permit Type:	
Description:	**No Plan Check remove and replace water heater in same location**
Permit Description:	**Plumbing**
Work Class:	
Proposed Use:	1 or 2 Family Dwelling
Permit Number:	140429000012752
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	F W H ACQUISITION CO LLC

ADJOINING PROPERTY FINDINGS

Date:	**1/16/2014**
Permit Type:	
Description:	**Plan Check Repair and replacement of roof and ceil ng. Building height to remain the same.**
Permit Description:	**Bldg-Alter/Repair**
Work Class:	
Proposed Use:	Apartment Apartment
Permit Number:	140163000000697
Status:	
Valuation:	$11,500.00
Contractor Company:	
Contractor Name:	HAR-BRO INC

Date:	**1/16/2014**
Permit Type:	
Description:	**No Plan Check INSTALL NEW 3 PC TUB AND ENCLOSER. INST LL NEW KITCHEN SINK & DISPOSAL. R&R BATHROOM TOILET.**
Permit Description:	**Plumbing**
Work Class:	
Proposed Use:	1 or 2 Family Dwelling
Permit Number:	140424000000915
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	HAR-BRO INC

Date:	**1/16/2014**
Permit Type:	
Description:	**No Plan Check INSTALL NEW KITCHEN EXHAUST HOOD**
Permit Description:	**HVAC**
Work Class:	
Proposed Use:	1 or 2 Family Dwelling
Permit Number:	140444000000456
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	HAR-BRO INC

ADJOINING PROPERTY FINDINGS

Date:	**11/9/2005**
Permit Type:	
Description:	**No Plan Check INSTALL SMOKE DETECTORS WITH BATTERY BACK-UP IN 4 DWELLING UNITS**
Permit Description:	**Electrical**
Work Class:	
Proposed Use:	Apartment
Permit Number:	050412000027563
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	CHITCHIAN MAKAR

Date:	**4/18/2005**
Permit Type:	
Description:	**No Plan Check replace wall heater**
Permit Description:	**HVAC**
Work Class:	
Proposed Use:	1 or 2 Family Dwelling
Permit Number:	050449000003629
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	INTER-CITY ENERGY SYSTEMS

ADJOINING PROPERTY FINDINGS

432 S SOTO ST

Date:	**8/12/2003**
Permit Type:	
Description:	**No Plan Check INSTALL E.Q. VALVE**
Permit Description:	**Plumbing**
Work Class:	
Proposed Use:	1 or 2 Family Dwelling
Permit Number:	030421000025545
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	DIAZ PLUMBING

Date:	**8/12/2003**
Permit Type:	
Description:	**No Plan Check INSTALL E.Q.VALVE.**
Permit Description:	**Plumbing**
Work Class:	
Proposed Use:	1 or 2 Family Dwelling
Permit Number:	030421000025557
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	DIAZ PLUMBING

ADJOINING PROPERTY FINDINGS

434 S SOTO ST

Date:	**1/14/2014**
Permit Type:	
Description:	**No Plan Check CHANGE OUT (15K) DIRECT VENT FURN.**
Permit Description:	**HVAC**
Work Class:	
Proposed Use:	Apartment
Permit Number:	140441000000359
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	MARAVILLA FOUNDATION

Date:	**12/20/2013**
Permit Type:	
Description:	**No Plan Check C/O 15K DIRECT VENT FURN.**
Permit Description:	**HVAC**
Work Class:	
Proposed Use:	Apartment
Permit Number:	130441000013784
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	MARAVILLA FOUNDATION

ADJOINING PROPERTY FINDINGS

Date:	**11/15/2012**
Permit Type:	
Description:	**No Plan Check Window change-out (same size & type) for residential buildings. Dual glazing, labeled and certified by National Fenestration Rating Council (NFRC), is required for doors and windows replaced in all residential buildings, three stories or less, per Section 152(b) of Title 24.**
Permit Description:	**Bldg-Alter/Repair**
Work Class:	
Proposed Use:	Apartment Apartment
Permit Number:	120161000023233
Status:	
Valuation:	$6,000.00
Contractor Company:	
Contractor Name:	OWNER-BUILDER

Date:	**6/10/2005**
Permit Type:	
Description:	**No Plan Check RE-ROOF W/ FLAT ROOFING SHEETS & HOT MOP FIBERGLASS.**
Permit Description:	**Bldg-Alter/Repair**
Work Class:	
Proposed Use:	Apartment Apartment
Permit Number:	050161000011287
Status:	
Valuation:	$3,500.00
Contractor Company:	
Contractor Name:	OWNER-BUILDER

ADJOINING PROPERTY FINDINGS

436 S SOTO ST

Date:	**6/14/2005**
Permit Type:	
Description:	**No Plan Check RE-ROOF - REPLACE PLYWOOD AS NEEDED AND APPLY SHINGLES.**
Permit Description:	**Bldg-Alter/Repair**
Work Class:	
Proposed Use:	1 or 2 Family Dwelling Duplex
Permit Number:	050161000011601
Status:	
Valuation:	$2,500.00
Contractor Company:	
Contractor Name:	OWNER-BUILDER

Date:	**12/19/2003**
Permit Type:	
Description:	**No Plan Check CHANGE OUT (9) WINDOWS, SAME SIZE/TYPE (IN BOTH UNITS). REPLACE KITCHEN CABINETS AND COUNTER TOPS IN UNIT #436 ONLY.**
Permit Description:	**Bldg-Alter/Repair**
Work Class:	
Proposed Use:	Apartment Duplex
Permit Number:	030161000025419
Status:	
Valuation:	$2,600.00
Contractor Company:	
Contractor Name:	OWNER-BUILDER

ADJOINING PROPERTY FINDINGS

Date:	**6/7/2002**
Permit Type:	
Description:	**No Plan Check REPAIR DRY-ROT DAMAGED STAIRCASE AND HANDRAILS (DAMAGE IS LESS THAN 10%) NO STRUCTURAL CHANGES**
Permit Description:	**Bldg-Alter/Repair**
Work Class:	
Proposed Use:	1 or 2 Family Dwelling Duplex
Permit Number:	020161000010894
Status:	
Valuation:	$600.00
Contractor Company:	
Contractor Name:	OWNER-BUILDER

438 S SOTO ST

Date:	**6/6/2013**
Permit Type:	
Description:	**Plan Check 17'10" x 20' bedroom addition and connec t the two 1 story SFD to create a duplex.**
Permit Description:	**Bldg-Addition**
Work Class:	
Proposed Use:	1 or 2 Family Dwelling Duplex
Permit Number:	130142000002103
Status:	
Valuation:	$15,000.00
Contractor Company:	
Contractor Name:	OWNER-BUILDER

ADJOINING PROPERTY FINDINGS

Date: **12/9/2005**
Permit Type:
Description: **No Plan Check RE-ROOF W/ SHINGLES.**

Permit Description: **Bldg-Alter/Repair**
Work Class:
Proposed Use: 1 or 2 Family Dwelling Single Family Residence
Permit Number: 050161000026435
Status:
Valuation: $2,000.00
Contractor Company:
Contractor Name: OWNER-BUILDER

Date: **4/24/2003**
Permit Type:
Description: **No Plan Check INSTALL EQ SHUT OFF VALVE. (OWNER -OCCUPIED/ REAR UNIT).**

Permit Description: **Plumbing**
Work Class:
Proposed Use: 1 or 2 Family Dwelling
Permit Number: 030421000013185
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: OWNER-BUILDER

440 S SOTO ST

Date: **9/16/2004**
Permit Type:
Description: **No Plan Check REPAIR TERMITE DAMAGE - LESS THAN 10%, SIZE 7" X 20".**

Permit Description: **Bldg-Alter/Repair**
Work Class:
Proposed Use: 1 or 2 Family Dwelling Single Family Residence
Permit Number: 040161000018400
Status:
Valuation: $301.00
Contractor Company:
Contractor Name: OWNER-BUILDER

ADJOINING PROPERTY FINDINGS

Date: **8/12/2004**
Permit Type:
Description: **No Plan Check RE-ROOF WITH COMP SHINGLES. APPLY NEW STUCCO.**

Permit Description: **Bldg-Alter/Repair**
Work Class:
Proposed Use: 1 or 2 Family Dwelling Single Family Residence
Permit Number: 040161000015766
Status:
Valuation: $7,000.00
Contractor Company:
Contractor Name: OWNER-BUILDER

450 S SOTO ST

Date: **11/13/2003**
Permit Type:
Description: **No Plan Check NEW ROOF HOUSE AND GARAGE, REPLACING PLYWOOD.**

Permit Description: **Bldg-Alter/Repair**
Work Class:
Proposed Use: 1 or 2 Family Dwelling Duplex
Permit Number: 030161000022994
Status:
Valuation: $2,000.00
Contractor Company:
Contractor Name: OWNER-BUILDER

Date: **11/4/1998**
Permit Type:
Description: **No Plan Check 1 SERVICE LINE.**

Permit Description: **Plumbing**
Work Class:
Proposed Use: 1 or 2 Family Dwelling
Permit Number: 980421000014351
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: E Z PLUMBING

ADJOINING PROPERTY FINDINGS

454 S SOTO ST

Date:	**6/19/1998**
Permit Type:	
Description:	**No Plan Check UPGRADE ELECTRIC METER**
Permit Description:	**Electrical**
Work Class:	
Proposed Use:	1 or 2 Family Dwelling
Permit Number:	980411000012206
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	A C ELECTRIC

Date:	**12/1/1997**
Permit Type:	
Description:	**No Plan Check Upgrade existing meters. Approved by DT.**
Permit Description:	**Electrical**
Work Class:	
Proposed Use:	1 or 2 Family Dwelling
Permit Number:	970411000020050
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	A C ELECTRIC

ADJOINING PROPERTY FINDINGS

455 S SOTO ST

Date:	**8/27/2014**
Permit Type:	
Description:	**No Plan Check HARDWIRED SMOKE ALARMS.**
Permit Description:	**Electrical**
Work Class:	
Proposed Use:	1 or 2 Family Dwelling
Permit Number:	140411000023432
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	HERNANDEZ EFRAIN JR

Date:	**4/17/2006**
Permit Type:	
Description:	**No Plan Check TWO GANG METER & COMPLETE RE-WIRING. SERVICE PAID UNDER 05041-10000-16246.**
Permit Description:	**Electrical**
Work Class:	
Proposed Use:	1 or 2 Family Dwelling
Permit Number:	060411000009037
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	E Z ELECTRIC

ADJOINING PROPERTY FINDINGS

Date: **10/13/2005**
Permit Type:
Description: **No Plan Check REPLACE (E) WALL FURNACE**

Permit Description: **HVAC**
Work Class:
Proposed Use: 1 or 2 Family Dwelling
Permit Number: 050447000010621
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: ARROW CONSTRUCTION

Date: **10/13/2005**
Permit Type:
Description: **No Plan Check REPLACE (E) WALL FURNACE**

Permit Description: **HVAC**
Work Class:
Proposed Use: 1 or 2 Family Dwelling
Permit Number: 050447000010622
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: ARROW CONSTRUCTION

Date: **7/26/2005**
Permit Type:
Description: **No Plan Check SUPPLEMENTAL PERMIT TO RESTUCCO BLDG. Termite damage/ dry rot repair less than 10% of replacement cost of building-IN BATHROOM AND KITCHEN.**

Permit Description: **Bldg-Alter/Repair**
Work Class:
Proposed Use: 1 or 2 Family Dwelling Single Family Residence
Permit Number: 050167000111848
Status:
Valuation: $4,000.00
Contractor Company:
Contractor Name: ARROW CONSTRUCTION

ADJOINING PROPERTY FINDINGS

Date:	**7/26/2005**
Permit Type:	
Description:	**No Plan Check SUPPLEMENTAL PERMIT TO RESTUCCO BLDG. Termite damage/ dry rot repair less than 10% of replacement cost of building-IN BATHROOM AND KITCHEN.**
Permit Description:	**Bldg-Alter/Repair**
Work Class:	
Proposed Use:	1 or 2 Family Dwelling Single Family Residence
Permit Number:	050167000111851
Status:	
Valuation:	$4,000.00
Contractor Company:	
Contractor Name:	ARROW CONSTRUCTION

Date:	**7/8/2005**
Permit Type:	
Description:	**No Plan Check TWO GANG METER & COMPLETE RE-WIRING.**
Permit Description:	**Electrical**
Work Class:	
Proposed Use:	1 or 2 Family Dwelling
Permit Number:	050411000016246
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	E Z ELECTRIC

ADJOINING PROPERTY FINDINGS

Date:	**6/17/2005**
Permit Type:	
Description:	**No Plan Check CHANGE OUT 9 (E) WINDOWS, SAME SIZE & LOCATION. REPLACE FLOORING, AND NEW DRYWALL IN THE SFD. ===SEE COMMENTS===**
Permit Description:	**Bldg-Alter/Repair**
Work Class:	
Proposed Use:	1 or 2 Family Dwelling Single Family Residence
Permit Number:	050167000011848
Status:	
Valuation:	$15,000.00
Contractor Company:	
Contractor Name:	ARROW CONSTRUCTION

Date:	**6/17/2005**
Permit Type:	
Description:	**No Plan Check CHANGE OUT 11 (E) WINDOWS, SAME SIZE & LOCATION. REPLACE DAMAGED FLOORING, AND NEW DRYWALL IN THE SFD. ===SEE COMMENTS===**
Permit Description:	**Bldg-Alter/Repair**
Work Class:	
Proposed Use:	1 or 2 Family Dwelling Single Family Residence
Permit Number:	050167000011851
Status:	
Valuation:	$15,000.00
Contractor Company:	
Contractor Name:	ARROW CONSTRUCTION

ADJOINING PROPERTY FINDINGS

Date:	**6/17/2005**
Permit Type:	
Description:	**No Plan Check REPLACE 2 GFI'S IN THE BATH OF THE SFD. ===SEE COMMENTS===**
Permit Description:	**Electrical**
Work Class:	
Proposed Use:	1 or 2 Family Dwelling
Permit Number:	050417000014321
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	ARROW CONSTRUCTION

Date:	**6/17/2005**
Permit Type:	
Description:	**No Plan Check REPLACE 2 GFI'S IN THE BATH OF THE SFD. ===SEE COMMENTS===**
Permit Description:	**Electrical**
Work Class:	
Proposed Use:	1 or 2 Family Dwelling
Permit Number:	050417000014329
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	ARROW CONSTRUCTION

ADJOINING PROPERTY FINDINGS

Date:	**6/17/2005**
Permit Type:	
Description:	**No Plan Check REPLACE WTR. HTR. & FIXTURES IN THE BATH & K/S OF THE SFD. ===SEE COMMENTS===**
Permit Description:	**Plumbing**
Work Class:	
Proposed Use:	1 or 2 Family Dwelling
Permit Number:	050427000015227
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	ARROW CONSTRUCTION

Date:	**6/17/2005**
Permit Type:	
Description:	**No Plan Check REPLACE WTR. HTR. & FIXTURES IN THE BATH & K/S OF THE SFD. ===SEE COMMENTS===**
Permit Description:	**Plumbing**
Work Class:	
Proposed Use:	1 or 2 Family Dwelling
Permit Number:	050427000015228
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	ARROW CONSTRUCTION

ADJOINING PROPERTY FINDINGS

457 S SOTO ST

Date:	**3/17/2008**
Permit Type:	
Description:	**No Plan Check Supplemental permit to collect fees for (1) Additional Inspection(s) per inspector dated ( ). This permit does not authorize any additional work or extend the expiration date of the original permit.**
Permit Description:	**Fire Sprinkler**
Work Class:	
Proposed Use:	1 or 2 Family Dwelling
Permit Number:	070431000100941
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	G & A FIRE AND SAFETY

Date:	**3/17/2008**
Permit Type:	
Description:	**No Plan Check Supplemental permit to collect fees for (1) Additional Inspection(s) per inspector dated ( ). This permit does not authorize any additional work or extend the expiration date of the original permit.**
Permit Description:	**Fire Sprinkler**
Work Class:	
Proposed Use:	1 or 2 Family Dwelling
Permit Number:	070431000100944
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	G & A FIRE AND SAFETY

ADJOINING PROPERTY FINDINGS

Date:	**3/27/2007**
Permit Type:	
Description:	**Plan Check Plan check and permit for sprinkler system within a single family dwelling**
Permit Description:	**Fire Sprinkler**
Work Class:	
Proposed Use:	1 or 2 Family Dwelling
Permit Number:	070431000000941
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	G & A FIRE AND SAFETY

Date:	**3/27/2007**
Permit Type:	
Description:	**Plan Check Plan check and permit for sprinkler system within a single family dwelling**
Permit Description:	**Fire Sprinkler**
Work Class:	
Proposed Use:	1 or 2 Family Dwelling
Permit Number:	070431000000944
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	G & A FIRE AND SAFETY

ADJOINING PROPERTY FINDINGS

Date:	**2/21/2007**
Permit Type:	
Description:	**Plan Check NEW SINGLE FAMILY DWELLING; UNIT 1 ***ZONE IS [Q]RD1.5-1*** PER ESTHERNY (CITY PLANNING, Q CONDITION), CITY PLANNING MAPPING ERROR, MSG 08/18/2006 @ 11:22AM**
Permit Description:	**Bldg-New**
Work Class:	
Proposed Use:	1 or 2 Family Dwelling Single Family Residence
Permit Number:	060104000002632
Status:	
Valuation:	$76,750.00
Contractor Company:	
Contractor Name:	B C S - B CONSTRUCTION SERVICES

Date:	**2/21/2007**
Permit Type:	
Description:	**Plan Check NEW SINGLE FAMILY DWELLING; UNIT 2**
Permit Description:	**Bldg-New**
Work Class:	
Proposed Use:	1 or 2 Family Dwelling Single Family Residence
Permit Number:	060104000002633
Status:	
Valuation:	$76,750.00
Contractor Company:	
Contractor Name:	B C S - B CONSTRUCTION SERVICES

Date:	**10/19/1998**
Permit Type:	
Description:	**No Plan Check GAS TEST**
Permit Description:	**Plumbing**
Work Class:	
Proposed Use:	1 or 2 Family Dwelling
Permit Number:	980421000013533
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	CHRIS PLUMBING SERVICE

ADJOINING PROPERTY FINDINGS

Date: **8/18/1998**
Permit Type:
Description: **No Plan Check SERVICE UPGRADE REFERENCE PERMIT #98014-10000-03471**

Permit Description: **Electrical**
Work Class:
Proposed Use: 1 or 2 Family Dwelling
Permit Number: 980411000017829
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: BCS-B CONSTRUCTION SERVICES

Date: **8/18/1998**
Permit Type:
Description: **No Plan Check SERVICE UPGRADE REFERENCE PERMIT 98014-10000-03471**

Permit Description: **Plumbing**
Work Class:
Proposed Use: 1 or 2 Family Dwelling
Permit Number: 980421000010844
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: BCS-B CONSTRUCTION

Date: **7/9/1998**
Permit Type:
Description: **Plan Check 5'11' X11'10" BATH ADDITION AND 7' X 7'4" STORAGE ADDITION TO (E) SFD. RTI FOR PETER LAM**

Permit Description: **Bldg-Addition**
Work Class:
Proposed Use: 1 or 2 Family Dwelling Single Family Residence
Permit Number: 980141000003471
Status:
Valuation: $8,000.00
Contractor Company:
Contractor Name: BCS-B CONSTRUCTION SERVICES

ADJOINING PROPERTY FINDINGS

Date: **6/23/1998**
Permit Type:
Description: **No Plan Check UPGRADE SERVICE & WIRING**

Permit Description: **Electrical**
Work Class:
Proposed Use: 1 or 2 Family Dwelling
Permit Number: 980411000012534
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: AVILA R ELECTRIC

Date: **6/23/1998**
Permit Type:
Description: **No Plan Check UPGRADE SERVICE & WIRING**

Permit Description: **Electrical**
Work Class:
Proposed Use: 1 or 2 Family Dwelling
Permit Number: 980411000012535
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: AVILA R ELECTRIC

ADJOINING PROPERTY FINDINGS

459 S SOTO ST

Date:	**11/18/2004**
Permit Type:	
Description:	**Plan Check NEW STORAGE BUILDING AND TWO OPEN PARKING SPACES TO REPLACE THE 2-CAR CARPORT PER PCIS # 03010-10000-04907**
Permit Description:	**Bldg-New**
Work Class:	
Proposed Use:	1 or 2 Family Dwelling Warehouse
Permit Number:	040101000005388
Status:	
Valuation:	$4,000.00
Contractor Company:	
Contractor Name:	B C S - B CONSTRUCTION SERVICES

Date:	**6/9/2004**
Permit Type:	
Description:	**Plan Check NEW BLOCK WALL 6 FT. HEIGHT BY 121' LONG ALONG SOUTH P.L. PER CITY STD.**
Permit Description:	**Nonbldg-New**
Work Class:	
Proposed Use:	1 or 2 Family Dwelling Misc. Bldg or Structure
Permit Number:	040201000002224
Status:	
Valuation:	$8,000.00
Contractor Company:	
Contractor Name:	B C S - B CONSTRUCTION SERVICES

ADJOINING PROPERTY FINDINGS

Date: **2/19/2004**
Permit Type:
Description: **Plan Check New 1-story SFD per city standard type V sheet. Combined permit.**

Permit Description: **Bldg-New**
Work Class:
Proposed Use: 1 or 2 Family Dwelling Single Family Residence
Permit Number: 030101000004906
Status:
Valuation: $82,000.00
Contractor Company:
Contractor Name: 13941 MEADOW LN

Date: **12/23/2003**
Permit Type:
Description: **Plan Check DEMOLISH EXISTING SINGLE FAMILY DWELLING (HANDWRECK)**

Permit Description: **Bldg-Demolition**
Work Class:
Proposed Use: 1 or 2 Family Dwelling Single Family Residence Misc. Bldg or Structure
Permit Number: 030191000002132
Status:
Valuation: $2,500.00
Contractor Company:
Contractor Name: 13941 MEADOW LN

Date: **6/23/1998**
Permit Type:
Description: **No Plan Check UPGRADE SERVICE & WIRING**

Permit Description: **Electrical**
Work Class:
Proposed Use: 1 or 2 Family Dwelling
Permit Number: 980411000012533
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: AVILA R ELECTRIC

ADJOINING PROPERTY FINDINGS

501 S SOTO ST

Date:	**2/2/2005**
Permit Type:	
Description:	**Plan Check NEW SLAB ON GRADE AND NEW CEMENT STEPS AND A NEW EXISTING PORCH (LESS THAN 30" ABOVE THE GRADE).**
Permit Description:	**Bldg-Alter/Repair**
Work Class:	
Proposed Use:	1 or 2 Family Dwelling Single Family Residence
Permit Number:	050161000001381
Status:	
Valuation:	$6,000.00
Contractor Company:	
Contractor Name:	OWNER-BUILDER

Date:	**2/22/2000**
Permit Type:	
Description:	**No Plan Check NEW CABINETS, REPLACE 12 WINDOWS SAME SIZE & LOCATION, GENERAL REPAIR, PAINTING & CARPETS, NO MAJOR STRUCTURAL.**
Permit Description:	**Bldg-Alter/Repair**
Work Class:	
Proposed Use:	1 or 2 Family Dwelling Single Family Residence
Permit Number:	000161000003055
Status:	
Valuation:	$3,000.00
Contractor Company:	
Contractor Name:	OWNER-BUILDER

ADJOINING PROPERTY FINDINGS

503 S SOTO ST

Date:	**8/18/2009**
Permit Type:	
Description:	**No Plan Check Window (1) change-out (same size & type) for residential buildings. Dual glazing, labeled and certified by National Fenestration Rating Council (NFRC), is required for doors and windows replaced in all residential buildings, three stories or less, per Section 152(b) of Title 24.**
Permit Description:	**Bldg-Alter/Repair**
Work Class:	
Proposed Use:	1 or 2 Family Dwelling Single Family Residence
Permit Number:	090161000012502
Status:	
Valuation:	$301.00
Contractor Company:	
Contractor Name:	OWNER-BUILDER

Date:	**8/18/2009**
Permit Type:	
Description:	**No Plan Check REMOVE PLUMBING FIXTURES INCLUDING REMOVAL OF WATER HEATER. CAP OFF FIXTURES.**
Permit Description:	**Plumbing**
Work Class:	
Proposed Use:	1 or 2 Family Dwelling
Permit Number:	090421000014280
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	HOMER'S PLUMBING SERVICE

ADJOINING PROPERTY FINDINGS

Date: **8/18/2009**
Permit Type:
Description: **No Plan Check INSTALL WALL FURNACE.**

Permit Description: **HVAC**
Work Class:
Proposed Use: 1 or 2 Family Dwelling
Permit Number: 090441000007543
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: HOMER'S PLUMBING SERVICE

506 S SOTO ST

Date: **9/17/2002**
Permit Type:
Description: **No Plan Check copper repipe: 19 fixtures: 4 toilets, 3 showers, 4 lavs, 4 laundry sinks, & 4 water heaters.**

Permit Description: **Plumbing**
Work Class:
Proposed Use: 1 or 2 Family Dwelling
Permit Number: 020427000028103
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: MIER CONSTRUCTION

ADJOINING PROPERTY FINDINGS

Date: **2/27/2002**
Permit Type:
Description: **No Plan Check UPGRADE ELECTRICAL METER SERVICE**

Permit Description: **Electrical**
Work Class:
Proposed Use: 1 or 2 Family Dwelling
Permit Number: 020411000004009
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: VARGAS ELECTRIC

Date: **1/18/2002**
Permit Type:
Description: **No Plan Check REPLACE 7 WINDOWS-SAME SIZE/SAME TYPE**

Permit Description: **Bldg-Alter/Repair**
Work Class:
Proposed Use: 1 or 2 Family Dwelling Duplex
Permit Number: 020161000001222
Status:
Valuation: $700.00
Contractor Company:
Contractor Name: SUNWAY CONSTRUCTION CO

Date: **11/15/2001**
Permit Type:
Description: **No Plan Check REPAIR FLOORING,REPAIR PLASTER AND STUCCO**

Permit Description: **Bldg-Alter/Repair**
Work Class:
Proposed Use: 1 or 2 Family Dwelling Duplex
Permit Number: 010161000022169
Status:
Valuation: $3,000.00
Contractor Company:
Contractor Name: SUNWAY CONSTRUCTION CO

ADJOINING PROPERTY FINDINGS

Date:	**11/15/2001**
Permit Type:	
Description:	**No Plan Check PROVIDE HARDWIRED W/BATTERY BACKUP;SMOKE DETECTORS (8),REPLACE SWITCHES,GFI(8);PERMIT 2 OF 2**
Permit Description:	**Electrical**
Work Class:	
Proposed Use:	1 or 2 Family Dwelling
Permit Number:	010411000024033
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	SUNWAY CONSTRUCTION CO

Date:	**11/15/2001**
Permit Type:	
Description:	**No Plan Check REPLACE 1 KITCHEN SINK,2 LABORATORIES;REPAIR LEAKING PROBLEMS;1 TOILET;PERMIT 1 OF 2**
Permit Description:	**Plumbing**
Work Class:	
Proposed Use:	1 or 2 Family Dwelling
Permit Number:	010421000017636
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	SUNWAY CONSTRUCTION CO

ADJOINING PROPERTY FINDINGS

508 S SOTO ST

Date:	**2/27/2002**
Permit Type:	
Description:	**No Plan Check UPGRADE ELECTRICAL SERVICE CHANGE**
Permit Description:	**Electrical**
Work Class:	
Proposed Use:	1 or 2 Family Dwelling
Permit Number:	020411000004011
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	VARGAS ELECTRIC

509 S SOTO ST

Date:	**8/27/2012**
Permit Type:	
Description:	**No Plan Check SERVICE UPGRADE. (SFD. - OWNER OCCUPIED)**
Permit Description:	**Electrical**
Work Class:	
Proposed Use:	1 or 2 Family Dwelling
Permit Number:	120411000020128
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	OWNER-BUILDER

ADJOINING PROPERTY FINDINGS

Date: **3/10/2000**
Permit Type:
Description: **No Plan Check CHANGE OUT/ DUAL WALL UNIT AND VENTING 35K**

Permit Description: **HVAC**
Work Class:
Proposed Use: 1 or 2 Family Dwelling
Permit Number: 000441000002152
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: MARAVILLA FOUNDATION

Date: **9/4/1998**
Permit Type:
Description: **No Plan Check RE-ROOF & NEW PLYWOOD (8 SQ'S)**

Permit Description: **Bldg-Alter/Repair**
Work Class:
Proposed Use: 1 or 2 Family Dwelling Single Family Residence
Permit Number: 980161000018667
Status:
Valuation: $2,200.00
Contractor Company:
Contractor Name: OWNER-BUILDER

510 S SOTO ST

Date: **4/16/2004**
Permit Type:
Description: **No Plan Check RE-ROOF THE SFD. W/ SHINGLES. NO PLYWOOD INVOLVED.**

Permit Description: **Bldg-Alter/Repair**
Work Class:
Proposed Use: 1 or 2 Family Dwelling Single Family Residence
Permit Number: 040161000007047
Status:
Valuation: $3,500.00
Contractor Company:
Contractor Name: OWNER-BUILDER

ADJOINING PROPERTY FINDINGS

513 S SOTO ST

Date:	**8/4/2014**
Permit Type:	
Description:	**No Plan Check REPLACE MECHANICAL ROOM LIGHT FIXTURE. OF 2 W/ #14042-10000-14644.**
Permit Description:	**Electrical**
Work Class:	
Proposed Use:	Apartment
Permit Number:	140411000020948
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	MURPHY JAMES P CONSTRUCTION

Date:	**8/4/2014**
Permit Type:	
Description:	**No Plan Check E.Q. VALVE FOR GAS LINES. 1 OF 2 W/ #**
Permit Description:	**Plumbing**
Work Class:	
Proposed Use:	Apartment
Permit Number:	140421000014644
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	MURPHY JAMES P CONSTRUCTION

ADJOINING PROPERTY FINDINGS

Date: **7/9/1999**
Permit Type:
Description: **No Plan Check WATER HEATER INSTALLATION CHANGE OUT**

Permit Description: **Plumbing**
Work Class:
Proposed Use: Commercial
Permit Number: 990421000009005
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: GENERAL INSTALLATION

514 S SOTO ST

Date: **3/11/2008**
Permit Type:
Description: **No Plan Check install wall heater**

Permit Description: **HVAC**
Work Class:
Proposed Use: 1 or 2 Family Dwelling
Permit Number: 080449000002581
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: INTER-CITY ENERGY SYSTEMS INC

ADJOINING PROPERTY FINDINGS

517 S SOTO ST

Date:	**1/7/2014**
Permit Type:	
Description:	**No Plan Check INSTALL 2 GAS SHUT OFF VALVES**
Permit Description:	**Plumbing**
Work Class:	
Proposed Use:	1 or 2 Family Dwelling
Permit Number:	140429000000311
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	M & D PLUMBING INC

Date:	**10/3/2007**
Permit Type:	
Description:	**No Plan Check CHANGE OUT SINGLE WALL FURANCE & VENT.**
Permit Description:	**HVAC**
Work Class:	
Proposed Use:	1 or 2 Family Dwelling
Permit Number:	070441000010093
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	MARAVILLA FOUNDATION

Date:	**9/10/2007**
Permit Type:	
Description:	**No Plan Check C/O S/WALL FURNACE 25K.**
Permit Description:	**HVAC**
Work Class:	
Proposed Use:	1 or 2 Family Dwelling
Permit Number:	070441000009340
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	MARAVILLA FOUNDATION

ADJOINING PROPERTY FINDINGS

520 S SOTO ST

Date:	**1/12/2006**
Permit Type:	
Description:	**No Plan Check INSTALL SMOKE DETECTORS FOR DWLG.**
Permit Description:	**Electrical**
Work Class:	
Proposed Use:	1 or 2 Family Dwelling
Permit Number:	060417000000815
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	MC CONSTRUCTION

Date:	**1/12/2006**
Permit Type:	
Description:	**No Plan Check INSTALL WALL HEATER.**
Permit Description:	**HVAC**
Work Class:	
Proposed Use:	1 or 2 Family Dwelling
Permit Number:	060447000000317
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	MC CONSTRUCTION

ADJOINING PROPERTY FINDINGS

529 S SOTO ST

Date:	**3/6/2013**
Permit Type:	
Description:	**No Plan Check INSTALL 3 GAS SHUT OFF VALVES**
Permit Description:	**Plumbing**
Work Class:	
Proposed Use:	Apartment
Permit Number:	130429000004640
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	M & D PLUMBING INC

532 S SOTO ST

Date:	**7/10/2006**
Permit Type:	
Description:	**No Plan Check CHANGE OUT SINGLE WALL FURNACE AND VENT FOR #532 & #532 1/2.**
Permit Description:	**HVAC**
Work Class:	
Proposed Use:	1 or 2 Family Dwelling
Permit Number:	060441000007020
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	MARAVILLA FOUNDATION

ADJOINING PROPERTY FINDINGS

Date:	**1/26/2006**
Permit Type:	
Description:	**No Plan Check INSTALL SMOKE DETECTORS FOR UNITS #532 & #532 1/2. (2 OF 2 W/ PERMIT #06042-10000-01846)**
Permit Description:	**Electrical**
Work Class:	
Proposed Use:	1 or 2 Family Dwelling
Permit Number:	060411000001827
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	PETERS CONSTRUCTION

Date:	**1/26/2006**
Permit Type:	
Description:	**No Plan Check REPLACE (2) WATER HEATERS FOR #532 & #532 1/2. (1 OF 2 W/ PERMIT #06041-10000-01827)**
Permit Description:	**Plumbing**
Work Class:	
Proposed Use:	1 or 2 Family Dwelling
Permit Number:	060421000001846
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	PETERS CONSTRUCTION

ADJOINING PROPERTY FINDINGS

533 S SOTO ST

Date:	**4/7/2003**
Permit Type:	
Description:	**No Plan Check SERVICE UPGRADE**
Permit Description:	**Electrical**
Work Class:	
Proposed Use:	1 or 2 Family Dwelling
Permit Number:	030411000007446
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	ROJAS DAVID

Date:	**2/21/2003**
Permit Type:	
Description:	**Plan Check PROPOSED 7.5' x 28' BEDROOM & BATH ADDITION TO REAR OF FRONT UNIT. CONSTRUCTION PER CITY STANDARD TYPE V. THIS WORK TO COMPLY W/ ORDER DATED 12-09-02**
Permit Description:	**Bldg-Addition**
Work Class:	
Proposed Use:	1 or 2 Family Dwelling Single Family Residence
Permit Number:	030141000000295
Status:	
Valuation:	$15,000.00
Contractor Company:	
Contractor Name:	OWNER-BUILDER

ADJOINING PROPERTY FINDINGS

534 S SOTO ST

Date:	**1/26/2006**
Permit Type:	
Description:	**No Plan Check CHANGE OUT (4) WINDOWS. (SAME SIZE AND LOC.)**
Permit Description:	**Bldg-Alter/Repair**
Work Class:	
Proposed Use:	1 or 2 Family Dwelling Single Family Residence
Permit Number:	060161000001563
Status:	
Valuation:	$1,800.00
Contractor Company:	
Contractor Name:	PETERS CONSTRUCTION

Date:	**1/26/2006**
Permit Type:	
Description:	**No Plan Check INSTALL SMOKE DETECTORS. (3 OF 3 W/ PERMIT #06042-10000-01844)**
Permit Description:	**Electrical**
Work Class:	
Proposed Use:	1 or 2 Family Dwelling
Permit Number:	060411000001824
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	PETERS CONSTRUCTION

ADJOINING PROPERTY FINDINGS

Date:	**1/26/2006**
Permit Type:	
Description:	**No Plan Check REPAIR/REPLACE WASTE AND VENT. (2 OF 3 W/ PERMIT #06044-10000-00801)**
Permit Description:	**Plumbing**
Work Class:	
Proposed Use:	1 or 2 Family Dwelling
Permit Number:	060421000001844
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	PETERS CONSTRUCTION

Date:	**1/26/2006**
Permit Type:	
Description:	**No Plan Check REPLACE (1) SINGLE WALL HEATER. (1 OF 3 W/ PERMIT #06041-10000-01824)**
Permit Description:	**HVAC**
Work Class:	
Proposed Use:	1 or 2 Family Dwelling
Permit Number:	060441000000801
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	PETERS CONSTRUCTION

Date:	**11/16/2005**
Permit Type:	
Description:	**No Plan Check REPLACE WINDOWS (SAME SIZE & LOCATION).**
Permit Description:	**Bldg-Alter/Repair**
Work Class:	
Proposed Use:	1 or 2 Family Dwelling Single Family Residence
Permit Number:	050161000024707
Status:	
Valuation:	$800.00
Contractor Company:	
Contractor Name:	OWNER-BUILDER

ADJOINING PROPERTY FINDINGS

536 S SOTO ST

Date:	**9/21/2007**
Permit Type:	
Description:	**No Plan Check Replace 7 window(s). Same size, location, number, type.**
Permit Description:	**Bldg-Alter/Repair**
Work Class:	
Proposed Use:	1 or 2 Family Dwelling Single Family Residence
Permit Number:	070169000017942
Status:	
Valuation:	$1,750.00
Contractor Company:	
Contractor Name:	GALKOS CONSTRUCTION INC

Date:	**5/10/2006**
Permit Type:	
Description:	**No Plan Check SERVICE CHANGE.**
Permit Description:	**Electrical**
Work Class:	
Proposed Use:	1 or 2 Family Dwelling
Permit Number:	060411000011271
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	BARRAZA OSCAR ROBERTO

Date:	**5/10/2006**
Permit Type:	
Description:	**No Plan Check SUB-PANEL. SERVICE @ 536.**
Permit Description:	**Electrical**
Work Class:	
Proposed Use:	1 or 2 Family Dwelling
Permit Number:	060411000011273
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	BARRAZA OSCAR ROBERTO

ADJOINING PROPERTY FINDINGS

Date:	**4/7/2006**
Permit Type:	
Description:	**Plan Check ONE STORY ADDITION OF 10'X16' PATIO COVER AND EXTENTION OF 10'X12' OF EXISTING BEDROOM PER TYPE V SHEET.**
Permit Description:	**Bldg-Addition**
Work Class:	
Proposed Use:	1 or 2 Family Dwelling Single Family Residence
Permit Number:	060141000003017
Status:	
Valuation:	$11,808.00
Contractor Company:	
Contractor Name:	OWNER-BUILDER

Date:	**3/16/2004**
Permit Type:	
Description:	**No Plan Check CHANGE OUT SINGLE WALL FURANCE & VENT.**
Permit Description:	**HVAC**
Work Class:	
Proposed Use:	1 or 2 Family Dwelling
Permit Number:	040441000002704
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	MARAVILLA FOUNDATION

ADJOINING PROPERTY FINDINGS

540 S SOTO ST

Date:	**5/15/2002**
Permit Type:	
Description:	**No Plan Check RE-ROOF THE SFR INSTALLING 1/2" CDX PLYWOOD & COMPOSITION SHINGLE.**
Permit Description:	**Bldg-Alter/Repair**
Work Class:	
Proposed Use:	1 or 2 Family Dwelling Single Family Residence
Permit Number:	020141000002935
Status:	
Valuation:	$2,000.00
Contractor Company:	
Contractor Name:	OWNER-BUILDER

Date:	**5/15/2002**
Permit Type:	
Description:	**No Plan Check RE-ROOF SFD & ATTACHED GARAGE, INSTALLING 1/2" CDX PLYWOOD & COMPOSITION SHINGLE.**
Permit Description:	**Bldg-Alter/Repair**
Work Class:	
Proposed Use:	1 or 2 Family Dwelling Single Family Residence
Permit Number:	020161000009196
Status:	
Valuation:	$2,000.00
Contractor Company:	
Contractor Name:	OWNER-BUILDER

ADJOINING PROPERTY FINDINGS

541 S SOTO ST

Date:	**7/7/1999**
Permit Type:	
Description:	**No Plan Check CHANGE OUT WALL HEATERS**
Permit Description:	**HVAC**
Work Class:	
Proposed Use:	Commercial
Permit Number:	990441000005855
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	ZAMORAS PLUMBING

543 S SOTO ST

Date:	**10/25/2005**
Permit Type:	
Description:	**No Plan Check RE-ROOF THE BLDG. W/ NEW PLYWOOD AND SHINGLES.**
Permit Description:	**Bldg-Alter/Repair**
Work Class:	
Proposed Use:	1 or 2 Family Dwelling Single Family Residence
Permit Number:	050161000022985
Status:	
Valuation:	$7,000.00
Contractor Company:	
Contractor Name:	OWNER-BUILDER

ADJOINING PROPERTY FINDINGS

545 S SOTO ST

Date:	**10/9/2013**
Permit Type:	
Description:	**No Plan Check INSTALL SMOKE DETECTORS**
Permit Description:	**Electrical**
Work Class:	
Proposed Use:	1 or 2 Family Dwelling
Permit Number:	130412000028128
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	FALCON BUILDING & ELECTRICAL CONSTRUCTION INC

Date:	**4/18/2008**
Permit Type:	
Description:	**No Plan Check REPLACE RECEPTACLES, OUTLETS, & INSTALL FIXTURES. (1 OF 2 WITH PERMIT# 08042-10000-07388)**
Permit Description:	**Electrical**
Work Class:	
Proposed Use:	1 or 2 Family Dwelling
Permit Number:	080411000008613
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	ENDURA CONSTRUCTION CORP

ADJOINING PROPERTY FINDINGS

Date:	**4/18/2008**
Permit Type:	
Description:	**No Plan Check REMOVE BATHTUB & REPLACE WITH SHOWER. (2 OF 2 WITH PERMIT# 08041-10000-08613)**
Permit Description:	**Plumbing**
Work Class:	
Proposed Use:	1 or 2 Family Dwelling
Permit Number:	080421000007388
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	ENDURA CONSTRUCTION CORP

Date:	**4/3/2008**
Permit Type:	
Description:	**No Plan Check DRYWALL & CEILING INSULATION.**
Permit Description:	**Bldg-Alter/Repair**
Work Class:	
Proposed Use:	1 or 2 Family Dwelling Single Family Residence
Permit Number:	080161000005431
Status:	
Valuation:	$3,000.00
Contractor Company:	
Contractor Name:	OWNER-BUILDER

Date:	**2/23/2006**
Permit Type:	
Description:	**No Plan Check INSTALL (2) RECEPTACLES, (2) SWITCHES, AND (1) LIGHT. (EXIST. CIRCUITS) 1 OF 2 W/ PERMIT #06042-10000-04265.**
Permit Description:	**Electrical**
Work Class:	
Proposed Use:	1 or 2 Family Dwelling
Permit Number:	060411000004853
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	FELIX G CONSTRUCTION

ADJOINING PROPERTY FINDINGS

Date: **2/23/2006**
Permit Type:
Description: **No Plan Check HOOK-UP WASHER. (2 OF 2 W/ PERMIT #06041-10000-04853)**

Permit Description: **Plumbing**
Work Class:
Proposed Use: 1 or 2 Family Dwelling
Permit Number: 060421000004265
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: FELIX G CONSTRUCTION

547 S SOTO ST

Date: **10/9/2013**
Permit Type:
Description: **No Plan Check INSTALL SMOKE DETECTORS**

Permit Description: **Electrical**
Work Class:
Proposed Use: 1 or 2 Family Dwelling
Permit Number: 130412000028126
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: FALCON BUILDING & ELECTRICAL CONSTRUCTION INC

Date: **9/22/2008**
Permit Type:
Description: **No Plan Check CHANGE OUT WALL FURN AND VENT.**

Permit Description: **HVAC**
Work Class:
Proposed Use: 1 or 2 Family Dwelling
Permit Number: 080441000009469
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: MARAVILLA FOUNDATION

ADJOINING PROPERTY FINDINGS

Date:	**9/18/2008**
Permit Type:	
Description:	**No Plan Check CHANGE OUT WALL FURNACE & VENT.**
Permit Description:	**HVAC**
Work Class:	
Proposed Use:	Apartment
Permit Number:	080441000009378
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	MARAVILLA FOUNDATION

549 S SOTO ST

Date:	**6/3/2002**
Permit Type:	
Description:	**No Plan Check tear off existing roofing. reroof with class A fiberglass or asphalt shingles(max 2 overlays total) 16sqrs.**
Permit Description:	**Bldg-Alter/Repair**
Work Class:	
Proposed Use:	1 or 2 Family Dwelling Single Family Residence
Permit Number:	020163000010470
Status:	
Valuation:	$2,500.00
Contractor Company:	
Contractor Name:	OWNER-BUILDER

ADJOINING PROPERTY FINDINGS

Date: **5/13/2002**
Permit Type:
Description: **No Plan Check earthquake gas valve**

Permit Description: **Plumbing**
Work Class:
Proposed Use: 1 or 2 Family Dwelling
Permit Number: 020429000012766
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: STRUHS COMPANY

Date: **5/1/2001**
Permit Type:
Description: **No Plan Check SERVICE UPGRADE (100 AMP) & 3 NEW CIRCUITS.**

Permit Description: **Electrical**
Work Class:
Proposed Use: 1 or 2 Family Dwelling
Permit Number: 010411000008813
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: CASTLE H R CONSTRUCTION

Date: **5/1/2001**
Permit Type:
Description: **No Plan Check REPLACING W/NEW WALL HEATER.**

Permit Description: **HVAC**
Work Class:
Proposed Use: 1 or 2 Family Dwelling
Permit Number: 010441000003926
Status:
Valuation: $0.00
Contractor Company:
Contractor Name: CASTLE H R CONSTRUCTION

ADJOINING PROPERTY FINDINGS

552 S SOTO ST

Date:	**8/9/2002**
Permit Type:	
Description:	**No Plan Check APPLY STUCCO.**
Permit Description:	**Bldg-Alter/Repair**
Work Class:	
Proposed Use:	1 or 2 Family Dwelling Single Family Residence
Permit Number:	020167000015558
Status:	
Valuation:	$2,000.00
Contractor Company:	
Contractor Name:	MASTER BUILDERS GENERAL CONTRACTOR

Date:	**8/9/2002**
Permit Type:	
Description:	**No Plan Check REPLACE GFI'S**
Permit Description:	**Electrical**
Work Class:	
Proposed Use:	1 or 2 Family Dwelling
Permit Number:	020417000017539
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	MASTER BUILDERS GENERAL CONTRACTOR

Date:	**8/9/2002**
Permit Type:	
Description:	**No Plan Check INSTALL WATER HEATER**
Permit Description:	**Plumbing**
Work Class:	
Proposed Use:	1 or 2 Family Dwelling
Permit Number:	020427000023198
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	MASTER BUILDERS GENERAL CONTRACTOR

ADJOINING PROPERTY FINDINGS

553 S SOTO ST

Date:	**9/19/2013**
Permit Type:	
Description:	**No Plan Check INSTALLATION OF SMOKE DETECTORS.**
Permit Description:	**Electrical**
Work Class:	
Proposed Use:	Apartment
Permit Number:	130411000025891
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	S A ELECTRIC

Date:	**10/5/2007**
Permit Type:	
Description:	**No Plan Check SUPPL. PERMIT TO PERMIT #07041-10000-23577 FOR CHANGE OF CONTRACTOR FROM OWNER-BLDR. TO S.A. ELECTRIC. (LIC. #748393) TO CORRECT ADDRESS FROM 555 S. SOTO ST. TO 553-555 S. SOTO ST. (NO CHANGE IN LEGAL DESCRIPTION) TO INCLUDE (1) ADDITIONAL PANEL FOR 2-GANG METER SERVICE.**
Permit Description:	**Electrical**
Work Class:	
Proposed Use:	1 or 2 Family Dwelling
Permit Number:	070411000123577
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	S A ELECTRIC

ADJOINING PROPERTY FINDINGS

Date:	**7/2/2004**
Permit Type:	
Description:	**No Plan Check RE-ROOF USING SHINGLES & PLYWOOD (AS NECCESSARY).**
Permit Description:	**Bldg-Alter/Repair**
Work Class:	
Proposed Use:	1 or 2 Family Dwelling Duplex
Permit Number:	040161000012722
Status:	
Valuation:	$1,200.00
Contractor Company:	
Contractor Name:	OWNER-BUILDER

554 S SOTO ST

Date:	**9/12/2006**
Permit Type:	
Description:	**No Plan Check PROPOSED GENERAL REHAB TO EXISTING SFD/MARKET BLDG, REROOF (REMOVE EXISTING RFG, ADD PLYWOOD AND REROOF W/ CLASS "A" BUILT UP ROOFING). THIS WORK IS TO COMPLY W/ ABATE ORDER DATED 8-16-06. REPLACING DRY ROT DAMAGE AT ROOF FRAMING MEMBERS (LESS THAN 10% DAMAGE)**
Permit Description:	**Bldg-Alter/Repair**
Work Class:	
Proposed Use:	Commercial Single Family Residence
Permit Number:	060161000017932
Status:	
Valuation:	$20,000.00
Contractor Company:	
Contractor Name:	OWNER-BUILDER

ADJOINING PROPERTY FINDINGS

Date:	**9/12/2006**
Permit Type:	
Description:	**No Plan Check PROPOSED GENERAL REHAB TO EXISTING DETACHED GARAGE, REROOF (REMOVE EXISTING RFG, ADD PLYWOOD AND REROOF W/ CLASS "A" BUILT UP ROOFING). THIS WORK IS TO COMPLY W/ ABATE ORDER DATED 8-16-06. REPLACING DRY ROT DAMAGE AT ROOF FRAMING MEMBERS (LESS THAN 10% DAMAGE)**
Permit Description:	**Bldg-Alter/Repair**
Work Class:	
Proposed Use:	1 or 2 Family Dwelling Private Garage
Permit Number:	060161000018036
Status:	
Valuation:	$2,000.00
Contractor Company:	
Contractor Name:	OWNER-BUILDER

Date:	**9/12/2006**
Permit Type:	
Description:	**Plan Check DEMOLISH FIRE DAMAGED SINGLE FAMILY DWELLING IN REAR PER ABATE ORDER # 102004 DATED 8/16/06. A PLUMBING FEE WAS CHARGED ON THIS PERMIT FOR CAPPING THE SEWER. THE DEMO PRE-INSP IS WAIVED SINCE THERE IS AN ORDER FROM THE DEPARTMENT RELATING TO THIS STRUCTURE. THIS AREA TO BE CLEARED, INCLUDING THE FOOTINGS. HANDWRECK**
Permit Description:	**Bldg-Demolition**
Work Class:	
Proposed Use:	1 or 2 Family Dwelling Single Family Residence Misc. Bldg or Structure
Permit Number:	060191000002291
Status:	
Valuation:	$2,500.00
Contractor Company:	
Contractor Name:	OWNER-BUILDER

ADJOINING PROPERTY FINDINGS

555 S SOTO ST

Date:	**9/27/2007**
Permit Type:	
Description:	**No Plan Check RELOCATE & UPGRADE PANEL.**
Permit Description:	**Electrical**
Work Class:	
Proposed Use:	1 or 2 Family Dwelling
Permit Number:	070411000023577
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	OWNER-BUILDER

S SOTO ST # 524

522 S SOTO ST # 524

Date:	**12/1/2005**
Permit Type:	
Description:	**No Plan Check INSTALL SMOKE DETECTORS IN UNIT. (WORK IS FOR UNIT 524 S. SOTO ONLY)**
Permit Description:	**Electrical**
Work Class:	
Proposed Use:	1 or 2 Family Dwelling
Permit Number:	050417000029233
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	MC CONSTRUCTION

ADJOINING PROPERTY FINDINGS

Date:	**12/1/2005**
Permit Type:	
Description:	**No Plan Check REPAIR VENT CONNECTORS AND INSTALL EARTHQUAKE STRAPPING FOR WATER HEATER. (WORK IS FOR UNIT 524 S. SOTO ONLY)**
Permit Description:	**Plumbing**
Work Class:	
Proposed Use:	1 or 2 Family Dwelling
Permit Number:	050427000029732
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	MC CONSTRUCTION

GLOSSARY

General Building Department concepts

- **ICC:** The International Code Council. The governing body for the building/development codes used by all jurisdictions who've adopted the ICC guidelines. MOST of the US has done this. Canada, Mexico, and other countries use ICC codes books and guides as well. There are a few states who have added guidelines to the ICC codes to better fit their needs. For example, California has added seismic retrofit requirements for most commercial structures.
- **Building Department (Permitting Authority, Building Codes, Inspections Department, Building and Inspections):** This is the department in a jurisdiction where an owner or contractor goes to obtain permits and inspections for building, tearing down, remodeling, adding to, re-roofing, moving or otherwise making changes to any structure, Residential or Commercial.
- **Jurisdiction:** This is the geographic area representing the properties over which a Permitting Authority has responsibility.
- **GC:** General Contractor. Usually the primary contractor hired for any Residential or Commercial construction work.
- **Sub:** Subordinate contracting companies or subcontractors. Usually a "trades" contractor working for the GC. These contractors generally have an area of expertise in which they are licensed like Plumbing, Electrical, Heating and Air systems, Gas Systems, Pools etc. (called "trades").
- **Journeymen:** Sub contractors who have their own personal licenses in one or more trades and work for different contracting companies, wherever they are needed or there is work.
- **HVAC (Mechanical, Heating & Air companies):** HVAC = Heating, Ventilation, and Air Conditioning.
- **ELEC (Electrical, TempPole, TPole, TPower, Temporary Power, Panel, AMP Change, Power Release):** Electrical permits can be pulled for many reasons. The most common reason is to increase the AMPs of power in an electrical power panel. This requires a permit in almost every jurisdiction. Other commons reason for Electrical permits is to insert a temporary power pole at a new construction site. Construction requires electricity, and in a new development, power has yet to be run to the lot. The temporary power pole is usually the very first permit pulled for new development. The power is released to the home owner when construction is complete and this sometimes takes the form of a Power Release permit or inspection.
- **"Pull" a permit:** To obtain and pay for a building permit.
- **CBO:** Chief Building Official
- **Planning Department:** The department in the development process where the building /structural plans are reviewed for their completeness and compliance with building codes
- **Zoning Department:** The department in the development process where the site plans are reviewed for their compliance with the regulations associated with the zoning district in which they are situated.
- **Zoning District:** A pre-determined geographic boundary within a jurisdiction where certain types of structures are permitted / prohibited. Examples are Residential structure, Commercial/Retail structures, Industrial/Manufacturing structures etc. Each zoning district has regulations associated with it like the sizes of the lots, the density of the structures on the lots, the number of parking spaces required for certain types of structures on the lots etc.
- **PIN (TMS, GIS ID, Parcel#):** Property Identification Number and Tax Map System number.
- **State Card (Business license):** A license card issued to a contractor to conduct business.
- **Building Inspector (Inspector):** The inspector is a building department employee that inspects building construction for compliance to codes.
- **C.O.:** Certificate of Occupancy. This is the end of the construction process and designates that the owners now have permission to occupy a structure after its building is complete. Sometimes also referred to as a Certificate of Compliance.

GLOSSARY

Permit Content Definitions

- Permit Number: The alphanumerical designation assigned to a permit for tracking within the building department system. Sometimes the permit number gives clues to its role, e.g. a "PL" prefix may designate a plumbing permit.
- Description: A field on the permit form that allows the building department to give a brief description of the work being done. More often than not, this is the most important field for EP's to find clues to the prior use(s) of the property.
- Permit Type: Generally a brief designation of the type of job being done. For example BLDG-RES, BLDG-COM, ELEC, MECH etc.

Sample Building Permit Data

Date: Nov 09, 2000
Permit Type: Bldg -
New Permit Number: 101000000405
Status: Valuation: $1,000,000.00
Contractor Company: OWNER-BUILDER
Contractor Name:

Description: New one store retail (SAV-ON) with drive-thru pharmacy. Certificate of Occupancy.

Roosevelt High School
456 South Mathews Street
Los Angeles, CA 90033

Inquiry Number: 4609254.7S
May 10, 2016

The EDR Environmental LienSearch™



Environmental Data Resources Inc

6 Armstrong Road,
Fourth Floor
Shelton, CT 06484
800.352.0050
www.edrnet.com

EDR Environmental LienSearch™ Report

The EDR Environmental LienSearch Report provides results from a search of available current land title records for environmental cleanup liens and other activity and use limitations, such as engineering controls and institutional controls.

A network of professional, trained researchers, following established procedures, uses client supplied address information to:

- search for parcel information and/or legal description;
- search for ownership information;
- research official land title documents recorded at jurisdictional agencies such as recorders' offices, registries of deeds, county clerks' offices, etc.;
- access a copy of the deed;
- search for environmental encumbering instrument(s) associated with the deed;
- provide a copy of any environmental encumbrance(s) based upon a review of key words in the instrument(s) (title, parties involved, and description); and
- provide a copy of the deed or cite documents reviewed.

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EDR Environmental LienSearch™ Report

TARGET PROPERTY INFORMATION

ADDRESS

Roosevelt High School
456 South Mathews Street
Los Angeles, CA 90033

RESEARCH SOURCE

Source 1: Los Angeles Assessor
Los Angeles County, California

Source 2: Los Angeles Recorder
Los Angeles County, California

PROPERTY INFORMATION

Deed 1:

According to the Los Angeles County Assessor, the current owner of the subject property is the Los Angeles Unified School District of Los Angeles County. Records were searched at the Los Angeles County Recorder's Office back to 1980. No conveyance was found of record for the subject property. Based on our research, it appears that the Los Angeles Unified School District of Los Angeles County acquired title to the property prior to 1980.

Legal Description: All that certain piece or parcel of land being a portion of Parcel 1 of Tract No. 34758, as filed in Map Book 967, at Page 99, situate and lying in the County of Los Angeles, State of California.

Legal Current Owner: Los Angeles Unified School District of Los Angeles County

Property Identifiers: 5185-004-929

ENVIRONMENTAL LIEN

Environmental Lien: Found ☐ Not Found ☒

If found:

1st Party:

2nd Party:

Dated:

Recorded:

Book:

Page:

Docket:

Volume:

Instrument:

Comments:

Miscellaneous:

EDR Environmental LienSearch™ Report

OTHER ACTIVITY AND USE LIMITATIONS (AULs)

Other AUL's: Found ☐ Not Found ☒

If found:

1st Party:

2nd Party:

Dated:
Recorded:
Book:
Page:
Docket:
Volume:
Instrument:
Comments:
Miscellaneous:

Roosevelt High School
456 South Mathews Street
Los Angeles, CA 90033

Inquiry Number: 4609254.6
May 03, 2016

The EDR Property Tax Map Report

Environmental Data Resources Inc

6 Armstrong Road
Shelton, CT 06484
800.352.0050
www.edrnet.com

EDR Property Tax Map Report

Environmental Data Resources, Inc.'s EDR Property Tax Map Report is designed to assist environmental professionals in evaluating potential environmental conditions on a target property by understanding property boundaries and other characteristics. The report includes a search of available property tax maps, which include information on boundaries for the target property and neighboring properties, addresses, parcel identification numbers, as well as other data typically used in property location and identification.

NO COVERAGE

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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City Directory

Appendix D

Converse Project No. 15-41-126-01
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Roosevelt High School
456 South Mathews Street
Los Angeles, CA 90033

Inquiry Number: 4609254.5
May 03, 2016

The EDR-City Directory Abstract

Environmental Data Resources Inc

6 Armstrong Road
Shelton, CT 06484
800.352.0050
www.edrnet.com

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Executive Summary

Findings

City Directory Images

Thank you for your business.
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with any questions or comments.

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This Report contains certain information obtained from a variety of public and other sources reasonably available to Environmental Data Resources, Inc. It cannot be concluded from this Report that coverage information for the target and surrounding properties does not exist from other sources. **NO WARRANTY EXPRESSED OR IMPLIED, IS MADE WHATSOEVER IN CONNECTION WITH THIS REPORT. ENVIRONMENTAL DATA RESOURCES, INC. SPECIFICALLY DISCLAIMS THE MAKING OF ANY SUCH WARRANTIES, INCLUDING WITHOUT LIMITATION, MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE OR PURPOSE. ALL RISK IS ASSUMED BY THE USER. IN NO EVENT SHALL ENVIRONMENTAL DATA RESOURCES, INC. BE LIABLE TO ANYONE, WHETHER ARISING OUT OF ERRORS OR OMISSIONS, NEGLIGENCE, ACCIDENT OR ANY OTHER CAUSE, FOR ANY LOSS OR DAMAGE, INCLUDING, WITHOUT LIMITATION, SPECIAL, INCIDENTAL, CONSEQUENTIAL, OR EXEMPLARY DAMAGES. ANY LIABILITY ON THE PART OF ENVIRONMENTAL DATA RESOURCES, INC. IS STRICTLY LIMITED TO A REFUND OF THE AMOUNT PAID FOR THIS REPORT.** Purchaser accepts this Report "AS IS". Any analyses, estimates, ratings, environmental risk levels or risk codes provided in this Report are provided for illustrative purposes only, and are not intended to provide, nor should they be interpreted as providing any facts regarding, or prediction orforecast of, any environmental risk for any property. Only a Phase I Environmental Site Assessment performed by an environmental professional can provide information regarding the environmental risk for any property. Additionally, the information provided in this Report is not to be construed as legal advice.

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EXECUTIVE SUMMARY

DESCRIPTION

Environmental Data Resources, Inc.'s (EDR) City Directory Abstract is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's City Directory Abstract includes a search and abstract of available city directory data. For each address, the directory lists the name of the corresponding occupant at five year intervals.

Business directories including city, cross reference and telephone directories were reviewed, if available, at approximately five year intervals for the years spanning 1920 through 2013. This report compiles information gathered in this review by geocoding the latitude and longitude of properties identified and gathering information about properties within 332 feet of the target property.

A summary of the information obtained is provided in the text of this report.

RESEARCH SUMMARY

The following research sources were consulted in the preparation of this report. An "X" indicates where information was identified in the source and provided in this report.

Year	Source	TP	Adjoining	Text Abstract	Source Image
2013	Cole Information Services	X	X	X	-
2008	Cole Information Services	X	X	X	-
2006	Haines Company, Inc.	X	X	X	-
2004	Haines Company	-	-	-	-
2003	Haines & Company	-	-	-	-
2001	Haines Company, Inc.	-	-	-	-
2000	Haines & Company	X	X	X	-
1999	Haines Company	-	-	-	-
1996	GTE	-	-	-	-
1995	Pacific Bell	-	X	X	-
1992	PACIFIC BELL WHITE PAGES	-	-	-	-
1991	Pacific Bell	-	X	X	-
1990	Pacific Bell	X	X	X	-
1986	Pacific Bell	-	X	X	-
1985	Pacific Bell	-	-	-	-
1981	Pacific Telephone	-	X	X	-
1980	Pacific Telephone	-	-	-	-
1976	Pacific Telephone	X	X	X	-
1975	Pacific Telephone	-	-	-	-
1972	R. L. Polk & Co.	-	-	-	-
1971	Pacific Telephone	-	X	X	-
1970	Pacific Telephone	X	X	X	-
1969	Pacific Telephone	-	-	-	-
1967	Pacific Telephone	X	X	X	-
1966	Pacific Telephone	-	-	-	-

EXECUTIVE SUMMARY

Year	Source	TP	Adjoining	Text Abstract	Source Image
1965	Pacific Telephone	X	X	X	-
1964	Pacific Telephone	-	-	-	-
1963	Pacific Telephone	-	-	-	-
1962	Pacific Telephone	X	X	X	-
1961	R. L. Polk & Co.	-	-	-	-
1960	Pacific Telephone	-	-	-	-
1958	Pacific Telephone	X	X	X	-
1957	Pacific Telephone	-	-	-	-
1956	Pacific Telephone	-	-	-	-
1955	R. L. Polk & Co.	-	-	-	-
1954	R. L. Polk & Co.	-	X	X	-
1952	Los Angeles Directory Co.	-	-	-	-
1951	Pacific Telephone & Telegraph Co.	X	X	X	-
1950	Pacific Telephone	-	X	X	-
1949	Los Angeles Directory Co.	-	-	-	-
1948	Associated Telephone Company, Ltd.	-	-	-	-
1947	Pacific Directory Co.	-	-	-	-
1946	Southern California Telephone Co	-	-	-	-
1945	R. L. Polk & Co.	-	-	-	-
1944	R. L. Polk & Co.	-	-	-	-
1942	Los Angeles Directory Co.	X	X	X	-
1940	Los Angeles Directory Co.	-	-	-	-
1939	Los Angeles Directory Co.	-	-	-	-
1938	Los Angeles Directory Company Publishers	-	-	-	-
1937	Los Angeles Directory Co.	-	X	X	-
1936	Los Angeles Directory Co.	-	-	-	-
1935	Los Angeles Directory Co.	-	-	-	-
1934	Los Angeles Directory Co.	-	-	-	-
1933	Los Angeles Directory Co.	X	X	X	-
1932	Los Angeles Directory Co.	-	-	-	-
1931	TRIBUNE-NEWS PUBLISHING CO.	-	-	-	-
1930	Los Angeles Directory Co.	-	-	-	-
1929	Los Angeles Directory Co.	X	X	X	-
1928	Los Angeles Directory Co.	-	-	-	-
1927	Los Angeles Directory Co.	-	-	-	-
1926	Los Angeles Directory Co.	-	-	-	-
1925	Los Angeles Directory Co.	-	-	-	-
1924	Los Angeles Directory Co.	X	X	X	-
1923	Los Angeles Directory Co.	-	-	-	-
1921	Los Angeles Directory Co.	-	-	-	-
1920	Los Angeles Directory Co.	-	-	-	-

FINDINGS

TARGET PROPERTY INFORMATION

ADDRESS

456 South Mathews Street
Los Angeles, CA 90033

FINDINGS DETAIL

Target Property research detail.

MATHEWS S

456 MATHEWS S

Year	Uses	Source
2000	BOYLE HEIGHTS HIGH SCHOOL	Haines & Company
	LA CT REC & PKS POOL ROOSEVELT	Haines & Company
	ROOSEVELT HIGH SC	Haines & Company
	ROOSEVELT HIGH SC CMTY ADLT SC 323 263 928 S	Haines & Company

MATHEWS ST S

456 MATHEWS ST S

Year	Uses	Source
1951	S Mathews Shida Tokuzo r	Pacific Telephone & Telegraph Co.

S MATHEWS

456 S MATHEWS

Year	Uses	Source
1990	BOYLE HEIGHTS HIGH SCHOOL	Pacific Bell
	ROOSEVELT HIGH SCHOOL COMMUNIETY ADULT SCHOOL	Pacific Bell

S MATHEWS ST

456 S MATHEWS ST

Year	Uses	Source
2013	BOYLE HEIGHTS CONTINUATION	Cole Information Services
	ROOSEVELT HIGH SCHOOL	Cole Information Services
2008	LOS ANGELES UNIFIED SCHOOL DISTRICT	Cole Information Services
	ROOSEVELT ADULT SCHOOL	Cole Information Services

FINDINGS

Year	Uses	Source
2008	THEODORE ROOSEVELT HIGH SCHOOL	Cole Information Services
2006	BOYLEHEIGHTS	Haines Company, Inc.
	HIGH SCHOOL	Haines Company, Inc.
	ROOSEVELTHIGH	Haines Company, Inc.
	SC CMTYADLTSC	Haines Company, Inc.
1976	Community Adult School	Pacific Telephone
	Day High School	Pacific Telephone
	Roosevelt High School	Pacific Telephone
1970	INMAN M C	Pacific Telephone
1967	Shida Tokuzo	Pacific Telephone
1965	INMAN M C	Pacific Telephone
1962	INMAN PI C	Pacific Telephone
	Shida Tokuzo	Pacific Telephone
1958	INMAN M C R	Pacific Telephone
	Shida Tokuzo	Pacific Telephone
1942	Nishimi Toshihiko Shigeno gro	Los Angeles Directory Co.
1933	Nishimi Toshihico Shigeno gro	Los Angeles Directory Co.
1929	CUMMINGS Julia maid	Los Angeles Directory Co.
	SOMERS Max baker h	Los Angeles Directory Co.
1924	Ferguson Andrew P clk h	Los Angeles Directory Co.
	h	Los Angeles Directory Co.

FINDINGS

ADJOINING PROPERTY DETAIL

The following Adjoining Property addresses were researched for this report. Detailed findings are provided for each address.

E 4TH

2488 E 4TH

Year	Uses	Source
1929	HALLNER Herman F Mary tailor	Los Angeles Directory Co.

2500 E 4TH

Year	Uses	Source
1962	Ciscos Food Products tortillas	Pacific Telephone
1942	Taira Frank Matsuko clk	Los Angeles Directory Co.
1937	Pesqueira Ralph Lupe printer	Los Angeles Directory Co.
1933	CASE Edgar A Esperanza millmn	Los Angeles Directory Co.
1929	MARTIN Vincent Theresa window trmr Clarks Dollar Store	Los Angeles Directory Co.
	MARTIN Tony	Los Angeles Directory Co.
	MARTIN Richd pntr	Los Angeles Directory Co.
	MARTIN Peter Rose	Los Angeles Directory Co.
1924	Glendenning John h	Los Angeles Directory Co.

2501 E 4TH

Year	Uses	Source
1990	SILVER MOON MKT	Pacific Bell
1986	SILVER MOON MKT	Pacific Bell
1981	SILVER MOON MKT	Pacific Telephone
1971	Silver Moon Mkt	Pacific Telephone
1962	Silver Moon Mkt	Pacific Telephone
1942	Nishimoto Kanji Mynao gro	Los Angeles Directory Co.
1937	Nishimoto Kanji Minao gro	Los Angeles Directory Co.
1933	Goldberg David M Dora gro	Los Angeles Directory Co.
1929	DALE Richd E Lillian meats	Los Angeles Directory Co.
1924	Woolf Bros Louis and Morris gro	Los Angeles Directory Co.

2503 E 4TH

Year	Uses	Source
1986	YOO BONG KYUNG	Pacific Bell
1981	PARK CHONG WHAN	Pacific Telephone

FINDINGS

Year	Uses	Source
1971	Shioda Mieko	Pacific Telephone
	Morizawa Yoshimi	Pacific Telephone
1962	Sera Jimmy	Pacific Telephone
	Kunihiro Fred M	Pacific Telephone
1942	Guajardo Chas Beatrice lab	Los Angeles Directory Co.
	Derian Jos Nartoohie auto repr	Los Angeles Directory Co.
1937	Rodriguez Frank lan	Los Angeles Directory Co.
1929	Sedoriusa Basilio Maria auto mech r	Los Angeles Directory Co.
	Sandoval Mary h	Los Angeles Directory Co.

2505 E 4TH

Year	Uses	Source
1990	CHOI HAE KUN	Pacific Bell
	MODERN BUILDER	Pacific Bell
1971	Globe Furniture Mfg Co	Pacific Telephone
1962	Lido Cabinet & Fixture Co	Pacific Telephone
	Lido Cabinet & Fixture Co	Pacific Telephone
1942	Derian Jos Nartoohie auto repr	Los Angeles Directory Co.
1937	Derian Jos Natalie auto repr	Los Angeles Directory Co.
1933	Darian Jos auto repr	Los Angeles Directory Co.
1929	Derian Jos Natalie auto repr	Los Angeles Directory Co.
1924	FIFE Floyd G garage	Los Angeles Directory Co.

2506 E 4TH

Year	Uses	Source
1962	Licon Connie	Pacific Telephone
1942	Gelgur Harry Mary	Los Angeles Directory Co.
	Gelgur Raymond	Los Angeles Directory Co.
1937	Gelgur Harry Mary driver	Los Angeles Directory Co.
1933	Gelgur Harry Mary pdlr	Los Angeles Directory Co.
1929	Rosenblum Ignatz r	Los Angeles Directory Co.
	Gilgur Harry Mary	Los Angeles Directory Co.
1924	Gelgur Harry slsmn h	Los Angeles Directory Co.
	KEMP Lyman T chef h	Los Angeles Directory Co.

2507 E 4TH

Year	Uses	Source
1990	R C PATROL	Pacific Bell
	YOSHIOKA PROTECTIVE AGCY	Pacific Bell

FINDINGS

Year	Uses	Source
1986	NAGAOKA TAKEYOSHI	Pacific Bell
1981	ROCK ISLAND MATHEMATICS SCHOOL	Pacific Telephone
1971	Ks Beauty Salon	Pacific Telephone
	Watanabe Toshishige	Pacific Telephone
1962	Kays Beauty Salon	Pacific Telephone
1942	CRUZ Jos Mary lab	Los Angeles Directory Co.
	Mariscal Ralph G Lupe printer	Los Angeles Directory Co.
1933	Babbit Rudolph tailor	Los Angeles Directory Co.
	Vera Frank tailor	Los Angeles Directory Co.
	Zimmerman Isaac Xae gro	Los Angeles Directory Co.
1929	BARTON & Barton L A & J P Barton plmbrs	Los Angeles Directory Co.
	GOLDBERG Saml sten	Los Angeles Directory Co.
	SCHWARTZ Gertrude smstrs r	Los Angeles Directory Co.
	SCHWARTZ Hyman Ida weaver h	Los Angeles Directory Co.
	SCHWARTZ Jacob r	Los Angeles Directory Co.
1924	Breun Alfd W pressmn r	Los Angeles Directory Co.
	Goldberg David gro	Los Angeles Directory Co.

2510 E 4TH

Year	Uses	Source
1962	Perdomo Delia	Pacific Telephone
	Perdomo Vicente C	Pacific Telephone
1942	Silva Jerome Elpidia slsmn	Los Angeles Directory Co.
	Vera Frank Maria tailor	Los Angeles Directory Co.
1937	Vera Frank fctywkr	Los Angeles Directory Co.
1933	CHAVEZ Alex B Eva welder	Los Angeles Directory Co.
	MONTOYA Ramona Mrs maid	Los Angeles Directory Co.
1929	Avelar Antonia Chona welder	Los Angeles Directory Co.
	BUTLER Gordon Cora cond	Los Angeles Directory Co.
1924	DYER Simon glazier h	Los Angeles Directory Co.
	Talgreen Richd moch h	Los Angeles Directory Co.

2515 E 4TH

Year	Uses	Source
1990	BEBEK FRANK	Pacific Bell
1981	BEBEK FRANK	Pacific Telephone
1971	Bebek Dorothy	Pacific Telephone
	Bebek Frank	Pacific Telephone

FINDINGS

Year	Uses	Source
1971	Gomez Salvador	Pacific Telephone
1962	Bebek Dorothy	Pacific Telephone
	Bebek Frank	Pacific Telephone
1942	BEACH John mech	Los Angeles Directory Co.
	Dragun Peter Frances	Los Angeles Directory Co.
	WHITE Travis mech	Los Angeles Directory Co.
	Dragun Kuzma cbtmkr	Los Angeles Directory Co.
1937	Kaminisky Michl carp	Los Angeles Directory Co.
	Dragun Peter Frances	Los Angeles Directory Co.
	Dragun Kuzma cbtmkr	Los Angeles Directory Co.
	BEACH John mech	Los Angeles Directory Co.
	Sokoloff Nickolas pntr	Los Angeles Directory Co.
1933	Socolow Nicholas	Los Angeles Directory Co.
	Dragun Peter fruit	Los Angeles Directory Co.
	Dragun Kuzma electn	Los Angeles Directory Co.
	BEACH John auto mech	Los Angeles Directory Co.
1929	Sokoloff Nicholas lab r	Los Angeles Directory Co.
	Rewtovich Igantz caltiakr r	Los Angeles Directory Co.
	Reutovich Egnat furn r	Los Angeles Directory Co.
	Kuzma Dragun lab	Los Angeles Directory Co.
	Kininsky Michl carp LAG & ECorp	Los Angeles Directory Co.
	KAMINSKY Michl	Los Angeles Directory Co.
	Dragun Kuzma cabt mkr	Los Angeles Directory Co.
1924	Bruneau Hermes mech h	Los Angeles Directory Co.
	FOSTER Bud mech r	Los Angeles Directory Co.
	Hamel Albt mech h	Los Angeles Directory Co.

2516 E 4TH

Year	Uses	Source
1962	Ortiz Medardo	Pacific Telephone
	Ortiz Aurora	Pacific Telephone
	Kolmnson & Lee Sheet Metal Works	Pacific Telephone
1942	Prince Benj Eva	Los Angeles Directory Co.
1933	BROWN Geo W Sadie chauf	Los Angeles Directory Co.
1924	Braverman Philip h	Los Angeles Directory Co.
	PHILLIPS Henry slsmn h	Los Angeles Directory Co.

FINDINGS

2518 E 4TH

Year	Uses	Source
1962	Takagaki Yoshiko	Pacific Telephone
1942	PERRIN David Marian fctywkr	Los Angeles Directory Co.

2519 E 4TH

Year	Uses	Source
1990	ALBERT S GROCERY	Pacific Bell
1971	Herald Examiner L A Circulation Dirs	Pacific Telephone
1962	Herald Examiner L A Circulation Distribution Offices	Pacific Telephone
1942	ELLIS Saml O Antoinette gro	Los Angeles Directory Co.
1929	GOLDBERG David Dora gro	Los Angeles Directory Co.

2520 E 4TH

Year	Uses	Source
1962	Nancys Cafe	Pacific Telephone
1942	BROWN Abr soft drinks	Los Angeles Directory Co.
1933	MC CONNELL Leslie H shoe repr	Los Angeles Directory Co.
1929	Mc CONNELL Leslie shoe rep	Los Angeles Directory Co.
1924	Furra Passer shoe repr	Los Angeles Directory Co.

2521 E 4TH

Year	Uses	Source
1990	YEN HONG CAFE	Pacific Bell
1986	YEN HONG CAFE	Pacific Bell
1981	YEN HONG CAFE	Pacific Telephone
1971	Yen Hong Cafe	Pacific Telephone
1962	Yen Hong Cafe	Pacific Telephone
1942	LEE Albt Jessie C restr	Los Angeles Directory Co.
1937	LEE Albt Q Jessie reste	Los Angeles Directory Co.

2522 E 4TH

Year	Uses	Source
1962	Mariscal Printng	Pacific Telephone
1937	CHAPMAN & Hill Eug Chapman G A Hill ice cream mfrs	Los Angeles Directory Co.
1929	Brill Jacob Anna confr	Los Angeles Directory Co.

2524 E 4TH

Year	Uses	Source
1962	Matsuura Geo T	Pacific Telephone

Year	Uses	Source
1942	Hattori Seikichi Tora	Los Angeles Directory Co.
1937	Hattori Walter S Toshiko clk	Los Angeles Directory Co.
1933	Hattori S	Los Angeles Directory Co.
1929	Hattori Sieketsu Tora	Los Angeles Directory Co.
1924	r	Los Angeles Directory Co.

2507 1/2 E 4TH

Year	Uses	Source
1981	TAMANE MASAHIKO	Pacific Telephone

2509 1/2 E 4TH

Year	Uses	Source
1990	KATO N	Pacific Bell

2509 3/4 E 4TH

Year	Uses	Source
1990	NAKAMURA SHIMEJI	Pacific Bell

2511 1/2 E 4TH

Year	Uses	Source
1990	HETZLER IRENE MRS	Pacific Bell

2511 3/4 E 4TH

Year	Uses	Source
1986	LOPEZ FRANCISCO E	Pacific Bell
1981	LOPEZ FRANCISCO E	Pacific Telephone

2513 1/2 E 4TH

Year	Uses	Source
1986	HERNANDEZ ANTONIA C	Pacific Bell

2515 1/2 E 4TH

Year	Uses	Source
1981	VUKOLEVICH MILO	Pacific Telephone

E 4TH ST

2500 E 4TH ST

Year	Uses	Source
1967	Rosales Fernando M La Fortaleza Tortilla Factory	Pacific Telephone
	Rosales Products	Pacific Telephone

Year	Uses	Source
1967	LA FORTALEZA TORTILLA FACTORY	Pacific Telephone
1958	Ciscos Food Products tortillas	Pacific Telephone
1954	CAMPBELL CLAYTON C MRS	R. L. Polk & Co.

2506 E 4TH ST

Year	Uses	Source
1958	Ortiz Aurora	Pacific Telephone

2510 E 4TH ST

Year	Uses	Source
1967	Arispe Lupe Vargas	Pacific Telephone
1958	Perdomo Vicente C	Pacific Telephone
1954	ARNOLD J H	R. L. Polk & Co.
1950	ARNOLD J H	Pacific Telephone

2516 E 4TH ST

Year	Uses	Source
1954	HUGHES M W CHIROPTR	R. L. Polk & Co.
1950	HUGHES M W CHIROPTR	Pacific Telephone

MATHEWS S

403 MATHEWS S

Year	Uses	Source
2000	HAMBARIAN Robert	Haines & Company

409 MATHEWS S

Year	Uses	Source
2000	OCHOA Josephine	Haines & Company

412 MATHEWS S

Year	Uses	Source
2000	XXXX	Haines & Company

413 MATHEWS S

Year	Uses	Source
2000	TOVAR Celia	Haines & Company

414 MATHEWS S

Year	Uses	Source
2000	XXXX	Haines & Company

FINDINGS

415 MATHEWS S

Year	Uses	Source
2000	PENA Ignacio	Haines & Company

417 MATHEWS S

Year	Uses	Source
2000	XXXX	Haines & Company

420 MATHEWS S

Year	Uses	Source
2000	XXXX	Haines & Company

421 MATHEWS S

Year	Uses	Source
2000	HAMBARIAN Robert	Haines & Company

425 MATHEWS S

Year	Uses	Source
2000	HERNANDEZ Jesus	Haines & Company

429 MATHEWS S

Year	Uses	Source
2000	HAMBARIAN Robt	Haines & Company

431 MATHEWS S

Year	Uses	Source
2000	AGUILAR Pascual	Haines & Company
	VASQUEZ Margarito	Haines & Company

432 MATHEWS S

Year	Uses	Source
2000	XXXX	Haines & Company

433 MATHEWS S

Year	Uses	Source
2000	MATINDELCAMPO Ma Gdaipe	Haines & Company

435 MATHEWS S

Year	Uses	Source
2000	TORRES Mary	Haines & Company

FINDINGS

437 MATHEWS S

Year	Uses	Source
2000	XXXX	Haines & Company

439 MATHEWS S

Year	Uses	Source
2000	LOPEZ Rosendo	Haines & Company

445 MATHEWS S

Year	Uses	Source
2000	RAYA Richard	Haines & Company

447 MATHEWS S

Year	Uses	Source
2000	XXXX	Haines & Company

448 MATHEWS S

Year	Uses	Source
2000	XXXX	Haines & Company

451 MATHEWS S

Year	Uses	Source
2000	PEREZ Araceli	Haines & Company

453 MATHEWS S

Year	Uses	Source
2000	FUENTES Jesus	Haines & Company

455 MATHEWS S

Year	Uses	Source
2000	a 1/2 TERRAZAS Manuela	Haines & Company
	BARAJAS Filiberto C	Haines & Company

501 MATHEWS S

Year	Uses	Source
2000	BESERRA Salvador	Haines & Company
	DAVILA Luis	Haines & Company

505 MATHEWS S

Year	Uses	Source
2000	CHAVEZ Pablo	Haines & Company

FINDINGS

509 MATHEWS S

Year	Uses	Source
2000	RAMIREZ Raymond	Haines & Company

513 MATHEWS S

Year	Uses	Source
2000	DORADO Alice	Haines & Company

MATHEWS ST S

408 MATHEWS ST S

Year	Uses	Source
1951	S Mathws Miyoshi Henry r	Pacific Telephone & Telegraph Co.

409 MATHEWS ST S

Year	Uses	Source
1951	S Mathews Gutierrez Maria r	Pacific Telephone & Telegraph Co.

410 MATHEWS ST S

Year	Uses	Source
1951	S Mathews Miyagawa Isami r	Pacific Telephone & Telegraph Co.

412 MATHEWS ST S

Year	Uses	Source
1951	S Mathews Endo Teruo S r	Pacific Telephone & Telegraph Co.

414 MATHEWS ST S

Year	Uses	Source
1951	S Mathews Matsumoto T r	Pacific Telephone & Telegraph Co.

417 MATHEWS ST S

Year	Uses	Source
1951	S Mathews Hirakawa Tony	Pacific Telephone & Telegraph Co.

420 MATHEWS ST S

Year	Uses	Source
1951	S Mathws Hamai Masaru	Pacific Telephone & Telegraph Co.
	S Mathws Sakamoto Jane K r	Pacific Telephone & Telegraph Co.

421 MATHEWS ST S

Year	Uses	Source
1951	S Mathews Duncan Chas R r	Pacific Telephone & Telegraph Co.

FINDINGS

422 MATHEWS ST S

Year	Uses	Source
1951	S Mathews Agopian John r	Pacific Telephone & Telegraph Co.

424 MATHEWS ST S

Year	Uses	Source
1951	S Mathws Ruiz Clotilde r	Pacific Telephone & Telegraph Co.

425 MATHEWS ST S

Year	Uses	Source
1951	S Mathews Valencia Jose Jesus r	Pacific Telephone & Telegraph Co.

429 MATHEWS ST S

Year	Uses	Source
1951	S Mathews Hambarian Sam K r	Pacific Telephone & Telegraph Co.

431 MATHEWS ST S

Year	Uses	Source
1951	S Mathews Rosenstein Mary r	Pacific Telephone & Telegraph Co.

432 MATHEWS ST S

Year	Uses	Source
1951	S Mathews Cerlek Paul I r	Pacific Telephone & Telegraph Co.

433 MATHEWS ST S

Year	Uses	Source
1951	S Mathews Yaller David r	Pacific Telephone & Telegraph Co.

435 MATHEWS ST S

Year	Uses	Source
1951	S Mathews Simonian Geo P r	Pacific Telephone & Telegraph Co.

436 MATHEWS ST S

Year	Uses	Source
1951	S Mathews Masnyak Madeline r	Pacific Telephone & Telegraph Co.

439 MATHEWS ST S

Year	Uses	Source
1951	S Mathews Geck Rudolph r	Pacific Telephone & Telegraph Co.
	S Mathews Connelly Geo C r	Pacific Telephone & Telegraph Co.

FINDINGS

440 MATHEWS ST S

Year	Uses	Source
1951	S Mathws Inouye Tom r	Pacific Telephone & Telegraph Co.

441 MATHEWS ST S

Year	Uses	Source
1951	S Mathews Russell Dorothy R Mrs r	Pacific Telephone & Telegraph Co.

444 MATHEWS ST S

Year	Uses	Source
1951	S Mathws Obregon Mariano R r	Pacific Telephone & Telegraph Co.

445 MATHEWS ST S

Year	Uses	Source
1951	S Mathws Stone Wm r	Pacific Telephone & Telegraph Co.

447 MATHEWS ST S

Year	Uses	Source
1951	S Mathews Hessell Sam r	Pacific Telephone & Telegraph Co.

448 MATHEWS ST S

Year	Uses	Source
1951	S Mathews Pulido Dolores Mrs r	Pacific Telephone & Telegraph Co.
	S Mathws Ulloa Alejandro J r	Pacific Telephone & Telegraph Co.

449 MATHEWS ST S

Year	Uses	Source
1951	S Mathews Watnick Herbert r	Pacific Telephone & Telegraph Co.
	S Mathws Weltman Sam r	Pacific Telephone & Telegraph Co.

451 MATHEWS ST S

Year	Uses	Source
1951	S Mathws Garcia Gloria r	Pacific Telephone & Telegraph Co.
	S Mathews Kuderman Julie r	Pacific Telephone & Telegraph Co.
	S Mathews Espinoza Placido r	Pacific Telephone & Telegraph Co.

452 MATHEWS ST S

Year	Uses	Source
1951	S Mathews Gordon Gerald r	Pacific Telephone & Telegraph Co.

FINDINGS

453 MATHEWS ST S

Year	Uses	Source
1951	S Mathews Sternberg Harry r	Pacific Telephone & Telegraph Co.
	S Mathews Marcus M Mrs r	Pacific Telephone & Telegraph Co.

502 MATHEWS ST S

Year	Uses	Source
1951	S Mathews Gomez Corrine Mrs r	Pacific Telephone & Telegraph Co.

504 MATHEWS ST S

Year	Uses	Source
1951	S Mathews Cardenas Ralph r	Pacific Telephone & Telegraph Co.

505 MATHEWS ST S

Year	Uses	Source
1951	S Mathews Samarin Wm J r	Pacific Telephone & Telegraph Co.

506 MATHEWS ST S

Year	Uses	Source
1951	S Mathws Pacheco Salvador r	Pacific Telephone & Telegraph Co.

508 MATHEWS ST S

Year	Uses	Source
1951	S Mathews Lopez Aurora r	Pacific Telephone & Telegraph Co.

509 MATHEWS ST S

Year	Uses	Source
1951	S Mathews Ramirez Raymond r	Pacific Telephone & Telegraph Co.

512 MATHEWS ST S

Year	Uses	Source
1951	S Mathews Vargas Lupe r	Pacific Telephone & Telegraph Co.

513 MATHEWS ST S

Year	Uses	Source
1951	S Mathews Chavira Aurelia C r	Pacific Telephone & Telegraph Co.

S MATHEWS

409 S MATHEWS

Year	Uses	Source
1990	SERRANO CARLOS	Pacific Bell

FINDINGS

413 S MATHEWS

Year	Uses	Source
1990	TOVAR ROSENDO	Pacific Bell

415 S MATHEWS

Year	Uses	Source
1990	CARDENAS ARACELI	Pacific Bell

425 S MATHEWS

Year	Uses	Source
1990	OCEGUEDA ELISA	Pacific Bell

429 S MATHEWS

Year	Uses	Source
1990	HAMBARIAN ROBT	Pacific Bell

431 S MATHEWS

Year	Uses	Source
1986	GONZALES ESTEVAN	Pacific Bell
1981	VALDEZ ROSALIE	Pacific Telephone

437 S MATHEWS

Year	Uses	Source
1990	RAMIREZ ALBERT	Pacific Bell

439 S MATHEWS

Year	Uses	Source
1990	LUGO TIMOTHY JAMES	Pacific Bell

441 S MATHEWS

Year	Uses	Source
1986	LOPEZ LAZARO	Pacific Bell

445 S MATHEWS

Year	Uses	Source
1990	HERNANDEZ YOLANDA L	Pacific Bell

449 S MATHEWS

Year	Uses	Source
1924	NORTON Mark mech h	Los Angeles Directory Co.

FINDINGS

453 S MATHEWS

Year	Uses	Source
1924	WOLF Herman B driver h	Los Angeles Directory Co.
	SCOTT Gerald E driver r	Los Angeles Directory Co.

455 S MATHEWS

Year	Uses	Source
1990	BARAJAS FILIBERTO C	Pacific Bell

505 S MATHEWS

Year	Uses	Source
1986	MOJICA MARIA THERESA	Pacific Bell

509 S MATHEWS

Year	Uses	Source
1990	SIERRA JUAN FELIX	Pacific Bell

439 1/2 S MATHEWS

Year	Uses	Source
1986	CONNELLY GEO C MRS	Pacific Bell
1981	CONNELLY GEO C MRS	Pacific Telephone

449 1/4 S MATHEWS

Year	Uses	Source
1986	ORTIZ MARIA	Pacific Bell

451 1/4 S MATHEWS

Year	Uses	Source
1981	RIVERA MANUEL Q	Pacific Telephone

453 1/2 S MATHEWS

Year	Uses	Source
1986	REYNOSO JOSE JESUS	Pacific Bell

455 1/2 S MATHEWS

Year	Uses	Source
1990	TERRAZAS MANUELA	Pacific Bell

FINDINGS

S MATHEWS ST

400 S MATHEWS ST

Year	Uses	Source
1937	Hunt Wm A auto repr	Los Angeles Directory Co.

403 S MATHEWS ST

Year	Uses	Source
1995	MANCILLA JOSE	Pacific Bell
1958	Murase M Dr	Pacific Telephone
1942	Shisamune Shizuo Yoneko bkpr	Los Angeles Directory Co.
1937	Dobson Hazel Mrs	Los Angeles Directory Co.
1933	Stroll Hiram P Daisy clk	Los Angeles Directory Co.
1929	Strole Hiram Daisy clk h	Los Angeles Directory Co.
	Dent Mary wid Chas	Los Angeles Directory Co.
1924	Strole Hiram P clk h	Los Angeles Directory Co.
	Dent Chas r	Los Angeles Directory Co.

407 S MATHEWS ST

Year	Uses	Source
1995	LESTER ENRIQUE	Pacific Bell

408 S MATHEWS ST

Year	Uses	Source
1958	Isobe Jane	Pacific Telephone

409 S MATHEWS ST

Year	Uses	Source
2006	OCHOAWilliam	Haines Company, Inc.
1962	Ochoa Wm E	Pacific Telephone
1958	Ochoa Wm E	Pacific Telephone
1942	CARILLO Rachel Mrs dancer	Los Angeles Directory Co.
1937	Goldberg Geo Frances cigar mkr	Los Angeles Directory Co.
1933	Hedge Sadie wid W S	Los Angeles Directory Co.
	Hedge Dorothy beauty opr	Los Angeles Directory Co.
1924	Reral Ella wid A L r	Los Angeles Directory Co.
	Fitzgerald David slsmn h	Los Angeles Directory Co.

410 S MATHEWS ST

Year	Uses	Source
1958	Rodriguez Eligio	Pacific Telephone

FINDINGS

Year	Uses	Source
1942	GRIMES Wilford A Lune M butcher	Los Angeles Directory Co.
1924	Mulligan John carp h	Los Angeles Directory Co.

412 S MATHEWS ST

Year	Uses	Source
1962	Masuda Frank	Pacific Telephone
1958	Masuda Frank	Pacific Telephone
	Masuda Toshiko	Pacific Telephone
1942	i Shima Geo Shiguko slsmn	Los Angeles Directory Co.
1933	Kato R clk	Los Angeles Directory Co.
1929	Husted Clara Mrs	Los Angeles Directory Co.
	Hedge J N depy sheriff	Los Angeles Directory Co.
1924	DOUGHERTY John J carp h	Los Angeles Directory Co.
	Livingston Bernard clk r	Los Angeles Directory Co.

413 S MATHEWS ST

Year	Uses	Source
2006	TOVARCetia	Haines Company, Inc.
1976	Tovar Rosendo	Pacific Telephone
1942	Espinosa Refugio wid Ralph	Los Angeles Directory Co.
1937	HERNANDEZ Jos Beatrice coppersmith	Los Angeles Directory Co.
1933	WILSON Margt wid Andw	Los Angeles Directory Co.
	WILSON Mary	Los Angeles Directory Co.
1929	WINTER Alice smstrs r	Los Angeles Directory Co.
	MARTIN Lee Bertha	Los Angeles Directory Co.
	Beard Cecil clk	Los Angeles Directory Co.
1924	BOLEN John driver h	Los Angeles Directory Co.

414 S MATHEWS ST

Year	Uses	Source
1967	Matsumoto T paintng	Pacific Telephone
1962	Matsumoto T paintng	Pacific Telephone
1958	Matsumoto T paintng	Pacific Telephone
1942	Acutanza Servando A Josefa barber	Los Angeles Directory Co.
	Webelhardt E porter Pullman Co	Los Angeles Directory Co.
1937	Husted Wayne	Los Angeles Directory Co.
	Geigler Dorothy Mrs	Los Angeles Directory Co.
	Hedge Clara E Mrs confr	Los Angeles Directory Co.
	Hedge Sadie Mrs	Los Angeles Directory Co.

FINDINGS

Year	Uses	Source
1933	Hedge John N Clara P dep sheriff	Los Angeles Directory Co.
1929	MATTINGLY John W Emma E firemn LAFD	Los Angeles Directory Co.
1924	Mattingly Agnes steno r	Los Angeles Directory Co.
	Mattingly John W firemn L A F D h	Los Angeles Directory Co.

415 S MATHEWS ST

Year	Uses	Source
2006	No Current Listing	Haines Company, Inc.
1942	ROMAN Thos S Lilia E welder	Los Angeles Directory Co.
1937	WAGNER Geo Concha clk	Los Angeles Directory Co.
1933	Arias Henry lab	Los Angeles Directory Co.
1924	JAMES Clarence L truck driver r	Los Angeles Directory Co.

417 S MATHEWS ST

Year	Uses	Source
2006	ROMERO Oralia E	Haines Company, Inc.
	i/2 DELEON Yohana	Haines Company, Inc.
1976	Martinez Joaquin	Pacific Telephone
	Olvera Frank	Pacific Telephone
1967	Arce Lupe	Pacific Telephone
	Mazzi Savino Sam	Pacific Telephone
1958	Olvera Frank	Pacific Telephone
1942	Koinatsuka Mickey M typist DMV	Los Angeles Directory Co.
	Komatsuka Joy Uta ins agt	Los Angeles Directory Co.
	Nakamura H Chiyo clk	Los Angeles Directory Co.
1937	Alarcon Carmen wid Frank	Los Angeles Directory Co.
	Komatsuka Joy S Utako clk	Los Angeles Directory Co.
1933	Schulman Saml Annie	Los Angeles Directory Co.
	Valdez Martin Irene meat ctr	Los Angeles Directory Co.
1929	Rummerfield Roy A May br mgr J B Ransom Corp h	Los Angeles Directory Co.
	Valencia Aleck Mary h	Los Angeles Directory Co.
1924	h	Los Angeles Directory Co.
	Rummerfield Roy E clk h	Los Angeles Directory Co.

420 S MATHEWS ST

Year	Uses	Source
1958	Iguchi Chiyeko Mrs	Pacific Telephone
	Maeda Dennis	Pacific Telephone

FINDINGS

Year	Uses	Source
1942	JOHNSON Wm P Lola mech	Los Angeles Directory Co.
1937	FERGUSON Fred Ida carp	Los Angeles Directory Co.
1933	FERGUSON Fred Ida lab	Los Angeles Directory Co.
1929	FERGUSON Fred Ida driller	Los Angeles Directory Co.
1924	FERGUSON Fred welder h	Los Angeles Directory Co.

421 S MATHEWS ST

Year	Uses	Source
2006	LOPEZ Rose	Haines Company, Inc.
	HAMBARIAN Robert	Haines Company, Inc.
1962	Duncan Chas R	Pacific Telephone
1958	Duncan Chas R	Pacific Telephone
1942	DUNCAN Chas R emp UPRR Co	Los Angeles Directory Co.
	DUNCAN Mabel A wid N G	Los Angeles Directory Co.
1937	DUNCAN Mable A wid N G	Los Angeles Directory Co.
	DUNCAN Chas R clk	Los Angeles Directory Co.
1933	Duncan Chas R oil inspr UP System	Los Angeles Directory Co.
	Schneiderman Harry lab	Los Angeles Directory Co.
1929	Duncan Chas R clk	Los Angeles Directory Co.
1924	DUNCAN Mabel A Mrs clk h	Los Angeles Directory Co.

422 S MATHEWS ST

Year	Uses	Source
1958	Hamai Masaru	Pacific Telephone
1942	Fukushima John M Sayako M slsmn	Los Angeles Directory Co.
1937	Clendenning John Allie	Los Angeles Directory Co.
1933	OLIVER Wm lab	Los Angeles Directory Co.
	Glendening John Alley	Los Angeles Directory Co.
1929	Glendenning John Allie	Los Angeles Directory Co.
1924	Schleicher Fred L clk h	Los Angeles Directory Co.

424 S MATHEWS ST

Year	Uses	Source
1967	Prado Salvador	Pacific Telephone
1965	THOMPSON ERNEST W	Pacific Telephone
1942	RUIZ John mech	Los Angeles Directory Co.
	RUIZ Felix V Clotilde E	Los Angeles Directory Co.
	RUIZ Juan shtmtlwkr	Los Angeles Directory Co.
1937	RUIZ Felix Clothilda	Los Angeles Directory Co.

Year	Uses	Source
1933	NOBLE Anna Mrs bkpr Globe Bottling Wks	Los Angeles Directory Co.
	NOBLE Annie Mrs	Los Angeles Directory Co.
1929	MENDOZA Mary S slsldy	Los Angeles Directory Co.
1924	Nobel Harry G clk h	Los Angeles Directory Co.

425 S MATHEWS ST

Year	Uses	Source
2006	o IBARRASandra	Haines Company, Inc.
1976	Ullman Henry	Pacific Telephone
1958	Valencia Maria	Pacific Telephone
1942	Nishimoto Kanji Mynao gro	Los Angeles Directory Co.
	Nishimoto Dick fruits	Los Angeles Directory Co.
1933	Casto Jas W pntr	Los Angeles Directory Co.
	Casto Jas W jr lab	Los Angeles Directory Co.
	GARRETT Hircle L Florence chauf	Los Angeles Directory Co.
1929	Casto Jas W	Los Angeles Directory Co.
1924	Casto Jas W painter h	Los Angeles Directory Co.

426 S MATHEWS ST

Year	Uses	Source
1962	PETTITT JACK A	Pacific Telephone

427 S MATHEWS ST

Year	Uses	Source
1942	Silverstein Louis M whol mens furngs	Los Angeles Directory Co.

428 S MATHEWS ST

Year	Uses	Source
1965	DARLING F	Pacific Telephone
1962	DARLING OF	Pacific Telephone
1958	DARLING O F R	Pacific Telephone

429 S MATHEWS ST

Year	Uses	Source
2006	HAMBARIAN Robt	Haines Company, Inc.
1967	Hambarian Robt	Pacific Telephone
1962	Hambarlan Robt	Pacific Telephone
1958	Hambarian Robt	Pacific Telephone
1942	Hambacher Saml K Mary jan	Los Angeles Directory Co.

FINDINGS

Year	Uses	Source
1933	Lawhon Edw O Eliz carrier PO	Los Angeles Directory Co.
1924	Lawhon Edwd O carrier h	Los Angeles Directory Co.

430 S MATHEWS ST

Year	Uses	Source
1967	Cerlek Paul I	Pacific Telephone
1962	Cerlek Paul I	Pacific Telephone
1958	Cerlek Paul I	Pacific Telephone
1942	Despot Steven steelwkr	Los Angeles Directory Co.
	Cerlek Paul Lillian cement fnshr	Los Angeles Directory Co.
1937	Cerlek Paul Lillian cement fnshr	Los Angeles Directory Co.
	Despot Steve steelwkr	Los Angeles Directory Co.
1933	BARTON Fannie D wid L W	Los Angeles Directory Co.
	BARTON J P Burke plmbr	Los Angeles Directory Co.
1929	BARTON Fannie D	Los Angeles Directory Co.
	BARTON Burke J P Barton & Barton	Los Angeles Directory Co.
	BARTON Lake A Barton & Barton	Los Angeles Directory Co.
1924	BARTON Burke P plumber r	Los Angeles Directory Co.
	BARTON Fannie wid L W h	Los Angeles Directory Co.
	BARTON J P Burke Barton & Barton r	Los Angeles Directory Co.
	BARTON Luke A Barton & Barton h	Los Angeles Directory Co.

431 S MATHEWS ST

Year	Uses	Source
1976	Valdez Rosalie	Pacific Telephone
1958	Camunas Rafael A	Pacific Telephone
1942	Yamamoto Tetsuo Sachiko slsmn	Los Angeles Directory Co.

432 S MATHEWS ST

Year	Uses	Source
1958	Fujishige Fujito	Pacific Telephone
1942	Kochi Susumu confy mfr	Los Angeles Directory Co.
	Kochi Yosbisuke	Los Angeles Directory Co.
1937	Nishimoto Kanji Minao gro	Los Angeles Directory Co.
1933	Turnbull Leonard A Carmen factywkr	Los Angeles Directory Co.
	Turnbull Roy A lab	Los Angeles Directory Co.
1929	TURNBULL Roy clk F & MN Bank r	Los Angeles Directory Co.
	TURNBULL Leonardo A Carmelita A slsmn Angelos Coffee Co r	Los Angeles Directory Co.

FINDINGS

433 S MATHEWS ST

Year	Uses	Source
2006	Maria G	Haines Company, Inc.
	MARTINDELCAMPO	Haines Company, Inc.
1976	Jacome Angel E	Pacific Telephone
1967	Sandoval Concepcion	Pacific Telephone
1962	Sandoval Raquel	Pacific Telephone
1958	Sandoval Raquel	Pacific Telephone
1942	Harutuian Eznik Helen scavenger	Los Angeles Directory Co.
1937	Harutunian Eznik Helen lab	Los Angeles Directory Co.
1933	Bloomfield Wm E formn Co Forestry Dept	Los Angeles Directory Co.

434 S MATHEWS ST

Year	Uses	Source
1942	Pattick Andw N Emma lab	Los Angeles Directory Co.
1929	Ernest G Tess slsmn	Los Angeles Directory Co.
	Abr Anna slsmn	Los Angeles Directory Co.

435 S MATHEWS ST

Year	Uses	Source
1967	Simonian Geo	Pacific Telephone
1958	Simonian Geo P	Pacific Telephone
1942	Simonian Evo Nazik lab	Los Angeles Directory Co.
	Simonian Geo Margt scavenger	Los Angeles Directory Co.
	SIMONIAN Mary mach opr	Los Angeles Directory Co.
1937	Simonian Ava Nazik gdnr	Los Angeles Directory Co.
	Simonian Geo Mary lab	Los Angeles Directory Co.
1933	BROWN Gertrude E sten	Los Angeles Directory Co.
	BROWN Wm E Margt M lab	Los Angeles Directory Co.
1929	Bloonmfield Edith wid Geo	Los Angeles Directory Co.
	Bloonmfield W E	Los Angeles Directory Co.
1924	Broomfield Geo E h	Los Angeles Directory Co.

436 S MATHEWS ST

Year	Uses	Source
1967	Despot Steve	Pacific Telephone
1942	Ishibashi Wm	Los Angeles Directory Co.
1937	Ishibashi Sokicha Suzuko rancher	Los Angeles Directory Co.
1933	BARTON Chas O Hazel K electn	Los Angeles Directory Co.
1929	BROWN Mary E	Los Angeles Directory Co.

FINDINGS

Year	Uses	Source
1929	BARTON Chas O Hazel	Los Angeles Directory Co.
1924	BARTON Chas O electr h	Los Angeles Directory Co.

437 S MATHEWS ST

Year	Uses	Source
1976	Castellanos Jerry M	Pacific Telephone
	Knobler Philip	Pacific Telephone
1971	Fernandez Joe	Pacific Telephone

439 S MATHEWS ST

Year	Uses	Source
1976	Connelly Geo C Mrs	Pacific Telephone
1967	Connelly Geo C Mrs	Pacific Telephone
1962	Connelly Geo C Mrs	Pacific Telephone
1958	Connelly Geo C Mrs	Pacific Telephone
	Geck Mamie	Pacific Telephone
1942	Sasaki Kinu wid Hiro	Los Angeles Directory Co.
	Sasaki Hiro fruit	Los Angeles Directory Co.
	Imada Kohache gdnr	Los Angeles Directory Co.
1937	Stoica Eli jr	Los Angeles Directory Co.
	Stoica Eli Mary custodian Ed of Educ	Los Angeles Directory Co.
	Sasaki Kinu Mrs fruits	Los Angeles Directory Co.
1933	POPE John Mary cook	Los Angeles Directory Co.
	Brahmst Louise H tel opr	Los Angeles Directory Co.
1924	KOCH Edwd estimator A G S Peterson h	Los Angeles Directory Co.

440 S MATHEWS ST

Year	Uses	Source
1991	Karton Harold& Shirtey	Pacific Bell
	KARTON HAROLD& SHIRTEY	Pacific Bell
1958	Inouye Tom	Pacific Telephone
1942	Peich Geo jr	Los Angeles Directory Co.
	Peich Geo Mary lab	Los Angeles Directory Co.
	MATHEWSON Myrtle T bkpr City Controller	Los Angeles Directory Co.
1937	Peich Geo Mary	Los Angeles Directory Co.
1933	Peich Geo Mary lab	Los Angeles Directory Co.
1929	Peich Geo Matilda lab	Los Angeles Directory Co.
	Todin Tony lab r	Los Angeles Directory Co.
1924	Paich Geo lab h	Los Angeles Directory Co.

FINDINGS

441 S MATHEWS ST

Year	Uses	Source
2006	MARINMada E 323 7 B	Haines Company, Inc.
1967	Russell Dorothy R Mrs	Pacific Telephone
1962	Russell Dorothy R Mrs	Pacific Telephone
1958	Russell Dorothy R Mrs	Pacific Telephone
1942	Nogawa Harry Mary importer	Los Angeles Directory Co.
1933	Zannis Michl Joan restr	Los Angeles Directory Co.

442 S MATHEWS ST

Year	Uses	Source
1970	CHRISTIANSEN CHRIS	Pacific Telephone
1958	SAVIN FANNIE MRS	Pacific Telephone

444 S MATHEWS ST

Year	Uses	Source
1958	Obregon Mariano R	Pacific Telephone
1942	Yokio Suketaro Suma restr	Los Angeles Directory Co.
1937	Yokoi Skedjuro Sumi factyw Kr	Los Angeles Directory Co.
1933	Romo Cornelio Geronima lab	Los Angeles Directory Co.
	Romo Raoul electn	Los Angeles Directory Co.
1924	Pedroza Frank stone moldr r	Los Angeles Directory Co.

445 S MATHEWS ST

Year	Uses	Source
2006	GUTIERREZ Claudia	Haines Company, Inc.
1967	Aguayo Margarita	Pacific Telephone
	Felix Jose	Pacific Telephone
	Parra Jose	Pacific Telephone
1958	Baca Alfred B	Pacific Telephone
1937	Kartz Aaron kitchenwkr	Los Angeles Directory Co.
	Fizdale Jack Lillie batteries	Los Angeles Directory Co.
1933	Crawford Alf B Mary carp	Los Angeles Directory Co.
	CRAWFORD Lillian fctywkr	Los Angeles Directory Co.
	Lloyd Bula F sten	Los Angeles Directory Co.
	LLOYD Joy D Leeta pntr	Los Angeles Directory Co.
1929	Lloyd Opie Kath	Los Angeles Directory Co.
1924	BECKMAN Ida Mrs seam r	Los Angeles Directory Co.
	Guiler J Alex bkpr Poultry Producers of Sou Cal h	Los Angeles Directory Co.

FINDINGS

446 S MATHEWS ST

Year	Uses	Source
1965	PINK PAUL	Pacific Telephone

447 S MATHEWS ST

Year	Uses	Source
2006	BARAJAS Filiberto C	Haines Company, Inc.
1976	Morales Ray R	Pacific Telephone
1967	Rebeles Isabel	Pacific Telephone
1958	Galban Frances	Pacific Telephone
1937	Bischowsky Pacob Bessie pntr	Los Angeles Directory Co.
1933	WILSON Herbt B June slsmn	Los Angeles Directory Co.
	WILSON Margt tel opr	Los Angeles Directory Co.
1929	Alm Antony	Los Angeles Directory Co.
	Alm Christine	Los Angeles Directory Co.
	Alm Hannah	Los Angeles Directory Co.
1924	Ervin Jas S student r	Los Angeles Directory Co.
	Ervin Linden E student r	Los Angeles Directory Co.
	Ervin L Watson h	Los Angeles Directory Co.

448 S MATHEWS ST

Year	Uses	Source
1962	RISICIN E	Pacific Telephone
1942	LOPEZ Ynes	Los Angeles Directory Co.
	Nishikawa Yonekchi Sawaye	Los Angeles Directory Co.
1937	Lopez Barbara Mrs	Los Angeles Directory Co.
	Nishikawa Y gro	Los Angeles Directory Co.
1929	FERNANDEZ Cesar Luz glazier	Los Angeles Directory Co.
	Lefkofsky Jos	Los Angeles Directory Co.
	SCHULTZ Eliz r	Los Angeles Directory Co.
1924	JOHNSON Wm C janitor h	Los Angeles Directory Co.
	Riggins Homer E jeweler r	Los Angeles Directory Co.
	h	Los Angeles Directory Co.

449 S MATHEWS ST

Year	Uses	Source
2006	VARGASCesar	Haines Company, Inc.
	V CRUZBemnanto	Haines Company, Inc.
1976	Carrera C	Pacific Telephone
1958	Fernandez Margaret	Pacific Telephone

FINDINGS

Year	Uses	Source
1958	Chavez Aurora	Pacific Telephone
1942	Steiert Harry L Jessie mach	Los Angeles Directory Co.
	Mathewson Harley P Myrtle T lawyer	Los Angeles Directory Co.
1937	DAVIS Herman auto mech	Los Angeles Directory Co.
	LEVINE Anne F A slswn	Los Angeles Directory Co.
1933	MARSHALL Mary Mrs sten	Los Angeles Directory Co.
	MORRIS Edw J Bridget lab	Los Angeles Directory Co.
	MORRIS Emanuel	Los Angeles Directory Co.
1929	KELLY Jas H slsmn Industrial Supp Co	Los Angeles Directory Co.
1924	Alm Anton plumber h	Los Angeles Directory Co.
	Alm Christina wid J r	Los Angeles Directory Co.
	Alm Hannah r	Los Angeles Directory Co.
	Alm Robt T clk r	Los Angeles Directory Co.
	COLLINS Iva A cashr Fifth Street Store r	Los Angeles Directory Co.

451 S MATHEWS ST

Year	Uses	Source
1976	Rivera Manuel Q	Pacific Telephone
1967	Falcon Lucille	Pacific Telephone
1958	Garcia Thos	Pacific Telephone
1942	JENNINGS Oliver E Jean M driver	Los Angeles Directory Co.
	JENNINGS O E Jean M driver	Los Angeles Directory Co.
1937	Zimmeroff Julius tailor	Los Angeles Directory Co.
	OMalley Edna Mrs	Los Angeles Directory Co.
1933	Brush Marcella Mrs apt hse mgr	Los Angeles Directory Co.
	JONES Walter W Edna meat ctr	Los Angeles Directory Co.
	Riggins Leander C Edna barber	Los Angeles Directory Co.
	Savely Wilbur A May slsmn Bulocks	Los Angeles Directory Co.
1929	Billeb Aug driver	Los Angeles Directory Co.
	HAYES Olin Blanche chauf	Los Angeles Directory Co.
	h	Los Angeles Directory Co.
	Riggins Leander Edna barber	Los Angeles Directory Co.
1924	OMally Edna wid M S h	Los Angeles Directory Co.

452 S MATHEWS ST

Year	Uses	Source
1958	Gordon Gerald	Pacific Telephone
1942	Nakata Roy fruits	Los Angeles Directory Co.
	Nakata Seichi Shizuko	Los Angeles Directory Co.

Year	Uses	Source
1937	Okumura Frank Hisao slsmn	Los Angeles Directory Co.
1933	YAMADA S mgr Mitsuwa Co	Los Angeles Directory Co.
	YAMADA Saburo Toshi	Los Angeles Directory Co.
1929	GORDON Gerald lab	Los Angeles Directory Co.
	Tenesch Thos L Kathryn h	Los Angeles Directory Co.
1924	Prinzmetal Harry h	Los Angeles Directory Co.

453 S MATHEWS ST

Year	Uses	Source
1976	Valencia Rita C	Pacific Telephone
	Reynoso Jose Jesus	Pacific Telephone
1967	Molina Amparo	Pacific Telephone
1942	Canfield Eug J Myrtle L gdnr CPD	Los Angeles Directory Co.
	Krasnow Benj A Sylvia pdlr	Los Angeles Directory Co.
	Krasnow Fannie L priv sec Babylon Oriental Rug Clnrs	Los Angeles Directory Co.
	Krasnow Irving	Los Angeles Directory Co.
1937	HARRISON Wm	Los Angeles Directory Co.
	Haus Mabel	Los Angeles Directory Co.
	Sandfelder Jennie clk	Los Angeles Directory Co.
1933	Gronlund Gustav Esther slsmn	Los Angeles Directory Co.
	Gronlund Henry clk	Los Angeles Directory Co.
1929	SPENCER Elsie smstrs r	Los Angeles Directory Co.
1924	DREW John welder h	Los Angeles Directory Co.

454 S MATHEWS ST

Year	Uses	Source
1958	ROSUMNY PAULINE	Pacific Telephone

455 S MATHEWS ST

Year	Uses	Source
2006	TERRAZAS Manuela	Haines Company, Inc.
	RAMIREZ Beartz	Haines Company, Inc.
1976	Terrazas Manuela	Pacific Telephone
1958	Arizpe Lucy	Pacific Telephone
1942	Bodle E Geo F Mildred F ydmn SFRy	Los Angeles Directory Co.
1933	Pickering John M Mary slsmn	Los Angeles Directory Co.
	Pickering Albt R shtmtlwkr	Los Angeles Directory Co.
	Everley Kendall clk	Los Angeles Directory Co.
	Everley Alleen wid Jesse	Los Angeles Directory Co.

Year	Uses	Source
1933	Everley Hugh clk	Los Angeles Directory Co.
	Everley Jos	Los Angeles Directory Co.
1924	Corum Wilson slsmn h	Los Angeles Directory Co.
	Giffard Lorretta wid S r	Los Angeles Directory Co.
	KELLY Jas D h	Los Angeles Directory Co.

457 S MATHEWS ST

Year	Uses	Source
1965	SCHWARTZ LEE	Pacific Telephone

458 S MATHEWS ST

Year	Uses	Source
1962	MAGID ARTHUR	Pacific Telephone
1924	PRICE Mary A wid S W	Los Angeles Directory Co.
	HAWKINS Mary H wid J A clk h	Los Angeles Directory Co.

460 S MATHEWS ST

Year	Uses	Source
1965	SILVER ALBERT	Pacific Telephone

461 S MATHEWS ST

Year	Uses	Source
1970	BORDE SEYMOUR	Pacific Telephone
1965	BORDE JANET L	Pacific Telephone
	BORDE SEYMOUR	Pacific Telephone
1962	BORDE ELLEN	Pacific Telephone
	BORDE SEYMOUR	Pacific Telephone

501 S MATHEWS ST

Year	Uses	Source
2006	D HERNANDEZJavier	Haines Company, Inc.
	DAVILALuls	Haines Company, Inc.
	Munoz	Haines Company, Inc.
	TOSTADONomna	Haines Company, Inc.

502 S MATHEWS ST

Year	Uses	Source
1965	RAICH KENNETH M	Pacific Telephone
1962	RAICH J L	Pacific Telephone
1958	RAICH J L	Pacific Telephone

FINDINGS

Year	Uses	Source
1958	Ramos E G	Pacific Telephone
	Telles Corrine	Pacific Telephone
1942	Matsushima Leo Dixie	Los Angeles Directory Co.
1937	Hasegawa F T Tie clk	Los Angeles Directory Co.
1933	ROBINSON Meyer mens furngs	Los Angeles Directory Co.
	PEARLMAN Jos Florist	Los Angeles Directory Co.
	PEARLMAN Dora wid Nathan	Los Angeles Directory Co.
1929	EPSTEIN Saml Ida	Los Angeles Directory Co.
	EPSTEIN Pauline bkpr	Los Angeles Directory Co.
	EPSTEIN Max	Los Angeles Directory Co.
1924	Epstein Saml tailor h	Los Angeles Directory Co.

504 S MATHEWS ST

Year	Uses	Source
1958	Estrada Pilar	Pacific Telephone
1942	Umeda Richd Y Mizue clk	Los Angeles Directory Co.
1937	Endo Geo Sie clk	Los Angeles Directory Co.
1933	Nakamura Koiche Horako clk	Los Angeles Directory Co.
1929	Jaral Henry Rose uphol	Los Angeles Directory Co.
	Jaral Morris comp	Los Angeles Directory Co.
	Pablos Vincent O drftsmn TG & TCo	Los Angeles Directory Co.

505 S MATHEWS ST

Year	Uses	Source
2006	CORTEZRogela	Haines Company, Inc.
	CHAVEZPabto	Haines Company, Inc.
1958	Samarin Wm J	Pacific Telephone
1942	Samarin Wm J Mary D cattle buyer	Los Angeles Directory Co.
1937	Samarin Wm J Mary brooms	Los Angeles Directory Co.
	Bagdanoff John Vera lab	Los Angeles Directory Co.
1933	Agalsoff June ractywkr	Los Angeles Directory Co.
	Samarin Wm J Mary factywkr	Los Angeles Directory Co.
1929	Schulze Martin C h	Los Angeles Directory Co.
	Schulze Anna E r	Los Angeles Directory Co.
1924	CRESSWELL Floyd W painter h	Los Angeles Directory Co.

506 S MATHEWS ST

Year	Uses	Source
1942	Marot Albina	Los Angeles Directory Co.

FINDINGS

Year	Uses	Source
1942	Marot Anna	Los Angeles Directory Co.
	Marot Ernest J jr	Los Angeles Directory Co.
	Marot Vincent printer Wm Leichman	Los Angeles Directory Co.
	Marot Ernest J Julia cooper	Los Angeles Directory Co.
1933	Buchwald Amelia Mrs	Los Angeles Directory Co.
1924	Fitzgerald Edwd printer h	Los Angeles Directory Co.

508 S MATHEWS ST

Year	Uses	Source
1958	Cardenas Ralph	Pacific Telephone
1942	Hayakawa Hiromu Aki clk	Los Angeles Directory Co.
1937	Kolver Marvin	Los Angeles Directory Co.
	Kolver Benj Edna chauf	Los Angeles Directory Co.
1933	FITZGERALD Edw E Agnes clk Dept Water & Power	Los Angeles Directory Co.
1924	Gardener Fred H carp h	Los Angeles Directory Co.

509 S MATHEWS ST

Year	Uses	Source
2006	CARREON Rose	Haines Company, Inc.
1976	Ng Fook Shuen	Pacific Telephone
1942	RAMIREZ Raymond Minnie sta atdt	Los Angeles Directory Co.
	Zambrano Emilio D Tula inspr SFRy	Los Angeles Directory Co.
1937	OCONNELL Michl Suki	Los Angeles Directory Co.
	FERGUSON Thos	Los Angeles Directory Co.
1933	MILLER Ruby A inspr Broadway Dept Store	Los Angeles Directory Co.
	MILLER Jesse A Ruby steelwkr	Los Angeles Directory Co.
1929	FERGUSON Thos	Los Angeles Directory Co.
1924	FERGUSON Thos driver h	Los Angeles Directory Co.

512 S MATHEWS ST

Year	Uses	Source
1942	Endo Yoji Seiko pdlr	Los Angeles Directory Co.
1937	Halapoff Alex	Los Angeles Directory Co.
	Halapoff Michl Mary scavenger	Los Angeles Directory Co.
1933	RUIZ Frank Eliria lab	Los Angeles Directory Co.
1924	Fukumoto Kiku lab h	Los Angeles Directory Co.

FINDINGS

513 S MATHEWS ST

Year	Uses	Source
2006	a DORADO Aice	Haines Company, Inc.
1942	Konya Walter S Meyeo fruits	Los Angeles Directory Co.
1937	MAYER Constantin Josephine	Los Angeles Directory Co.
1933	MAYER C baker	Los Angeles Directory Co.
	MAYER Constantine Josephine baker	Los Angeles Directory Co.
1929	HILLIARD John W Mabel supt Standard Paper Box Co	Los Angeles Directory Co.
1924	GARDNER Clare H shtmtlwkr h	Los Angeles Directory Co.

516 S MATHEWS ST

Year	Uses	Source
1958	Granillo Margarita Ode	Pacific Telephone
1933	LEE Harwood N Doris marblewkr	Los Angeles Directory Co.
1929	PALMER Lucy Mrs	Los Angeles Directory Co.
1924	PALMER Lucy wid Allen h	Los Angeles Directory Co.

517 S MATHEWS ST

Year	Uses	Source
2006	CORONEL Olga	Haines Company, Inc.
1976	Pantoja Manuel O	Pacific Telephone
1958	Pantoja Manuel O	Pacific Telephone
1942	Gallegos Dionisio Agnes collr Dave Chern	Los Angeles Directory Co.
1937	Sasada Kumakichi Tomeko lab	Los Angeles Directory Co.
1933	Kojima Usaburo Shia slsmn	Los Angeles Directory Co.
1929	DAVIS Norman slsmn May Co	Los Angeles Directory Co.
	Abounader Ralph Rita	Los Angeles Directory Co.
1924	York Cath slswmn r	Los Angeles Directory Co.
	Mc COY Rose waiter r	Los Angeles Directory Co.
	Mc COY Ben painter h	Los Angeles Directory Co.
	York Jean r	Los Angeles Directory Co.

S SOTO

440 S SOTO

Year	Uses	Source
1962	Godoy Gilbert	Pacific Telephone
1942	STONE Irving Rose slsmn	Los Angeles Directory Co.
1937	Matz Wm clk	Los Angeles Directory Co.
	Matz Mary beauty apr	Los Angeles Directory Co.

FINDINGS

Year	Uses	Source
1937	Matz Eug Mary jan	Los Angeles Directory Co.
	Matz Emilia sten Victor Belting & Rubber Co	Los Angeles Directory Co.
1933	Metz Eug Mary jan	Los Angeles Directory Co.
1929	Melendez Celso P Charlotte carp	Los Angeles Directory Co.
	CASTLE Robt M police	Los Angeles Directory Co.
	CASTLE Dolores	Los Angeles Directory Co.
1924	ROBERTS Julia B seam h	Los Angeles Directory Co.
	Coheour Marjorie clk r	Los Angeles Directory Co.
	Coheour Fannie wid J E r	Los Angeles Directory Co.

443 S SOTO

Year	Uses	Source
1990	HOWARD NEIL M ATTY	Pacific Bell
	LINCOLN HOSPITAL MEDICAL CENTER	Pacific Bell
	LINCOLN HOSPITAL MEDICAL CENTER LEGAL DEPT	Pacific Bell
1986	LINCOLN HOSPITAL MEDICAL CENTER	Pacific Bell
1981	GERMAN HOSPITAL ASSN	Pacific Telephone
	HENRY ANDRE F MD	Pacific Telephone
	LEE JOHN H MD	Pacific Telephone
	LEE MEDICAL GROUP	Pacific Telephone
	LINCOLN HOSPITAL	Pacific Telephone
	LINCOLN HOSPITAL PHARMACY	Pacific Telephone
1971	German Hospital Assn	Pacific Telephone
	Jennings Jean M	Pacific Telephone
	LINCOLN HOSPITAL	Pacific Telephone
1967	German Hospital Assn	Pacific Telephone
	Jennings Jean	Pacific Telephone
	LINCOLN HOSPITAL	Pacific Telephone
1962	German Hospital Assn	Pacific Telephone
	LINCOLN HOSPI AL	Pacific Telephone

450 S SOTO

Year	Uses	Source
1981	TORRES R	Pacific Telephone
1971	Torres R	Pacific Telephone
	Rodriguez Rojas Miguel	Pacific Telephone
1967	Molina Margaret	Pacific Telephone
	Torres R	Pacific Telephone

FINDINGS

Year	Uses	Source
1962	Torres R	Pacific Telephone
	Molina Margaret	Pacific Telephone
1942	DORRIS Francisco fndywkr	Los Angeles Directory Co.
	DORRIS Refugio wid Francisco	Los Angeles Directory Co.
	Lucero Aurelio Elvira musician	Los Angeles Directory Co.
1937	Lucero Aureho Elvira auto mech	Los Angeles Directory Co.
	Torres Refuglo wid Francisco	Los Angeles Directory Co.
1929	ADKINS John C uphol	Los Angeles Directory Co.
	ADKINS Louise H smstrs	Los Angeles Directory Co.
1924	JOHNSTON Isabella F wid A D h	Los Angeles Directory Co.
	JOHNSTON Wm A lab r	Los Angeles Directory Co.
	ADKINS John C clk r	Los Angeles Directory Co.

453 S SOTO

Year	Uses	Source
1990	CLINICA MEDICA FAMILIAR	Pacific Bell
1986	CLINICA MEDICA FAMILIAR	Pacific Bell
1981	GRANT W R MD INC	Pacific Telephone
1971	Ermshar Lloyd G MD Ofc	Pacific Telephone
	Grant W R MD	Pacific Telephone
	Kelso Donald R Lincoln Medical Pharmacy	Pacific Telephone
	Kelso Ernest Lancoln Medical Pharmacy	Pacific Telephone
	Lincoln Hospital Pharmacy	Pacific Telephone
	Lincoln Medical Pharmacy	Pacific Telephone
	Ofc	Pacific Telephone
	Mc Guffin De Vere W MD	Pacific Telephone
	Pac Tissue Lab	Pacific Telephone
	Soto Medical Lab	Pacific Telephone
	Vogel Ellen M MD	Pacific Telephone
1967	Ermshar Lloyd G MD	Pacific Telephone
	Ofc	Pacific Telephone
	Grant W R MD	Pacific Telephone
	Kelso Donald R Lincoln Medical Pharmacy	Pacific Telephone
	Kelso Ernest Lincoln Medical Pharmacy	Pacific Telephone
	Lincoln Hospital Pharmacy	Pacific Telephone
	Lincoln Medical Pharmacy	Pacific Telephone
	Ofc	Pacific Telephone
	McGuffin De Vere W MD	Pacific Telephone
	Pac Tissue Lab	Pacific Telephone

FINDINGS

Year	Uses	Source
1967	Soto Medical Lab	Pacific Telephone
	Vogel Ellen M MD	Pacific Telephone
1962	Adler Meyers & Mikity MDs	Pacific Telephone
	Ermshar Lloyd G MD	Pacific Telephone
	Ofc	Pacific Telephone
	Grant W R MD	Pacific Telephone
	Kelso Donald R Lincoln Medical Pharmacy	Pacific Telephone
	Kelso Ernest Lincoln Medlical Pharmacy	Pacific Telephone
	LINCOLN HOSPI AL MEDICAL OFC BUILDING	Pacific Telephone
	LINCOLN MEDICAL PHARMACY	Pacific Telephone
	Mc Guffin De Vere W MD	Pacific Telephone
	Ofc	Pacific Telephone
	Pacific Tissue Laboratory	Pacific Telephone
	Schwarz Robt J MD	Pacific Telephone
	Soto Medical Lab	Pacific Telephone
1958	Adler Meyers & Milkity MDs	Pacific Telephone
1950	SOTO MEDICAL INSTITUTE	Pacific Telephone
1933	LINCOLN Hospital Mrs Janie ONeill supt	Los Angeles Directory Co.
	ONEILL Janie Mrs supt Lincoln Hosp	Los Angeles Directory Co.
	Oyler J Dickson phys	Los Angeles Directory Co.
1929	GALLAGHER Hiram phys	Los Angeles Directory Co.
	LINCOLN Hospital Mrs Janie ONeill supt	Los Angeles Directory Co.
	ONEILL Janie M Mrs nurse Lincoln Hosp	Los Angeles Directory Co.
1924	BURTON Emma A nurse r	Los Angeles Directory Co.
	Estabrooks Lucretia A nurse r	Los Angeles Directory Co.
	Garbe Ruth E nurse r	Los Angeles Directory Co.
	Griffith Belle maid r	Los Angeles Directory Co.
	Hendrickson Ethel L nurse r	Los Angeles Directory Co.
	LINCOLN Hospital	Los Angeles Directory Co.
	LITTLE Bernice F nurse r	Los Angeles Directory Co.
	MOORE Nettie E maid r	Los Angeles Directory Co.
	MOORE Rogers M janitor r	Los Angeles Directory Co.
	MOORE Wm M gardner r	Los Angeles Directory Co.
	ONEILL Janie M nurse r	Los Angeles Directory Co.
	ONEILL Margt J Mrs supt Lincoln Hosp h	Los Angeles Directory Co.
	Shamp Sara I nurse r	Los Angeles Directory Co.
	Stroud Chester E driver h	Los Angeles Directory Co.
	Towalsky Emma W cook r	Los Angeles Directory Co.

FINDINGS

455 S SOTO

Year	Uses	Source
1990	YAMAMOTO MITSUKO	Pacific Bell
1986	YAMANCHI KAZUO	Pacific Bell
1981	YAMANCHI KAZUO	Pacific Telephone
1971	Okazaki Itsuo	Pacific Telephone
1967	Okazaki Itsuo	Pacific Telephone
	Okazaki Martha	Pacific Telephone
1962	Matsunaga Tom T	Pacific Telephone
	Okazaki Itsuo	Pacific Telephone
	Okazaki Martha	Pacific Telephone
1942	Schuching Alice sten Good Hope Hosp Assn	Los Angeles Directory Co.
	Schucking Alice M sten	Los Angeles Directory Co.
	Schucking Charlene N sten W E Smith	Los Angeles Directory Co.
1937	Schucking Alice labty tchr	Los Angeles Directory Co.
	Schucking Jos Mary inspr SP Co	Los Angeles Directory Co.
1933	Seider Joe Clara fur ctr	Los Angeles Directory Co.
1929	Freeman Blumie	Los Angeles Directory Co.
	FREEMAN Elsie clk	Los Angeles Directory Co.
	FREEMAN Harry Bessie	Los Angeles Directory Co.
	FREEMAN Sarah C clk	Los Angeles Directory Co.
1924	Ramirez Elizabeth wid J h	Los Angeles Directory Co.
	SANROMAN Isabel cashr Jose Sanroman r	Los Angeles Directory Co.
	SANROMAN Jessie clk r	Los Angeles Directory Co.
	SANROMAN Jose prop Sanroman Grocery & Cafe r	Los Angeles Directory Co.
	SANROMAN Louis slsmn r	Los Angeles Directory Co.
	SANROMAN Mary clk h	Los Angeles Directory Co.
	SANROMAN Teresa cashr Jose Sanroman r	Los Angeles Directory Co.

457 S SOTO

Year	Uses	Source
1981	LOPEZ ANTONIO M	Pacific Telephone
1971	Michiuye Ray	Pacific Telephone
1967	Kuwashima Horioko	Pacific Telephone
	Kuwashima Takashi	Pacific Telephone
	Michiuye Jas	Pacific Telephone
1962	Michiuye Jas	Pacific Telephone

Year	Uses	Source
1962	Kuwashima Horioko	Pacific Telephone
	Kuwashima Takashi	Pacific Telephone
1942	HERNANDEZ Librada wid Henry	Los Angeles Directory Co.
1937	OGrady C Stewart Mayme slsmn Sears Roebuck & Co	Los Angeles Directory Co.
	OGrady Chas drftsmn M J Black	Los Angeles Directory Co.
	OGrady John C clk	Los Angeles Directory Co.
	OGrady Stewart auto mech	Los Angeles Directory Co.
	ROBERTSON Quincy D	Los Angeles Directory Co.
	Zepeda Alice	Los Angeles Directory Co.
	Zepeda Manuelo Romona barber	Los Angeles Directory Co.
1933	Azuma Harry auto mech	Los Angeles Directory Co.
	OGrady C Stewart Mary E slsmn Sears Roebuck & Co	Los Angeles Directory Co.
	Osaki Ribsabulo Yuki	Los Angeles Directory Co.
1929	Dufau Eloisa M bkpr Southwestern Bag Co	Los Angeles Directory Co.
	Leckie Nessa clk	Los Angeles Directory Co.
	OGrady Chas S clk	Los Angeles Directory Co.
1924	h	Los Angeles Directory Co.
	OGrady Chas S Doorkpr r	Los Angeles Directory Co.
	Schucking Jos mach h	Los Angeles Directory Co.
	Schucking Jos jr clk r	Los Angeles Directory Co.

458 S SOTO

Year	Uses	Source
1981	PACHECO REFUGIO	Pacific Telephone
1971	Pacheco Refugio	Pacific Telephone
1967	Pacheco Refugio	Pacific Telephone
1962	Pacheco Refugio	Pacific Telephone
1942	Kubo Thos Tome clk	Los Angeles Directory Co.
1933	Josephson Al Fay slsmn	Los Angeles Directory Co.
1924	Spena Elizabeth P nu se r	Los Angeles Directory Co.

460 S SOTO

Year	Uses	Source
1986	GUARDADO RUBEN	Pacific Bell
1942	Kasuyama Frank Mitzi driver	Los Angeles Directory Co.
1937	Lorona Chas emp Calif Consumers Corp	Los Angeles Directory Co.
	Lorona Dolores C Mrs	Los Angeles Directory Co.

Year	Uses	Source
1933	SNOW Rose wid Morris factywkr	Los Angeles Directory Co.
1929	Rafoth John W Eliz msngr h	Los Angeles Directory Co.
1924	Raford Rafot John W clk h	Los Angeles Directory Co.

444 1/4 S SOTO

Year	Uses	Source
1990	GUTIERREZ MARTIN & RAFAELA	Pacific Bell

454 1/2 S SOTO

Year	Uses	Source
1990	QUEZADA IGNACIO S	Pacific Bell

457 1/2 S SOTO

Year	Uses	Source
1990	MICHIUYE RAY	Pacific Bell

S SOTO ST

436 S SOTO ST

Year	Uses	Source
2006	JIMINEZ Miguel	Haines Company, Inc.
1976	Takeuchi Fusakichi	Pacific Telephone
	Kagimoto Narumi H	Pacific Telephone
1958	Furuye Moyo Mrs	Pacific Telephone
	Takeuchi Fusakichi	Pacific Telephone

438 S SOTO ST

Year	Uses	Source
2006	ALVARDOOscar A	Haines Company, Inc.
1976	Godoy Elvira	Pacific Telephone
1958	Okumura Masayuki	Pacific Telephone
	Arias Manuel	Pacific Telephone

440 S SOTO ST

Year	Uses	Source
2006	a GARCIA Marta	Haines Company, Inc.
1976	Torres Richard T	Pacific Telephone
1958	Godoy Gilbert	Pacific Telephone

FINDINGS

443 S SOTO ST

Year	Uses	Source
2013	DUSK TO DAWN URGENT CARE	Cole Information Services
	CLINICA MEDICA FAMILIAR	Cole Information Services
	LINCOLN HOSPITAL MEDICAL CENTER	Cole Information Services
2008	CLINICA MEDICAL FAMILIAR	Cole Information Services
	JAGAN N BANSAL MD INC	Cole Information Services
2006	OFELALP	Haines Company, Inc.
	CLINICA MEDICA	Haines Company, Inc.
	PROMISEHOSPITAL	Haines Company, Inc.
	FAMILIAR	Haines Company, Inc.
	ULINCOLNHSPMDCL	Haines Company, Inc.
1976	Lincoln Hospital Pharmacy	Pacific Telephone
	LINCOLN HOSPITAL	Pacific Telephone
	German Hospital Assn	Pacific Telephone
1958	Bender Pauline	Pacific Telephone
	German Hospital Assn	Pacific Telephone
	Lincoln Hospital	Pacific Telephone

444 S SOTO ST

Year	Uses	Source
2006	PERALTASon Ia	Haines Company, Inc.
1976	Santana Antonio	Pacific Telephone
1958	Rodriguez Eloise	Pacific Telephone

450 S SOTO ST

Year	Uses	Source
2006	RODRIGUEZ M A	Haines Company, Inc.
1976	Torres R	Pacific Telephone
	Rodriguez Rojas Miguel	Pacific Telephone
1958	Molina Margaret	Pacific Telephone
	Torres R	Pacific Telephone

453 S SOTO ST

Year	Uses	Source
1976	Ermshar Lloyd G MD	Pacific Telephone
	Grant W R MD Inc	Pacific Telephone
	Pac Tissue Lab	Pacific Telephone
	Vogel Ellen M MD	Pacific Telephone
1958	Hieshima Asaichi S MD	Pacific Telephone

Year	Uses	Source
1958	Graves Alfred Wm Jr MD	Pacific Telephone
	Ermshar Lloyd G MD Ofc	Pacific Telephone
	LINCOLN MEDICAL PHARMACY	Pacific Telephone
	Mc Guffin De Vere W MD Ofc	Pacific Telephone
	Pacific Tissue Laboratory	Pacific Telephone
	Soto Medical Lab	Pacific Telephone
	Kelso Donald R Lincoln Medical Pharmacy	Pacific Telephone
	Kelso Ernest Lincoln Medical Pharmacy	Pacific Telephone
1950	SOTO MEDICAL INSTITUTE	Pacific Telephone

454 S SOTO ST

Year	Uses	Source
2006	V MARTINEZAlida B	Haines Company, Inc.
	MEDINAJose	Haines Company, Inc.
1976	Montano Frank	Pacific Telephone
	Montano Herlinda	Pacific Telephone
1958	Anderson Jacob I	Pacific Telephone
	King W L	Pacific Telephone

455 S SOTO ST

Year	Uses	Source
2006	MORENO Maria	Haines Company, Inc.
1958	Shimahara Walter	Pacific Telephone
	Matsunaga Tom T	Pacific Telephone

457 S SOTO ST

Year	Uses	Source
2006	RUOTOLO Joseph	Haines Company, Inc.
1976	Michiuye Ray	Pacific Telephone
1958	Michiuye Jas	Pacific Telephone

458 S SOTO ST

Year	Uses	Source
2006	GARCIA Pedro	Haines Company, Inc.
1976	Pacheco Refugio	Pacific Telephone

459 S SOTO ST

Year	Uses	Source
2006	TESTA Eleanor	Haines Company, Inc.
	PANTOJA Maria V	Haines Company, Inc.

FINDINGS

TARGET PROPERTY: ADDRESS NOT IDENTIFIED IN RESEARCH SOURCE

The following Target Property addresses were researched for this report, and the addresses were not identified in the research source.

Address Researched	Address Not Identified in Research Source
456 South Mathews Street	2004, 2003, 2001, 1999, 1996, 1995, 1992, 1991, 1986, 1985, 1981, 1980, 1975, 1972, 1971, 1969, 1966, 1964, 1963, 1961, 1960, 1957, 1956, 1955, 1954, 1952, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1932, 1931, 1930, 1928, 1927, 1926, 1925, 1923, 1921, 1920

ADJOINING PROPERTY: ADDRESSES NOT IDENTIFIED IN RESEARCH SOURCE

The following Adjoining Property addresses were researched for this report, and the addresses were not identified in research source.

Address Researched	Address Not Identified in Research Source
2488 E 4TH	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
2500 E 4TH	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1940, 1939, 1938, 1936, 1935, 1934, 1932, 1931, 1930, 1928, 1927, 1926, 1925, 1923, 1921, 1920
2500 E 4TH ST	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1957, 1956, 1955, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
2501 E 4TH	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1985, 1980, 1976, 1975, 1972, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1940, 1939, 1938, 1936, 1935, 1934, 1932, 1931, 1930, 1928, 1927, 1926, 1925, 1923, 1921, 1920
2503 E 4TH	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1985, 1980, 1976, 1975, 1972, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1940, 1939, 1938, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
2505 E 4TH	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1940, 1939, 1938, 1936, 1935, 1934, 1932, 1931, 1930, 1928, 1927, 1926, 1925, 1923, 1921, 1920
2506 E 4TH	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1940, 1939, 1938, 1936, 1935, 1934, 1932, 1931, 1930, 1928, 1927, 1926, 1925, 1923, 1921, 1920

FINDINGS

Address Researched	Address Not Identified in Research Source
2506 E 4TH ST	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
2507 1/2 E 4TH	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
2507 E 4TH	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1985, 1980, 1976, 1975, 1972, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1932, 1931, 1930, 1928, 1927, 1926, 1925, 1923, 1921, 1920
2509 1/2 E 4TH	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
2509 3/4 E 4TH	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
2510 E 4TH	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1940, 1939, 1938, 1936, 1935, 1934, 1932, 1931, 1930, 1928, 1927, 1926, 1925, 1923, 1921, 1920
2510 E 4TH ST	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1957, 1956, 1955, 1952, 1951, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
2511 1/2 E 4TH	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
2511 3/4 E 4TH	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1985, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
2513 1/2 E 4TH	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
2515 1/2 E 4TH	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920

FINDINGS

Address Researched	Address Not Identified in Research Source
2515 E 4TH	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1986, 1985, 1980, 1976, 1975, 1972, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1940, 1939, 1938, 1936, 1935, 1934, 1932, 1931, 1930, 1928, 1927, 1926, 1925, 1923, 1921, 1920
2516 E 4TH	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1923, 1921, 1920
2516 E 4TH ST	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1952, 1951, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
2518 E 4TH	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
2519 E 4TH	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
2520 E 4TH	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1932, 1931, 1930, 1928, 1927, 1926, 1925, 1923, 1921, 1920
2521 E 4TH	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1985, 1980, 1976, 1975, 1972, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1940, 1939, 1938, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
2522 E 4TH	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
2524 E 4TH	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1940, 1939, 1938, 1936, 1935, 1934, 1932, 1931, 1930, 1928, 1927, 1926, 1925, 1923, 1921, 1920
400 S MATHEWS ST	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
403 MATHEWS S	2013, 2008, 2006, 2004, 2003, 2001, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920

FINDINGS

Address Researched	Address Not Identified in Research Source
403 S MATHEWS ST	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1940, 1939, 1938, 1936, 1935, 1934, 1932, 1931, 1930, 1928, 1927, 1926, 1925, 1923, 1921, 1920
407 S MATHEWS ST	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
408 MATHEWS ST S	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
408 S MATHEWS ST	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
409 MATHEWS S	2013, 2008, 2006, 2004, 2003, 2001, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
409 MATHEWS ST S	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
409 S MATHEWS	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
409 S MATHEWS ST	2013, 2008, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1961, 1960, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1940, 1939, 1938, 1936, 1935, 1934, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1923, 1921, 1920
410 MATHEWS ST S	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
410 S MATHEWS ST	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1923, 1921, 1920
412 MATHEWS S	2013, 2008, 2006, 2004, 2003, 2001, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920

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Address Researched	Address Not Identified in Research Source
412 MATHEWS ST S	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
412 S MATHEWS ST	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1961, 1960, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1932, 1931, 1930, 1928, 1927, 1926, 1925, 1923, 1921, 1920
413 MATHEWS S	2013, 2008, 2006, 2004, 2003, 2001, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
413 S MATHEWS	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
413 S MATHEWS ST	2013, 2008, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1940, 1939, 1938, 1936, 1935, 1934, 1932, 1931, 1930, 1928, 1927, 1926, 1925, 1923, 1921, 1920
414 MATHEWS S	2013, 2008, 2006, 2004, 2003, 2001, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
414 MATHEWS ST S	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
414 S MATHEWS ST	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1966, 1965, 1964, 1963, 1961, 1960, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1940, 1939, 1938, 1936, 1935, 1934, 1932, 1931, 1930, 1928, 1927, 1926, 1925, 1923, 1921, 1920
415 MATHEWS S	2013, 2008, 2006, 2004, 2003, 2001, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
415 S MATHEWS	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
415 S MATHEWS ST	2013, 2008, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1940, 1939, 1938, 1936, 1935, 1934, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1923, 1921, 1920

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Address Researched	Address Not Identified in Research Source
417 MATHEWS S	2013, 2008, 2006, 2004, 2003, 2001, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
417 MATHEWS ST S	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
417 S MATHEWS ST	2013, 2008, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1975, 1972, 1971, 1970, 1969, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1940, 1939, 1938, 1936, 1935, 1934, 1932, 1931, 1930, 1928, 1927, 1926, 1925, 1923, 1921, 1920
420 MATHEWS S	2013, 2008, 2006, 2004, 2003, 2001, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
420 MATHEWS ST S	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
420 S MATHEWS ST	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1940, 1939, 1938, 1936, 1935, 1934, 1932, 1931, 1930, 1928, 1927, 1926, 1925, 1923, 1921, 1920
421 MATHEWS S	2013, 2008, 2006, 2004, 2003, 2001, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
421 MATHEWS ST S	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
421 S MATHEWS ST	2013, 2008, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1961, 1960, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1940, 1939, 1938, 1936, 1935, 1934, 1932, 1931, 1930, 1928, 1927, 1926, 1925, 1923, 1921, 1920
422 MATHEWS ST S	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
422 S MATHEWS ST	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1940, 1939, 1938, 1936, 1935, 1934, 1932, 1931, 1930, 1928, 1927, 1926, 1925, 1923, 1921, 1920

FINDINGS

Address Researched	Address Not Identified in Research Source
424 MATHEWS ST S	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
424 S MATHEWS ST	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1966, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1940, 1939, 1938, 1936, 1935, 1934, 1932, 1931, 1930, 1928, 1927, 1926, 1925, 1923, 1921, 1920
425 MATHEWS S	2013, 2008, 2006, 2004, 2003, 2001, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
425 MATHEWS ST S	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
425 S MATHEWS	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
425 S MATHEWS ST	2013, 2008, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1932, 1931, 1930, 1928, 1927, 1926, 1925, 1923, 1921, 1920
426 S MATHEWS ST	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
427 S MATHEWS ST	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
428 S MATHEWS ST	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1964, 1963, 1961, 1960, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
429 MATHEWS S	2013, 2008, 2006, 2004, 2003, 2001, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
429 MATHEWS ST S	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920

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Address Researched	Address Not Identified in Research Source
429 S MATHEWS	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
429 S MATHEWS ST	2013, 2008, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1966, 1965, 1964, 1963, 1961, 1960, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1923, 1921, 1920
430 S MATHEWS ST	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1966, 1965, 1964, 1963, 1961, 1960, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1940, 1939, 1938, 1936, 1935, 1934, 1932, 1931, 1930, 1928, 1927, 1926, 1925, 1923, 1921, 1920
431 MATHEWS S	2013, 2008, 2006, 2004, 2003, 2001, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
431 MATHEWS ST S	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
431 S MATHEWS	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1985, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
431 S MATHEWS ST	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
432 MATHEWS S	2013, 2008, 2006, 2004, 2003, 2001, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
432 MATHEWS ST S	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
432 S MATHEWS ST	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1940, 1939, 1938, 1936, 1935, 1934, 1932, 1931, 1930, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
433 MATHEWS S	2013, 2008, 2006, 2004, 2003, 2001, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920

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Address Researched	Address Not Identified in Research Source
433 MATHEWS ST S	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
433 S MATHEWS ST	2013, 2008, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1975, 1972, 1971, 1970, 1969, 1966, 1965, 1964, 1963, 1961, 1960, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1940, 1939, 1938, 1936, 1935, 1934, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
434 S MATHEWS ST	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
435 MATHEWS S	2013, 2008, 2006, 2004, 2003, 2001, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
435 MATHEWS ST S	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
435 S MATHEWS ST	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1940, 1939, 1938, 1936, 1935, 1934, 1932, 1931, 1930, 1928, 1927, 1926, 1925, 1923, 1921, 1920
436 MATHEWS ST S	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
436 S MATHEWS ST	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1940, 1939, 1938, 1936, 1935, 1934, 1932, 1931, 1930, 1928, 1927, 1926, 1925, 1923, 1921, 1920
436 S SOTO ST	2013, 2008, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
437 MATHEWS S	2013, 2008, 2006, 2004, 2003, 2001, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
437 S MATHEWS	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920

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Address Researched	Address Not Identified in Research Source
437 S MATHEWS ST	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1975, 1972, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
438 S SOTO ST	2013, 2008, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
439 1/2 S MATHEWS	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1985, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
439 MATHEWS S	2013, 2008, 2006, 2004, 2003, 2001, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
439 MATHEWS ST S	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
439 S MATHEWS	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
439 S MATHEWS ST	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1975, 1972, 1971, 1970, 1969, 1966, 1965, 1964, 1963, 1961, 1960, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1940, 1939, 1938, 1936, 1935, 1934, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1923, 1921, 1920
440 MATHEWS ST S	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
440 S MATHEWS ST	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1940, 1939, 1938, 1936, 1935, 1934, 1932, 1931, 1930, 1928, 1927, 1926, 1925, 1923, 1921, 1920
440 S SOTO	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1940, 1939, 1938, 1936, 1935, 1934, 1932, 1931, 1930, 1928, 1927, 1926, 1925, 1923, 1921, 1920
440 S SOTO ST	2013, 2008, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920

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Address Researched	Address Not Identified in Research Source
441 MATHEWS ST S	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
441 S MATHEWS	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
441 S MATHEWS ST	2013, 2008, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1966, 1965, 1964, 1963, 1961, 1960, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
442 S MATHEWS ST	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
443 S SOTO	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1985, 1980, 1976, 1975, 1972, 1970, 1969, 1966, 1965, 1964, 1963, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
443 S SOTO ST	2013, 2008, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
443 S SOTO ST	2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
444 1/4 S SOTO	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
444 MATHEWS ST S	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
444 S MATHEWS ST	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1940, 1939, 1938, 1936, 1935, 1934, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1923, 1921, 1920
444 S SOTO ST	2013, 2008, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920

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Address Researched	Address Not Identified in Research Source
445 MATHEWS S	2013, 2008, 2006, 2004, 2003, 2001, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
445 MATHEWS ST S	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
445 S MATHEWS	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
445 S MATHEWS ST	2013, 2008, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1936, 1935, 1934, 1932, 1931, 1930, 1928, 1927, 1926, 1925, 1923, 1921, 1920
446 S MATHEWS ST	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
447 MATHEWS S	2013, 2008, 2006, 2004, 2003, 2001, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
447 MATHEWS ST S	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
447 S MATHEWS ST	2013, 2008, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1975, 1972, 1971, 1970, 1969, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1936, 1935, 1934, 1932, 1931, 1930, 1928, 1927, 1926, 1925, 1923, 1921, 1920
448 MATHEWS S	2013, 2008, 2006, 2004, 2003, 2001, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
448 MATHEWS ST S	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
448 S MATHEWS ST	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1940, 1939, 1938, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1928, 1927, 1926, 1925, 1923, 1921, 1920

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Address Researched	Address Not Identified in Research Source
449 1/4 S MATHEWS	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
449 MATHEWS ST S	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
449 S MATHEWS	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1923, 1921, 1920
449 S MATHEWS ST	2013, 2008, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1940, 1939, 1938, 1936, 1935, 1934, 1932, 1931, 1930, 1928, 1927, 1926, 1925, 1923, 1921, 1920
450 S SOTO	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1980, 1976, 1975, 1972, 1970, 1969, 1966, 1965, 1964, 1963, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1940, 1939, 1938, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1928, 1927, 1926, 1925, 1923, 1921, 1920
450 S SOTO ST	2013, 2008, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
451 1/4 S MATHEWS	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
451 MATHEWS S	2013, 2008, 2006, 2004, 2003, 2001, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
451 MATHEWS ST S	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
451 S MATHEWS ST	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1975, 1972, 1971, 1970, 1969, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1940, 1939, 1938, 1936, 1935, 1934, 1932, 1931, 1930, 1928, 1927, 1926, 1925, 1923, 1921, 1920
452 MATHEWS ST S	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920

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Address Researched	Address Not Identified in Research Source
452 S MATHEWS ST	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1940, 1939, 1938, 1936, 1935, 1934, 1932, 1931, 1930, 1928, 1927, 1926, 1925, 1923, 1921, 1920
453 1/2 S MATHEWS	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
453 MATHEWS S	2013, 2008, 2006, 2004, 2003, 2001, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
453 MATHEWS ST S	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
453 S MATHEWS	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1923, 1921, 1920
453 S MATHEWS ST	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1975, 1972, 1971, 1970, 1969, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1940, 1939, 1938, 1936, 1935, 1934, 1932, 1931, 1930, 1928, 1927, 1926, 1925, 1923, 1921, 1920
453 S SOTO	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1985, 1980, 1976, 1975, 1972, 1970, 1969, 1966, 1965, 1964, 1963, 1961, 1960, 1957, 1956, 1955, 1954, 1952, 1951, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1932, 1931, 1930, 1928, 1927, 1926, 1925, 1923, 1921, 1920
453 S SOTO ST	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1957, 1956, 1955, 1954, 1952, 1951, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
454 1/2 S SOTO	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
454 S MATHEWS ST	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
454 S SOTO ST	2013, 2008, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920

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Address Researched	Address Not Identified in Research Source
455 1/2 S MATHEWS	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
455 MATHEWS S	2013, 2008, 2006, 2004, 2003, 2001, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
455 S MATHEWS	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
455 S MATHEWS ST	2013, 2008, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1923, 1921, 1920
455 S SOTO	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1985, 1980, 1976, 1975, 1972, 1970, 1969, 1966, 1965, 1964, 1963, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1940, 1939, 1938, 1936, 1935, 1934, 1932, 1931, 1930, 1928, 1927, 1926, 1925, 1923, 1921, 1920
455 S SOTO ST	2013, 2008, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
457 1/2 S SOTO	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
457 S MATHEWS ST	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
457 S SOTO	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1980, 1976, 1975, 1972, 1970, 1969, 1966, 1965, 1964, 1963, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1940, 1939, 1938, 1936, 1935, 1934, 1932, 1931, 1930, 1928, 1927, 1926, 1925, 1923, 1921, 1920
457 S SOTO ST	2013, 2008, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
458 S MATHEWS ST	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1923, 1921, 1920

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Address Researched	Address Not Identified in Research Source
458 S SOTO	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1980, 1976, 1975, 1972, 1970, 1969, 1966, 1965, 1964, 1963, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1923, 1921, 1920
458 S SOTO ST	2013, 2008, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
459 S SOTO ST	2013, 2008, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
460 S MATHEWS ST	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
460 S SOTO	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1940, 1939, 1938, 1936, 1935, 1934, 1932, 1931, 1930, 1928, 1927, 1926, 1925, 1923, 1921, 1920
461 S MATHEWS ST	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1969, 1967, 1966, 1964, 1963, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
501 MATHEWS S	2013, 2008, 2006, 2004, 2003, 2001, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
501 S MATHEWS ST	2013, 2008, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
502 MATHEWS ST S	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
502 S MATHEWS ST	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1964, 1963, 1961, 1960, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1940, 1939, 1938, 1936, 1935, 1934, 1932, 1931, 1930, 1928, 1927, 1926, 1925, 1923, 1921, 1920
504 MATHEWS ST S	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920

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505 MATHEWS S	2013, 2008, 2006, 2004, 2003, 2001, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
505 MATHEWS ST S	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
505 S MATHEWS	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
505 S MATHEWS ST	2013, 2008, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1940, 1939, 1938, 1936, 1935, 1934, 1932, 1931, 1930, 1928, 1927, 1926, 1925, 1923, 1921, 1920
506 MATHEWS ST S	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
506 S MATHEWS ST	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1923, 1921, 1920
508 MATHEWS ST S	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
508 S MATHEWS ST	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1940, 1939, 1938, 1936, 1935, 1934, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1923, 1921, 1920
509 MATHEWS S	2013, 2008, 2006, 2004, 2003, 2001, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
509 MATHEWS ST S	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920

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509 S MATHEWS ST	2013, 2008, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1940, 1939, 1938, 1936, 1935, 1934, 1932, 1931, 1930, 1928, 1927, 1926, 1925, 1923, 1921, 1920
512 MATHEWS ST S	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
512 S MATHEWS ST	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1940, 1939, 1938, 1936, 1935, 1934, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1923, 1921, 1920
513 MATHEWS S	2013, 2008, 2006, 2004, 2003, 2001, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
513 MATHEWS ST S	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
513 S MATHEWS ST	2013, 2008, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1940, 1939, 1938, 1936, 1935, 1934, 1932, 1931, 1930, 1928, 1927, 1926, 1925, 1923, 1921, 1920
516 S MATHEWS ST	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1932, 1931, 1930, 1928, 1927, 1926, 1925, 1923, 1921, 1920
517 S MATHEWS ST	2013, 2008, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1940, 1939, 1938, 1936, 1935, 1934, 1932, 1931, 1930, 1928, 1927, 1926, 1925, 1923, 1921, 1920

EDR-Radius Map Report

Appendix E

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Roosevelt High School
456 South Mathews Street
Los Angeles, CA 90033

Inquiry Number: 4609254.2s
May 03, 2016

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A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-13) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

456 SOUTH MATHEWS STREET
LOS ANGELES, CA 90033

COORDINATES

Latitude (North):	34.0383570 - 34° 2' 18.08''
Longitude (West):	118.2104040 - 118° 12' 37.45''
Universal Tranverse Mercator:	Zone 11
UTM X (Meters):	388266.4
UTM Y (Meters):	3766875.0
Elevation:	313 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map:	5630795 LOS ANGELES, CA
Version Date:	2012

AERIAL PHOTOGRAPHY IN THIS REPORT

Portions of Photo from:	20120505
Source:	USDA

MAPPED SITES SUMMARY

Target Property Address:
456 SOUTH MATHEWS STREET
LOS ANGELES, CA 90033

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
A1	LAUSD/ ROOSEVELT HS	456 S MATHEWS ST	HAZNET		TP
A2	LA USD ROOSEVELT HS	456 S MATHEWS ST	RCRA-SQG, FINDS, ECHO		TP
A3	LA UNI SCH DIST, ROO	456 S MATHEWS ST	EMI		TP
A4	ROOSEVELT HIGH SCHOO	456 SOUTH MATTHEW ST	NPDES		TP
5	BOYLE HEIGHTS HIGH S	544 S MATHEWS ST	RCRA-LQG	Higher	434, 0.082, West
6		2601 E 4TH ST	EDR Hist Cleaner	Higher	558, 0.106, NE
B7	KASH DORA MRS	2547 E 4TH ST	EDR Hist Cleaner	Higher	569, 0.108, NNE
B8	ROSENTHAL H D	2523 E 4TH ST	EDR Hist Cleaner	Higher	603, 0.114, North
C9	ROSENTHAL H D	2509 E 4TH ST	EDR Hist Cleaner	Higher	636, 0.120, North
C10	DERIAN JOS	2505 E 4TH ST	EDR Hist Auto	Higher	637, 0.121, North
11	LINCOLN HOSP MED CTR	443 S SOTO ST	RCRA-SQG, SWEEPS UST, CA FID UST, FINDS, HAZNET,...	Higher	766, 0.145, WNW
12	LA USD HOLLENBECK JH	2510 E 6TH ST	RCRA-SQG, FINDS, ECHO	Lower	786, 0.149, SW
D13	SHELL SERVICE STATIO	400 S SOTO ST	RCRA-SQG, LUST, UST	Higher	893, 0.169, NNW
D14	CHA SHELL	400 S SOTO ST	SWEEPS UST, CA FID UST	Higher	893, 0.169, NNW
D15	WINALL #1	401 SOTO ST. S.	LUST	Higher	908, 0.172, NNW
D16	WINALL OIL COMPANY	401 S SOTO ST	SWEEPS UST, CA FID UST	Higher	925, 0.175, NNW
D17	WINALL #1	401 S SOTO ST	UST	Higher	925, 0.175, NNW
E18	90668	2333 E 4TH ST	HIST UST	Higher	1158, 0.219, NNW
E19	CHEVRON STATION 9066	2333 E 4TH ST	SWEEPS UST, CA FID UST	Higher	1158, 0.219, NNW
E20	EAST L A PHOTO AND S	2323 E 4TH ST	RCRA-SQG, FINDS, HAZNET, ECHO	Lower	1187, 0.225, NW
21	RODRIGUEZ RECYCLING	2503 WHITTIER BLVD	SWRCY	Lower	2016, 0.382, SSW
22	EAST L A RECYCLING C	2750 E 1ST ST	SWRCY	Higher	2080, 0.394, ENE
F23	M & Y SERVICE STATIO	2701 001ST	HIST CORTESE	Higher	2112, 0.400, NE
F24	M & Y SERVICE STATIO	2701 001ST ST E	LUST	Higher	2112, 0.400, NE
25	QUINTERO TIRES	2726 WHITTIER BLVD	LUST, HIST CORTESE	Higher	2219, 0.420, South
26	LINDA VISTA HOSPITAL	610 SAINT LOUIS ST S	LUST	Higher	2233, 0.423, West
27	MOBIL #11-EKT	909 SOTO ST S	LUST, HIST CORTESE	Lower	2291, 0.434, SW
28	MARLENE'S MUFFLER SH	2239 001ST ST E	LUST	Lower	2443, 0.463, NNW
G29	SHELL SERVICE STATIO	2005 E FOURTH / CUMM	RCRA-SQG, LUST	Lower	2469, 0.468, NW
G30	SHELL - KOBASSI	2005 4TH STREET, EAS	LUST	Lower	2469, 0.468, NW
31	SOTO STREET	1010 SOTO STREET	ENVIROSTOR, SCH	Lower	3094, 0.586, SW
32	CENTRAL REGION MIDDL	2821 EAST 7TH STREET	ENVIROSTOR, SCH	Lower	3187, 0.604, South
H33	CAPRI PUMPING SERVIC	3128 WHITTIER BLVD.	HIST Cal-Sites	Lower	3613, 0.684, SSE
H34	CONTAMINATED TRANSFE	3128 WHITTIER BLVD	RESPONSE, ENVIROSTOR, LDS, LA Co. Site Mitigation	Lower	3613, 0.684, SSE
I35	SILVA PROPERTY	3201 WHITTIER BLVD	ENVIROSTOR	Lower	3840, 0.727, SSE
I36	MADRID PROPERTY	3207 WHITTIER BLVD	ENVIROSTOR	Lower	3879, 0.735, SSE
37	SANTA FE/W.A. GRANT	2144 EAST 7TH STREET	ENVIROSTOR, VCP, LA Co. Site Mitigation	Lower	5022, 0.951, WSW

EXECUTIVE SUMMARY

TARGET PROPERTY SEARCH RESULTS

The target property was identified in the following records. For more information on this property see page 8 of the attached EDR Radius Map report:

Site	Database(s)	EPA ID
LAUSD/ ROOSEVELT HS 456 S MATHEWS ST LOS ANGELES, CA 90033	HAZNET GEPAID: CAD981625163	N/A
LA USD ROOSEVELT HS 456 S MATHEWS ST LOS ANGELES, CA 90033	RCRA-SQG EPA ID:: CAD981625163 FINDS Registry ID:: 110002728610 ECHO	CAD981625163
LA UNI SCH DIST, ROO 456 S MATHEWS ST LOS ANGELES, CA 90033	EMI Facility Id: 78178 Facility Id: 71577	N/A
ROOSEVELT HIGH SCHOO 456 SOUTH MATTHEW ST LOS ANGELES, CA 90033	NPDES Facility Status: Terminated	N/A

DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL ---------- National Priority List
Proposed NPL ---------- Proposed National Priority List Sites
NPL LIENS ---------- Federal Superfund Liens

Federal Delisted NPL site list

Delisted NPL ---------- National Priority List Deletions

Federal CERCLIS list

FEDERAL FACILITY ---------- Federal Facility Site Information listing

SEMS Superfund Enterprise Management System

Federal CERCLIS NFRAP site list

SEMS-ARCHIVE Superfund Enterprise Management System Archive

Federal RCRA CORRACTS facilities list

CORRACTS Corrective Action Report

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF RCRA - Treatment, Storage and Disposal

Federal RCRA generators list

RCRA-CESQG RCRA - Conditionally Exempt Small Quantity Generator

Federal institutional controls / engineering controls registries

LUCIS Land Use Control Information System
US ENG CONTROLS Engineering Controls Sites List
US INST CONTROL Sites with Institutional Controls

Federal ERNS list

ERNS Emergency Response Notification System

State and tribal landfill and/or solid waste disposal site lists

SWF/LF Solid Waste Information System

State and tribal leaking storage tank lists

INDIAN LUST Leaking Underground Storage Tanks on Indian Land
SLIC Statewide SLIC Cases

State and tribal registered storage tank lists

FEMA UST Underground Storage Tank Listing
AST Aboveground Petroleum Storage Tank Facilities
INDIAN UST Underground Storage Tanks on Indian Land

State and tribal voluntary cleanup sites

VCP Voluntary Cleanup Program Properties
INDIAN VCP Voluntary Cleanup Priority Listing

State and tribal Brownfields sites

BROWNFIELDS Considered Brownfieds Sites Listing

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS A Listing of Brownfields Sites

EXECUTIVE SUMMARY

Local Lists of Landfill / Solid Waste Disposal Sites

WMUDS/SWAT	Waste Management Unit Database
HAULERS	Registered Waste Tire Haulers Listing
INDIAN ODI	Report on the Status of Open Dumps on Indian Lands
DEBRIS REGION 9	Torres Martinez Reservation Illegal Dump Site Locations
ODI	Open Dump Inventory

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL	Delisted National Clandestine Laboratory Register
AOCONCERN	San Gabriel Valley Areas of Concern
SCH	School Property Evaluation Program
CDL	Clandestine Drug Labs
Toxic Pits	Toxic Pits Cleanup Act Sites
US CDL	National Clandestine Laboratory Register

Local Land Records

LIENS	Environmental Liens Listing
LIENS 2	CERCLA Lien Information
DEED	Deed Restriction Listing

Records of Emergency Release Reports

HMIRS	Hazardous Materials Information Reporting System
CHMIRS	California Hazardous Material Incident Report System
LDS	Land Disposal Sites Listing
MCS	Military Cleanup Sites Listing
SPILLS 90	SPILLS 90 data from FirstSearch

Other Ascertainable Records

RCRA NonGen / NLR	RCRA - Non Generators / No Longer Regulated
FUDS	Formerly Used Defense Sites
DOD	Department of Defense Sites
SCRD DRYCLEANERS	State Coalition for Remediation of Drycleaners Listing
US FIN ASSUR	Financial Assurance Information
EPA WATCH LIST	EPA WATCH LIST
2020 COR ACTION	2020 Corrective Action Program List
TSCA	Toxic Substances Control Act
TRIS	Toxic Chemical Release Inventory System
SSTS	Section 7 Tracking Systems
ROD	Records Of Decision
RMP	Risk Management Plans
RAATS	RCRA Administrative Action Tracking System
PRP	Potentially Responsible Parties
PADS	PCB Activity Database System
ICIS	Integrated Compliance Information System
FTTS	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
MLTS	Material Licensing Tracking System
COAL ASH DOE	Steam-Electric Plant Operation Data
COAL ASH EPA	Coal Combustion Residues Surface Impoundments List

PCB TRANSFORMER - PCB Transformer Registration Database
RADINFO - Radiation Information Database
HIST FTTS - FIFRA/TSCA Tracking System Administrative Case Listing
DOT OPS - Incident and Accident Data
CONSENT - Superfund (CERCLA) Consent Decrees
INDIAN RESERV - Indian Reservations
FUSRAP - Formerly Utilized Sites Remedial Action Program
UMTRA - Uranium Mill Tailings Sites
LEAD SMELTERS - Lead Smelter Sites
US AIRS - Aerometric Information Retrieval System Facility Subsystem
US MINES - Mines Master Index File
CA BOND EXP. PLAN - Bond Expenditure Plan
Cortese - "Cortese" Hazardous Waste & Substances Sites List
CUPA Listings - CUPA Resources List
DRYCLEANERS - Cleaner Facilities
ENF - Enforcement Action Listing
Financial Assurance - Financial Assurance Information Listing
LOS ANGELES CO. HMS - HMS: Street Number List
HWP - EnviroStor Permitted Facilities Listing
HWT - Registered Hazardous Waste Transporter Database
MINES - Mines Site Location Listing
MWMP - Medical Waste Management Program Listing
PEST LIC - Pesticide Regulation Licenses Listing
PROC - Certified Processors Database
Notify 65 - Proposition 65 Records
LA Co. Site Mitigation - Site Mitigation List
UIC - UIC Listing
WASTEWATER PITS - Oil Wastewater Pits Listing
WDS - Waste Discharge System
WIP - Well Investigation Program Case List
FUELS PROGRAM - EPA Fuels Program Registered Listing

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP - EDR Proprietary Manufactured Gas Plants

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA LF - Recovered Government Archive Solid Waste Facilities List
RGA LUST - Recovered Government Archive Leaking Underground Storage Tank

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.
Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

EXECUTIVE SUMMARY

STANDARD ENVIRONMENTAL RECORDS

Federal RCRA generators list

RCRA-LQG: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

A review of the RCRA-LQG list, as provided by EDR, and dated 12/09/2015 has revealed that there is 1 RCRA-LQG site within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
BOYLE HEIGHTS HIGH S	544 S MATHEWS ST	W 0 - 1/8 (0.082 mi.)	5	15

RCRA-SQG: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

A review of the RCRA-SQG list, as provided by EDR, and dated 12/09/2015 has revealed that there are 4 RCRA-SQG sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
LINCOLN HOSP MED CTR	***443 S SOTO ST***	***WNW 1/8 - 1/4 (0.145 mi.)***	***11***	***18***
SHELL SERVICE STATIO	***400 S SOTO ST***	***NNW 1/8 - 1/4 (0.169 mi.)***	***D13***	***22***
Lower Elevation	**Address**	**Direction / Distance**	**Map ID**	**Page**
LA USD HOLLENBECK JH	***2510 E 6TH ST***	***SW 1/8 - 1/4 (0.149 mi.)***	***12***	***20***
EAST L A PHOTO AND S	***2323 E 4TH ST***	***NW 1/8 - 1/4 (0.225 mi.)***	***E20***	***38***

State- and tribal - equivalent NPL

RESPONSE: Identifies confirmed release sites where DTSC is involved in remediation, either in a lead or oversight capacity. These confirmed release sites are generally high-priority and high potential risk.

A review of the RESPONSE list, as provided by EDR, and dated 02/01/2016 has revealed that there is 1 RESPONSE site within approximately 1 mile of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
CONTAMINATED TRANSFE	***3128 WHITTIER BLVD***	***SSE 1/2 - 1 (0.684 mi.)***	***H34***	***77***
Status: Certified				
Facility Id: 19490015				

State- and tribal - equivalent CERCLIS

ENVIROSTOR: The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifes sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

A review of the ENVIROSTOR list, as provided by EDR, and dated 02/01/2016 has revealed that there are 6 ENVIROSTOR sites within approximately 1 mile of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
SOTO STREET Facility Id: 19000004 Status: Inactive - Action Required	***1010 SOTO STREET***	***SW 1/2 - 1 (0.586 mi.)***	***31***	***70***
CENTRAL REGION MIDDL Facility Id: 60000584 Status: Inactive - Needs Evaluation	***2821 EAST 7TH STREET***	***S 1/2 - 1 (0.604 mi.)***	***32***	***73***
CONTAMINATED TRANSFE Facility Id: 19490015 Status: Certified	***3128 WHITTIER BLVD***	***SSE 1/2 - 1 (0.684 mi.)***	***H34***	***77***
SILVA PROPERTY Facility Id: 60001677 Status: No Further Action	3201 WHITTIER BLVD	SSE 1/2 - 1 (0.727 mi.)	I35	80
MADRID PROPERTY Facility Id: 60001702 Status: No Further Action	3207 WHITTIER BLVD	SSE 1/2 - 1 (0.735 mi.)	I36	81
SANTA FE/W.A. GRANT Facility Id: 19330375 Status: No Further Action	***2144 EAST 7TH STREET***	***WSW 1/2 - 1 (0.951 mi.)***	***37***	***82***

State and tribal leaking storage tank lists

LUST: The Leaking Underground Storage Tank Incident Reports contain an inventory of reported leaking underground storage tank incidents. The data come from the State Water Resources Control Board Leaking Underground Storage Tank Information System.

A review of the LUST list, as provided by EDR, and dated 12/14/2015 has revealed that there are 9 LUST sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
SHELL SERVICE STATIO Status: Completed - Case Closed Facility Id: 900330389	***400 S SOTO ST***	***NNW 1/8 - 1/4 (0.169 mi.)***	***D13***	***22***

Status: Leak being confirmed
Global Id: T0603760383
Global ID: T0603760383

WINALL #1 Status: Open - Remediation Global Id: T0603739097	401 SOTO ST. S.	NNW 1/8 - 1/4 (0.172 mi.)	D15	31
M & Y SERVICE STATIO Status: Completed - Case Closed Facility Id: 900330143 Status: Case Closed Global Id: T0603700833 Global ID: T0603700833	2701 001ST ST E	NE 1/4 - 1/2 (0.400 mi.)	F24	42
QUINTERO TIRES Status: Completed - Case Closed Facility Id: 900230189 Status: Case Closed Global Id: T0603700669 Global ID: T0603700669	***2726 WHITTIER BLVD***	***S 1/4 - 1/2 (0.420 mi.)***	***25***	***44***
LINDA VISTA HOSPITAL Status: Completed - Case Closed Facility Id: 900230289 Status: Pollution Characterization Global Id: T0603792895 Global ID: T0603792895	610 SAINT LOUIS ST S	W 1/4 - 1/2 (0.423 mi.)	26	47

Lower Elevation	Address	Direction / Distance	Map ID	Page
MOBIL #11-EKT Status: Completed - Case Closed Facility Id: 900230234 Status: Pollution Characterization Global Id: T0603700674 Global ID: T0603700674	***909 SOTO ST S***	***SW 1/4 - 1/2 (0.434 mi.)***	***27***	***50***
MARLENE'S MUFFLER SH Status: Completed - Case Closed Facility Id: 900330298 Status: Pollution Characterization Global Id: T0603700848 Global ID: T0603700848	2239 001ST ST E	NNW 1/4 - 1/2 (0.463 mi.)	28	56
SHELL SERVICE STATIO Status: Completed - Case Closed Facility Id: 900330307 Status: Case Closed Global Id: T0603700849 Global ID: T0603700849	***2005 E FOURTH / CUMM***	***NW 1/4 - 1/2 (0.468 mi.)***	***G29***	***63***
SHELL - KOBASSI Status: Completed - Case Closed Global Id: T0603732654	2005 4TH STREET, EAS	NW 1/4 - 1/2 (0.468 mi.)	G30	67

State and tribal registered storage tank lists

UST: The Underground Storage Tank database contains registered USTs. USTs are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA). The data come from the State Water Resources Control Board's Hazardous Substance Storage Container Database.

A review of the UST list, as provided by EDR, and dated 12/14/2015 has revealed that there are 2 UST sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
SHELL SERVICE STATIO Facility Id: 23924	***400 S SOTO ST***	***NNW 1/8 - 1/4 (0.169 mi.)***	***D13***	***22***
WINALL #1 Facility Id: 24378	401 S SOTO ST	NNW 1/8 - 1/4 (0.175 mi.)	D17	35

ADDITIONAL ENVIRONMENTAL RECORDS

Local Lists of Landfill / Solid Waste Disposal Sites

SWRCY: A listing of recycling facilities in California.

A review of the SWRCY list, as provided by EDR, and dated 12/14/2015 has revealed that there are 2 SWRCY sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
EAST L A RECYCLING C Cert Id: RC11354	2750 E 1ST ST	ENE 1/4 - 1/2 (0.394 mi.)	22	41

Lower Elevation	Address	Direction / Distance	Map ID	Page
RODRIGUEZ RECYCLING Cert Id: RC208422.001	2503 WHITTIER BLVD	SSW 1/4 - 1/2 (0.382 mi.)	21	41

Local Lists of Hazardous waste / Contaminated Sites

HIST Cal-Sites: Formerly known as ASPIS, this database contains both known and potential hazardous substance sites. The source is the California Department of Toxic Substance Control. No longer updated by the state agency. It has been replaced by ENVIROSTOR.

A review of the HIST Cal-Sites list, as provided by EDR, and dated 08/08/2005 has revealed that there is 1 HIST Cal-Sites site within approximately 1 mile of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
CAPRI PUMPING SERVIC	3128 WHITTIER BLVD.	SSE 1/2 - 1 (0.684 mi.)	H33	75

Local Lists of Registered Storage Tanks

SWEEPS UST: Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and maintained by a company contacted by the SWRCB in the early 1990's. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.

A review of the SWEEPS UST list, as provided by EDR, and dated 06/01/1994 has revealed that there are 4 SWEEPS UST sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
LINCOLN HOSP MED CTR Status: A Comp Number: 5123	***443 S SOTO ST***	***WNW 1/8 - 1/4 (0.145 mi.)***	***11***	***18***
CHA SHELL Status: A Tank Status: A Comp Number: 4466	***400 S SOTO ST***	***NNW 1/8 - 1/4 (0.169 mi.)***	***D14***	***29***
WINALL OIL COMPANY Status: A Comp Number: 4707	***401 S SOTO ST***	***NNW 1/8 - 1/4 (0.175 mi.)***	***D16***	***35***
CHEVRON STATION 9066 Comp Number: 3470	***2333 E 4TH ST***	***NNW 1/8 - 1/4 (0.219 mi.)***	***E19***	***37***

HIST UST: Historical UST Registered Database.

A review of the HIST UST list, as provided by EDR, and dated 10/15/1990 has revealed that there is 1 HIST UST site within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
90668 Facility Id: 00000061874	2333 E 4TH ST	NNW 1/8 - 1/4 (0.219 mi.)	E18	36

CA FID UST: The Facility Inventory Database contains active and inactive underground storage tank locations. The source is the State Water Resource Control Board.

A review of the CA FID UST list, as provided by EDR, and dated 10/31/1994 has revealed that there are 4 CA FID UST sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
LINCOLN HOSP MED CTR Facility Id: 19035408 Status: A	***443 S SOTO ST***	***WNW 1/8 - 1/4 (0.145 mi.)***	***11***	***18***
CHA SHELL Facility Id: 19034784 Status: A	***400 S SOTO ST***	***NNW 1/8 - 1/4 (0.169 mi.)***	***D14***	***29***
WINALL OIL COMPANY Facility Id: 19009951	***401 S SOTO ST***	***NNW 1/8 - 1/4 (0.175 mi.)***	***D16***	***35***

Status: A

CHEVRON STATION 9066 Facility Id: 19006724 Status: I	***2333 E 4TH ST***	***NNW 1/8 - 1/4 (0.219 mi.)***	***E19***	***37***

Other Ascertainable Records

HIST CORTESE: The sites for the list are designated by the State Water Resource Control Board [LUST], the Integrated Waste Board [SWF/LS], and the Department of Toxic Substances Control [CALSITES]. This listing is no longer updated by the state agency.

A review of the HIST CORTESE list, as provided by EDR, and dated 04/01/2001 has revealed that there are 3 HIST CORTESE sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
M & Y SERVICE STATIO Reg Id: 900330143	2701 001ST	NE 1/4 - 1/2 (0.400 mi.)	F23	42
QUINTERO TIRES Reg Id: 900230189	***2726 WHITTIER BLVD***	***S 1/4 - 1/2 (0.420 mi.)***	***25***	***44***

Lower Elevation	Address	Direction / Distance	Map ID	Page
MOBIL #11-EKT Reg Id: 900230234	***909 SOTO ST S***	***SW 1/4 - 1/2 (0.434 mi.)***	***27***	***50***

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR Hist Auto: EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

A review of the EDR Hist Auto list, as provided by EDR, has revealed that there is 1 EDR Hist Auto site within approximately 0.125 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
DERIAN JOS	2505 E 4TH ST	N 0 - 1/8 (0.121 mi.)	C10	17

EXECUTIVE SUMMARY

EDR Hist Cleaner: EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

A review of the EDR Hist Cleaner list, as provided by EDR, has revealed that there are 4 EDR Hist Cleaner sites within approximately 0.125 miles of the target property.

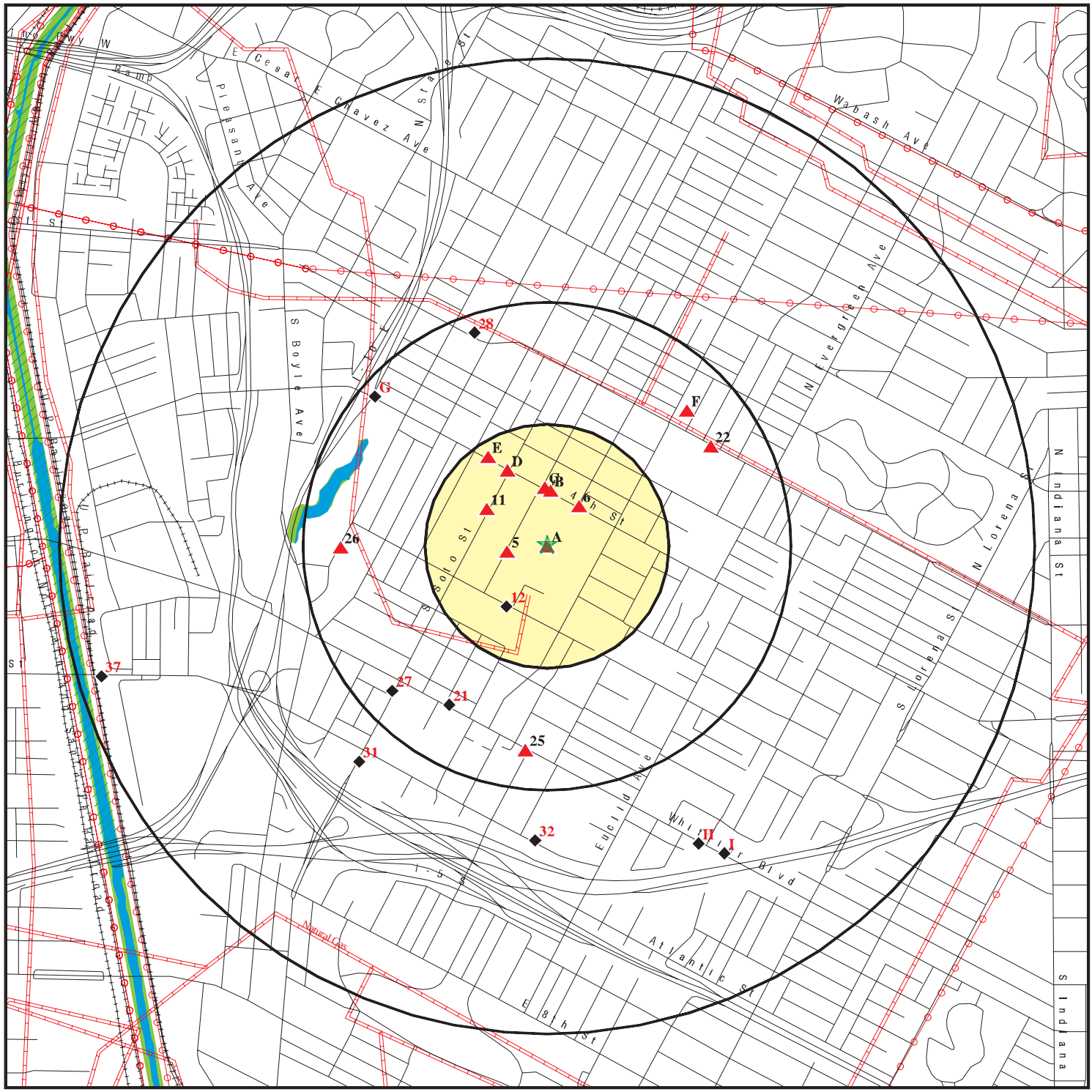
Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
Not reported	2601 E 4TH ST	NE 0 - 1/8 (0.106 mi.)	6	16
KASH DORA MRS	2547 E 4TH ST	NNE 0 - 1/8 (0.108 mi.)	B7	16
ROSENTHAL H D	2523 E 4TH ST	N 0 - 1/8 (0.114 mi.)	B8	17
ROSENTHAL H D	2509 E 4TH ST	N 0 - 1/8 (0.120 mi.)	C9	17

EXECUTIVE SUMMARY

Due to poor or inadequate address information, the following sites were not mapped. Count: 3 records.

Site Name	Database(s)
ACTA NORTH - UNION PACIFIC RAILROA	SLIC
DENA NEW PRIMARY CENTER	ENVIROSTOR, SCH
CENTRAL REGION HIGH SCHOOL #15	ENVIROSTOR, SCH

OVERVIEW MAP - 4609254.2S



Target Property

Sites at elevations higher than or equal to the target property

Sites at elevations lower than the target property

Manufactured Gas Plants

National Priority List Sites

Dept. Defense Sites

0 1/4 1/2 1 Miles

Indian Reservations BIA

Power transmission lines

Pipelines

100-year flood zone

500-year flood zone

National Wetland Inventory

State Wetlands

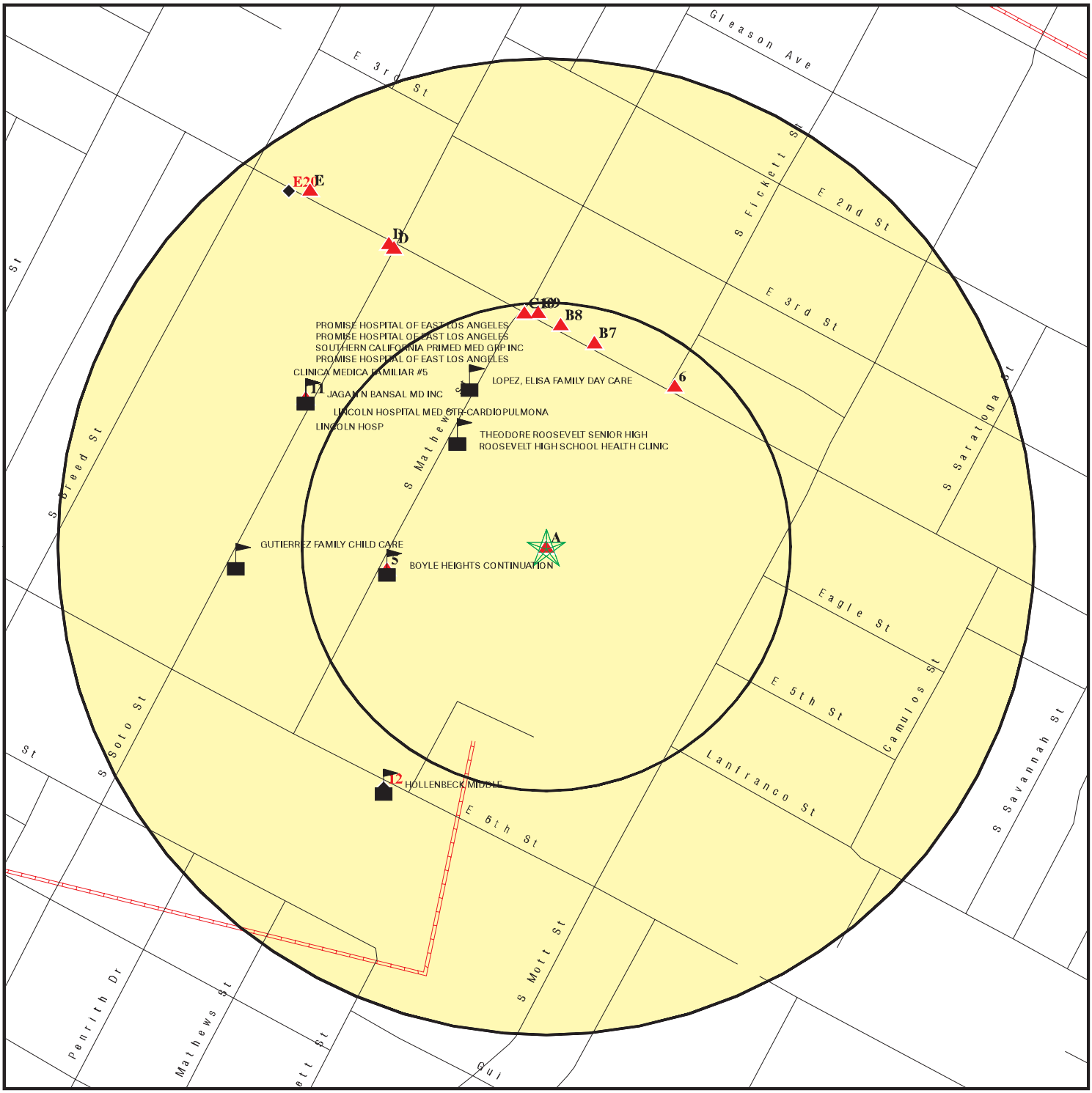
Areas of Concern

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME:	Roosevelt High School	CLIENT:	Converse Consult Inland Empire
ADDRESS:	456 South Mathews Street Los Angeles CA 90033	CONTACT:	Sue Krobthong
LAT/LONG:	34.038357 / 118.210404	INQUIRY #:	4609254.2s
		DATE:	May 03, 2016 7:40 pm

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DETAIL MAP - 4609254.2S



0 1/16 1/8 1/4 Miles

- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- Sensitive Receptors
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- Pipelines
- 100-year flood zone
- 500-year flood zone
- Areas of Concern

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Roosevelt High School	CLIENT: Converse Consult Inland Empire
ADDRESS: 456 South Mathews Street Los Angeles CA 90033	CONTACT: Sue Krobthong
LAT/LONG: 34.038357 / 118.210404	INQUIRY #: 4609254.2s DATE: May 03, 2016 7:42 pm

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MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
Federal NPL site list								
NPL	1.000		0	0	0	0	NR	0
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	TP		NR	NR	NR	NR	NR	0
Federal Delisted NPL site list								
Delisted NPL	1.000		0	0	0	0	NR	0
Federal CERCLIS list								
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
SEMS	0.500		0	0	0	NR	NR	0
Federal CERCLIS NFRAP site list								
SEMS-ARCHIVE	0.500		0	0	0	NR	NR	0
Federal RCRA CORRACTS facilities list								
CORRACTS	1.000		0	0	0	0	NR	0
Federal RCRA non-CORRACTS TSD facilities list								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
Federal RCRA generators list								
RCRA-LQG	0.250		1	0	NR	NR	NR	1
RCRA-SQG	0.250	1	0	4	NR	NR	NR	5
RCRA-CESQG	0.250		0	0	NR	NR	NR	0
Federal institutional controls / engineering controls registries								
LUCIS	0.500		0	0	0	NR	NR	0
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROL	0.500		0	0	0	NR	NR	0
Federal ERNS list								
ERNS	TP		NR	NR	NR	NR	NR	0
State- and tribal - equivalent NPL								
RESPONSE	1.000		0	0	0	1	NR	1
State- and tribal - equivalent CERCLIS								
ENVIROSTOR	1.000		0	0	0	6	NR	6
State and tribal landfill and/or solid waste disposal site lists								
SWF/LF	0.500		0	0	0	NR	NR	0
State and tribal leaking storage tank lists								
LUST	0.500		0	2	7	NR	NR	9

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
INDIAN LUST	0.500		0	0	0	NR	NR	0
SLIC	0.500		0	0	0	NR	NR	0
State and tribal registered storage tank lists								
FEMA UST	0.250		0	0	NR	NR	NR	0
UST	0.250		0	2	NR	NR	NR	2
AST	0.250		0	0	NR	NR	NR	0
INDIAN UST	0.250		0	0	NR	NR	NR	0
State and tribal voluntary cleanup sites								
VCP	0.500		0	0	0	NR	NR	0
INDIAN VCP	0.500		0	0	0	NR	NR	0
State and tribal Brownfields sites								
BROWNFIELDS	0.500		0	0	0	NR	NR	0
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
Local Lists of Landfill / Solid Waste Disposal Sites								
WMUDS/SWAT	0.500		0	0	0	NR	NR	0
SWRCY	0.500		0	0	2	NR	NR	2
HAULERS	TP		NR	NR	NR	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
ODI	0.500		0	0	0	NR	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
US HIST CDL	TP		NR	NR	NR	NR	NR	0
AOCONCERN	1.000		0	0	0	0	NR	0
HIST Cal-Sites	1.000		0	0	0	1	NR	1
SCH	0.250		0	0	NR	NR	NR	0
CDL	TP		NR	NR	NR	NR	NR	0
Toxic Pits	1.000		0	0	0	0	NR	0
US CDL	TP		NR	NR	NR	NR	NR	0
Local Lists of Registered Storage Tanks								
SWEEPS UST	0.250		0	4	NR	NR	NR	4
HIST UST	0.250		0	1	NR	NR	NR	1
CA FID UST	0.250		0	4	NR	NR	NR	4
Local Land Records								
LIENS	TP		NR	NR	NR	NR	NR	0
LIENS 2	TP		NR	NR	NR	NR	NR	0
DEED	0.500		0	0	0	NR	NR	0
Records of Emergency Release Reports								
HMIRS	TP		NR	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
CHMIRS	TP		NR	NR	NR	NR	NR	0
LDS	TP		NR	NR	NR	NR	NR	0
MCS	TP		NR	NR	NR	NR	NR	0
SPILLS 90	TP		NR	NR	NR	NR	NR	0
Other Ascertainable Records								
RCRA NonGen / NLR	0.250		0	0	NR	NR	NR	0
FUDS	1.000		0	0	0	0	NR	0
DOD	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
US FIN ASSUR	TP		NR	NR	NR	NR	NR	0
EPA WATCH LIST	TP		NR	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
TSCA	TP		NR	NR	NR	NR	NR	0
TRIS	TP		NR	NR	NR	NR	NR	0
SSTS	TP		NR	NR	NR	NR	NR	0
ROD	1.000		0	0	0	0	NR	0
RMP	TP		NR	NR	NR	NR	NR	0
RAATS	TP		NR	NR	NR	NR	NR	0
PRP	TP		NR	NR	NR	NR	NR	0
PADS	TP		NR	NR	NR	NR	NR	0
ICIS	TP		NR	NR	NR	NR	NR	0
FTTS	TP		NR	NR	NR	NR	NR	0
MLTS	TP		NR	NR	NR	NR	NR	0
COAL ASH DOE	TP		NR	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
PCB TRANSFORMER	TP		NR	NR	NR	NR	NR	0
RADINFO	TP		NR	NR	NR	NR	NR	0
HIST FTTS	TP		NR	NR	NR	NR	NR	0
DOT OPS	TP		NR	NR	NR	NR	NR	0
CONSENT	1.000		0	0	0	0	NR	0
INDIAN RESERV	1.000		0	0	0	0	NR	0
FUSRAP	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
LEAD SMELTERS	TP		NR	NR	NR	NR	NR	0
US AIRS	TP		NR	NR	NR	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
FINDS	TP	1	NR	NR	NR	NR	NR	1
CA BOND EXP. PLAN	1.000		0	0	0	0	NR	0
Cortese	0.500		0	0	0	NR	NR	0
CUPA Listings	0.250		0	0	NR	NR	NR	0
DRYCLEANERS	0.250		0	0	NR	NR	NR	0
EMI	TP	1	NR	NR	NR	NR	NR	1
ENF	TP		NR	NR	NR	NR	NR	0
Financial Assurance	TP		NR	NR	NR	NR	NR	0
HAZNET	TP	1	NR	NR	NR	NR	NR	1
HIST CORTESE	0.500		0	0	3	NR	NR	3
LOS ANGELES CO. HMS	TP		NR	NR	NR	NR	NR	0
HWP	1.000		0	0	0	0	NR	0
HWT	0.250		0	0	NR	NR	NR	0
MINES	TP		NR	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
MWMP	0.250		0	0	NR	NR	NR	0
NPDES	TP	1	NR	NR	NR	NR	NR	1
PEST LIC	TP		NR	NR	NR	NR	NR	0
PROC	0.500		0	0	0	NR	NR	0
Notify 65	1.000		0	0	0	0	NR	0
LA Co. Site Mitigation	TP		NR	NR	NR	NR	NR	0
UIC	TP		NR	NR	NR	NR	NR	0
WASTEWATER PITS	0.500		0	0	0	NR	NR	0
WDS	TP		NR	NR	NR	NR	NR	0
WIP	0.250		0	0	NR	NR	NR	0
ECHO	TP	1	NR	NR	NR	NR	NR	1
FUELS PROGRAM	0.250		0	0	NR	NR	NR	0
EDR HIGH RISK HISTORICAL RECORDS								
EDR Exclusive Records								
EDR MGP	1.000		0	0	0	0	NR	0
EDR Hist Auto	0.125		1	NR	NR	NR	NR	1
EDR Hist Cleaner	0.125		4	NR	NR	NR	NR	4
EDR RECOVERED GOVERNMENT ARCHIVES								
Exclusive Recovered Govt. Archives								
RGA LF	TP		NR	NR	NR	NR	NR	0
RGA LUST	TP		NR	NR	NR	NR	NR	0
- Totals --		6	6	17	12	8	0	49

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

A1 **LAUSD/ ROOSEVELT HS** **HAZNET** **S113008120**
Target **456 S MATHEWS ST** **N/A**
Property **LOS ANGELES, CA 90033**

Site 1 of 4 in cluster A

Actual:
313 ft.

HAZNET:

envid:	S113008120
Year:	2011
GEPAID:	CAD981625163
Contact:	SOE AUNG / ECM
Telephone:	2132413199
Mailing Name:	Not reported
Mailing Address:	333 S BEAUDRY AVE FL 27
Mailing City,St,Zip:	LOS ANGELES, CA 900170000
Gen County:	Not reported
TSD EPA ID:	CAD028409019
TSD County:	Not reported
Waste Category:	Waste oil and mixed oil
Disposal Method:	Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons:	0.209
Cat Decode:	Waste oil and mixed oil
Method Decode:	Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Facility County:	Los Angeles

envid:	S113008120
Year:	2011
GEPAID:	CAD981625163
Contact:	SOE AUNG / ECM
Telephone:	2132413199
Mailing Name:	Not reported
Mailing Address:	333 S BEAUDRY AVE FL 27
Mailing City,St,Zip:	LOS ANGELES, CA 900170000
Gen County:	Not reported
TSD EPA ID:	CAD028409019
TSD County:	Not reported
Waste Category:	Laboratory waste chemicals
Disposal Method:	Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons:	0.4875
Cat Decode:	Laboratory waste chemicals
Method Decode:	Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Facility County:	Los Angeles

envid:	S113008120
Year:	2009
GEPAID:	CAD981625163
Contact:	SOE AUNG / ECM
Telephone:	2132413199
Mailing Name:	Not reported
Mailing Address:	333 S BEAUDRY AVE 20TH FLOOR
Mailing City,St,Zip:	LOS ANGELES, CA 900170000
Gen County:	Not reported
TSD EPA ID:	CAD009007626
TSD County:	Not reported
Waste Category:	Asbestos containing waste

LAUSD/ ROOSEVELT HS (Continued) **S113008120**

Disposal Method:	Landfill Or Surface Impoundment That Will Be Closed As Landfill(To Include On-Site Treatment And/Or Stabilization)
Tons:	9.6
Cat Decode:	Asbestos containing waste
Method Decode:	Landfill Or Surface Impoundment That Will Be Closed As Landfill(To Include On-Site Treatment And/Or Stabilization)
Facility County:	Los Angeles
envid:	S113008120
Year:	2009
GEPAID:	CAD981625163
Contact:	SOE AUNG / ECM
Telephone:	2132413199
Mailing Name:	Not reported
Mailing Address:	333 S BEAUDRY AVE 20TH FLOOR
Mailing City,St,Zip:	LOS ANGELES, CA 900170000
Gen County:	Not reported
TSD EPA ID:	AZC950823111
TSD County:	Not reported
Waste Category:	Other inorganic solid waste
Disposal Method:	Landfill Or Surface Impoundment That Will Be Closed As Landfill(To Include On-Site Treatment And/Or Stabilization)
Tons:	67.424
Cat Decode:	Other inorganic solid waste
Method Decode:	Landfill Or Surface Impoundment That Will Be Closed As Landfill(To Include On-Site Treatment And/Or Stabilization)
Facility County:	Los Angeles
envid:	S113008120
Year:	2008
GEPAID:	CAD981625163
Contact:	YI HWA KIM DEPUTY DIRECTOR
Telephone:	2137435086
Mailing Name:	Not reported
Mailing Address:	333 S BEAUDRY AVE 20TH FLR
Mailing City,St,Zip:	LOS ANGELES, CA 900170000
Gen County:	Not reported
TSD EPA ID:	CAD028409019
TSD County:	Not reported
Waste Category:	Unspecified organic liquid mixture
Disposal Method:	Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons:	0.102
Cat Decode:	Unspecified organic liquid mixture
Method Decode:	Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Facility County:	Los Angeles

Click this hyperlink while viewing on your computer to access
27 additional CA_HAZNET: record(s) in the EDR Site Report.

A2 Target Property | **LA USD ROOSEVELT HS**
456 S MATHEWS ST
LOS ANGELES, CA 90033

RCRA-SQG
FINDS
ECHO

1000427616
CAD981625163

Site 2 of 4 in cluster A

Actual: 313 ft.

RCRA-SQG:

Date form received by agency:	01/27/1987
Facility name:	LA USD ROOSEVELT HS
Facility address:	456 S MATHEWS ST LOS ANGELES, CA 90033
EPA ID:	CAD981625163
Mailing address:	1425 S SAN PEDRO ST LOS ANGELES, CA 90015
Contact:	ENVIRONMENTAL MANAGER
Contact address:	456 S MATHEWS ST LOS ANGELES, CA 90033
Contact country:	US
Contact telephone:	(213) 742-7371
Contact email:	Not reported
EPA Region:	09
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	NOT REQUIRED
Owner/operator address:	NOT REQUIRED NOT REQUIRED, ME 99999
Owner/operator country:	Not reported
Owner/operator telephone:	(415) 555-1212
Legal status:	District
Owner/Operator Type:	Operator
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Owner/operator name:	LA USD
Owner/operator address:	NOT REQUIRED NOT REQUIRED, ME 99999
Owner/operator country:	Not reported
Owner/operator telephone:	(415) 555-1212
Legal status:	District
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No

LA USD ROOSEVELT HS (Continued) **1000427616**

Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Violation Status: No violations found

FINDS:

Registry ID: 110002728610

Environmental Interest/Information System
California Hazardous Waste Tracking System - Datamart (HWTS-DATAMART) provides California with information on hazardous waste shipments for generators, transporters, and treatment, storage, and disposal facilities.

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

ECHO:
Envid: 1000427616
Registry ID: 110002728610
DFR URL: http://echo.epa.gov/detailed_facility_report?fid=110002728610

A3 **LA UNI SCH DIST, ROOSEVELT HIG** **EMI** **S103974498**
Target **456 S MATHEWS ST** **N/A**
Property **LOS ANGELES, CA 90033**

Site 3 of 4 in cluster A

Actual: 313 ft.

EMI:
Year: 1990
County Code: 19
Air Basin: SC
Facility ID: 71577
Air District Name: SC
SIC Code: 8211
Air District Name: SOUTH COAST AQMD
Community Health Air Pollution Info System: Not reported
Consolidated Emission Reporting Rule: Not reported
Total Organic Hydrocarbon Gases Tons/Yr: 0
Reactive Organic Gases Tons/Yr: 0
Carbon Monoxide Emissions Tons/Yr: 0
NOX - Oxides of Nitrogen Tons/Yr: 0
SOX - Oxides of Sulphur Tons/Yr: 0
Particulate Matter Tons/Yr: 0
Part. Matter 10 Micrometers & Smllr Tons/Yr: 0

Year: 1990

LA UNI SCH DIST, ROOSEVELT HIG (Continued) **S103974498**

County Code:	19
Air Basin:	SC
Facility ID:	78178
Air District Name:	SC
SIC Code:	6552
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	2
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	2
NOX - Oxides of Nitrogen Tons/Yr:	2
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

A4 **ROOSEVELT HIGH SCHOOL SLC PROJECT** **NPDES** **S113450451**
Target **456 SOUTH MATTHEW STREET** **N/A**
Property **LOS ANGELES, CA 90033**

Site 4 of 4 in cluster A

Actual:
313 ft.

NPDES:

Npdes Number:	Not reported
Facility Status:	Not reported
Agency Id:	Not reported
Region:	4
Regulatory Measure Id:	435991
Order No:	Not reported
Regulatory Measure Type:	Construction
Place Id:	Not reported
WDID:	4 19C366067
Program Type:	Not reported
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	Not reported
Expiration Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	3/6/2014
Discharge Name:	Not reported
Discharge Address:	Not reported
Discharge City:	Not reported
Discharge State:	Not reported
Discharge Zip:	Not reported
RECEIVED DATE:	3/22/2013
PROCESSED DATE:	4/5/2013
STATUS CODE NAME:	Terminated
STATUS DATE:	5/7/2014
PLACE SIZE:	24.1
PLACE SIZE UNIT:	Acres
FACILITY CONTACT NAME:	Greg Jacobson
FACILITY CONTACT TITLE:	OAR
FACILITY CONTACT PHONE:	213-241-3401
FACILITY CONTACT PHONE EXT:	Not reported
FACILITY CONTACT EMAIL:	greg.jacobson@lausd.net
OPERATOR NAME:	Los Angeles Unified School District
OPERATOR ADDRESS:	333 S Beaudry Ave
OPERATOR CITY:	Los Angeles
OPERATOR STATE:	California
OPERATOR ZIP:	90017

ROOSEVELT HIGH SCHOOL SLC PROJECT (Continued) **S113450451**

OPERATOR CONTACT NAME:	Greg Jacobson
OPERATOR CONTACT TITLE:	OAR
OPERATOR CONTACT PHONE:	213-241-3401
OPERATOR CONTACT PHONE EXT:	Not reported
OPERATOR CONTACT EMAIL:	greg.jacobson@lausd.net
OPERATOR TYPE:	State Agency
DEVELOPER NAME:	AP Construction Group
DEVELOPER ADDRESS:	15537 Cabrito Road
DEVELOPER CITY:	Van Nuys
DEVELOPER STATE:	California
DEVELOPER ZIP:	91406
DEVELOPER CONTACT NAME:	Kouros Farahmand
DEVELOPER CONTACT TITLE:	Project Manager
CONSTYPE LINEAR UTILITY IND:	N
EMERGENCY PHONE NO:	Not reported
EMERGENCY PHONE EXT:	Not reported
CONSTYPE ABOVE GROUND IND:	N
CONSTYPE BELOW GROUND IND:	N
CONSTYPE CABLE LINE IND:	N
CONSTYPE COMM LINE IND:	N
CONSTYPE COMMERTIAL IND:	Y
CONSTYPE ELECTRICAL LINE IND:	N
CONSTYPE GAS LINE IND:	N
CONSTYPE INDUSTRIAL IND:	N
CONSTYPE OTHER DESRIPTION:	Not reported
CONSTYPE OTHER IND:	N
CONSTYPE RECONS IND:	N
CONSTYPE RESIDENTIAL IND:	N
CONSTYPE TRANSPORT IND:	N
CONSTYPE UTILITY DESCRIPTION:	Not reported
CONSTYPE UTILITY IND:	N
CONSTYPE WATER SEWER IND:	N
DIR DISCHARGE USWATER IND:	N
RECEIVING WATER NAME:	Not reported
CERTIFIER NAME:	Talal Balaa
CERTIFIER TITLE:	Not reported
CERTIFICATION DATE:	22-MAR-13
PRIMARY SIC:	Not reported
SECONDARY SIC:	Not reported
TERTIARY SIC:	Not reported
Npdes Number:	CAS000002
Facility Status:	Terminated
Agency Id:	0
Region:	4
Regulatory Measure Id:	435991
Order No:	2009-0009-DWQ
Regulatory Measure Type:	Enrollee
Place Id:	Not reported
WDID:	4 19C366067
Program Type:	Construction
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	04/05/2013
Expiration Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	03/06/2014
Discharge Name:	Los Angeles Unified School District
Discharge Address:	333 S Beaudry Ave

ROOSEVELT HIGH SCHOOL SLC PROJECT (Continued) **S113450451**

Discharge City:	Los Angeles
Discharge State:	California
Discharge Zip:	90017
RECEIVED DATE:	Not reported
PROCESSED DATE:	Not reported
STATUS CODE NAME:	Not reported
STATUS DATE:	Not reported
PLACE SIZE:	Not reported
PLACE SIZE UNIT:	Not reported
FACILITY CONTACT NAME:	Not reported
FACILITY CONTACT TITLE:	Not reported
FACILITY CONTACT PHONE:	Not reported
FACILITY CONTACT PHONE EXT:	Not reported
FACILITY CONTACT EMAIL:	Not reported
OPERATOR NAME:	Not reported
OPERATOR ADDRESS:	Not reported
OPERATOR CITY:	Not reported
OPERATOR STATE:	Not reported
OPERATOR ZIP:	Not reported
OPERATOR CONTACT NAME:	Not reported
OPERATOR CONTACT TITLE:	Not reported
OPERATOR CONTACT PHONE:	Not reported
OPERATOR CONTACT PHONE EXT:	Not reported
OPERATOR CONTACT EMAIL:	Not reported
OPERATOR TYPE:	Not reported
DEVELOPER NAME:	Not reported
DEVELOPER ADDRESS:	Not reported
DEVELOPER CITY:	Not reported
DEVELOPER STATE:	Not reported
DEVELOPER ZIP:	Not reported
DEVELOPER CONTACT NAME:	Not reported
DEVELOPER CONTACT TITLE:	Not reported
CONSTYPE LINEAR UTILITY IND:	Not reported
EMERGENCY PHONE NO:	Not reported
EMERGENCY PHONE EXT:	Not reported
CONSTYPE ABOVE GROUND IND:	Not reported
CONSTYPE BELOW GROUND IND:	Not reported
CONSTYPE CABLE LINE IND:	Not reported
CONSTYPE COMM LINE IND:	Not reported
CONSTYPE COMMERTIAL IND:	Not reported
CONSTYPE ELECTRICAL LINE IND:	Not reported
CONSTYPE GAS LINE IND:	Not reported
CONSTYPE INDUSTRIAL IND:	Not reported
CONSTYPE OTHER DESRIPTION:	Not reported
CONSTYPE OTHER IND:	Not reported
CONSTYPE RECONS IND:	Not reported
CONSTYPE RESIDENTIAL IND:	Not reported
CONSTYPE TRANSPORT IND:	Not reported
CONSTYPE UTILITY DESCRIPTION:	Not reported
CONSTYPE UTILITY IND:	Not reported
CONSTYPE WATER SEWER IND:	Not reported
DIR DISCHARGE USWATER IND:	Not reported
RECEIVING WATER NAME:	Not reported
CERTIFIER NAME:	Not reported
CERTIFIER TITLE:	Not reported
CERTIFICATION DATE:	Not reported
PRIMARY SIC:	Not reported

ROOSEVELT HIGH SCHOOL SLC PROJECT (Continued) **S113450451**

SECONDARY SIC: Not reported
TERTIARY SIC: Not reported

5
West
< 1/8
0.082 mi.
434 ft.

BOYLE HEIGHTS HIGH SCHOOL
544 S MATHEWS ST
LOS ANGELES, CA 90033

RCRA-LQG **1011488215**
CAR000193714

Relative:
Higher

Actual:
313 ft.

RCRA-LQG:

Date form received by agency:	07/10/2008
Facility name:	BOYLE HEIGHTS HIGH SCHOOL
Facility address:	544 S MATHEWS ST LOS ANGELES, CA 90033
EPA ID:	CAR000193714
Mailing address:	333 S BEAUDRY AVE LAUSD OEHS 20TH FL LOS ANGELES, CA 90017
Contact:	SOE AUNG
Contact address:	333 S BEAUDRY AVE LAUSD OEHS 20TH FL LOS ANGELES, CA 90017
Contact country:	US
Contact telephone:	213-241-3904
Contact email:	SOE.AUNG@LAUSD.NET
EPA Region:	09
Classification:	Large Quantity Generator
Description:	Handler: generates 1,000 kg or more of hazardous waste during any calendar month; or generates more than 1 kg of acutely hazardous waste during any calendar month; or generates more than 100 kg of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month; or generates 1 kg or less of acutely hazardous waste during any calendar month, and accumulates more than 1 kg of acutely hazardous waste at any time; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates more than 100 kg of that material at any time

Owner/Operator Summary:

Owner/operator name:	BOYLE HEIGHTS HIGH SCHOOL
Owner/operator address:	Not reported Not reported
Owner/operator country:	Not reported
Owner/operator telephone:	Not reported
Legal status:	District
Owner/Operator Type:	Operator
Owner/Op start date:	11/14/1989
Owner/Op end date:	Not reported
Owner/operator name:	LOS ANGELES UNIFIED SCHOOL DIST
Owner/operator address:	333 S BEAUDRY AVE LOS ANGELES, CA 90017
Owner/operator country:	US
Owner/operator telephone:	Not reported
Legal status:	District
Owner/Operator Type:	Owner

BOYLE HEIGHTS HIGH SCHOOL (Continued) **1011488215**

Owner/Op start date: 11/14/1989
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

. Waste code: D008
. Waste name: LEAD

Violation Status: No violations found

---

6 **EDR Hist Cleaner** **1015030052**
NE **2601 E 4TH ST** **N/A**
< 1/8 **LOS ANGELES, CA 90033**
0.106 mi.
558 ft.

Relative: Higher
Actual: 321 ft.

EDR Historical Cleaners:
Name: US COIN LAUNDRY INC
Year: 2008
Address: 2601 E 4TH ST

B7 **KASH DORA MRS** **EDR Hist Cleaner** **1009192750**
NNE **2547 E 4TH ST** **N/A**
< 1/8 **LOS ANGELES, CA**
0.108 mi.
569 ft. **Site 1 of 2 in cluster B**

Relative: Higher
Actual: 319 ft.

EDR Historical Cleaners:
Name: KASH DORA MRS
Year: 1937
Type: CLOTHES PRESSERS AND CLEANERS

B8 **ROSENTHAL H D** **EDR Hist Cleaner** **1009187557**
North **2523 E 4TH ST** **N/A**
< 1/8 **LOS ANGELES, CA**
0.114 mi.
603 ft. **Site 2 of 2 in cluster B**

Relative:
Higher

Actual:
318 ft.

EDR Historical Cleaners:

Name:	ROSENTHAL H D
Year:	1929
Type:	CLOTHES PRESSERS CLEANERS AND REPAIRERS
Name:	ROSENTHAL H D
Year:	1929
Type:	CLOTHES PRESSERS CLEANERS AND REPAIRERS

C9 **ROSENTHAL H D** **EDR Hist Cleaner** **1009187903**
North **2509 E 4TH ST** **N/A**
< 1/8 **LOS ANGELES, CA**
0.120 mi.
636 ft. **Site 1 of 2 in cluster C**

Relative:
Higher

Actual:
318 ft.

EDR Historical Cleaners:

Name:	ROSENTHAL H D
Year:	1924
Type:	CLOTHES CLEANERS PRESSERS AND DYERS

C10 **DERIAN JOS** **EDR Hist Auto** **1009078980**
North **2505 E 4TH ST** **N/A**
< 1/8 **LOS ANGELES, CA**
0.121 mi.
637 ft. **Site 2 of 2 in cluster C**

Relative:
Higher

Actual:
317 ft.

EDR Historical Auto Stations:

Name:	DERIAN JOS
Year:	1929
Type:	AUTOMOBILE REPAIRING AND SERVICE STATIONS
Name:	DERIAN JOS
Year:	1933
Type:	AUTOMOBILE REPAIRING
Name:	DERIAN JOS
Year:	1937
Type:	AUTOMOBILE REPAIRING
Name:	DERIAN JOS
Year:	1942
Type:	AUTOMOBILE REPAIRING

11
WNW
1/8-1/4
0.145 mi.
766 ft.

Relative:
Higher

Actual:
316 ft.

LINCOLN HOSP MED CTR
443 S SOTO ST
LOS ANGELES, CA 90033

Database(s): RCRA-SQG, SWEEPS UST, CA FID UST, FINDS, HAZNET, ECHO

EDR ID Number: 1000598083
EPA ID Number: CAD983621244

RCRA-SQG:

Date form received by agency:	03/10/1992
Facility name:	LINCOLN HOSP MED CTR
Facility address:	443 S SOTO ST LOS ANGELES, CA 90033
EPA ID:	CAD983621244
Contact:	ADEMIR PASCO
Contact address:	443 S SOTO ST LOS ANGELES, CA 90033
Contact country:	US
Contact telephone:	(213) 261-1181
Contact email:	Not reported
EPA Region:	09
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	EDWARD RUBIN
Owner/operator address:	443 S SOTO ST LOS ANGELES, CA 90033
Owner/operator country:	Not reported
Owner/operator telephone:	(213) 261-1184
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Violation Status: No violations found

SWEEPS UST:

Status: Active

LINCOLN HOSP MED CTR (Continued) **1000598083**

Comp Number: 5123
Number: 1
Board Of Equalization: Not reported
Referral Date: 07-21-93
Action Date: 07-21-93
Created Date: 02-29-88
Owner Tank Id: Not reported
SWRCB Tank Id: Not reported
Tank Status: Not reported
Capacity: Not reported
Active Date: Not reported
Tank Use: Not reported
STG: Not reported
Content: Not reported
Number Of Tanks: Not reported

CA FID UST:
Facility ID: 19035408
Regulated By: UTNKA
Regulated ID: Not reported
Cortese Code: Not reported
SIC Code: Not reported
Facility Phone: 2132611181
Mail To: Not reported
Mailing Address: 443 S SOTO ST
Mailing Address 2: Not reported
Mailing City,St,Zip: LOS ANGELES 900330000
Contact: Not reported
Contact Phone: Not reported
DUNs Number: Not reported
NPDES Number: Not reported
EPA ID: Not reported
Comments: Not reported
Status: Active

FINDS:

Registry ID: 110002870607

Environmental Interest/Information System
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

HAZNET:
envid: 1000598083
Year: 2001
GEPAID: CAD983621244
Contact: --
Telephone: --
Mailing Name: Not reported
Mailing Address: 443 S SOTO ST

LINCOLN HOSP MED CTR (Continued) **1000598083**

Mailing City,St,Zip:	LOS ANGELES, CA 900334315
Gen County:	Not reported
TSD EPA ID:	CAT080013352
TSD County:	Not reported
Waste Category:	Aqueous solution with total organic residues less than 10 percent
Disposal Method:	Recycler
Tons:	0.07
Cat Decode:	Aqueous solution with total organic residues less than 10 percent
Method Decode:	Recycler
Facility County:	Los Angeles

envid:	1000598083
Year:	1999
GEPAID:	CAD983621244
Contact:	EDWARD RUBIN
Telephone:	2132611184
Mailing Name:	Not reported
Mailing Address:	443 S SOTO ST
Mailing City,St,Zip:	LOS ANGELES, CA 900334315
Gen County:	Not reported
TSD EPA ID:	CAT080013352
TSD County:	Not reported
Waste Category:	Unspecified organic liquid mixture
Disposal Method:	Recycler
Tons:	.2293
Cat Decode:	Unspecified organic liquid mixture
Method Decode:	Recycler
Facility County:	Los Angeles

ECHO:

Envid:	1000598083
Registry ID:	110002870607
DFR URL:	http://echo.epa.gov/detailed_facility_report?fid=110002870607

12
SW
1/8-1/4
0.149 mi.
786 ft.

LA USD HOLLENBECK JH **RCRA-SQG 1000427598**
2510 E 6TH ST **FINDS CAD981624786**
LOS ANGELES, CA 90023 **ECHO**

Relative:
Lower

Actual:
303 ft.

RCRA-SQG:

Date form received by agency:	01/27/1987
Facility name:	LA USD HOLLENBECK JH
Facility address:	2510 E 6TH ST LOS ANGELES, CA 90023
EPA ID:	CAD981624786
Mailing address:	1425 S SAN PEDRO ST LOS ANGELES, CA 90015
Contact:	ENVIRONMENTAL MANAGER
Contact address:	2510 E SIXTH ST LOS ANGELES, CA 90023
Contact country:	US
Contact telephone:	(213) 742-7371
Contact email:	Not reported
EPA Region:	09
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous

LA USD HOLLENBECK JH (Continued) **1000427598**

waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	NOT REQUIRED
Owner/operator address:	NOT REQUIRED
	NOT REQUIRED, ME 99999
Owner/operator country:	Not reported
Owner/operator telephone:	(415) 555-1212
Legal status:	District
Owner/Operator Type:	Operator
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Owner/operator name:	LA USD
Owner/operator address:	NOT REQUIRED
	NOT REQUIRED, ME 99999
Owner/operator country:	Not reported
Owner/operator telephone:	(415) 555-1212
Legal status:	District
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Violation Status: No violations found

FINDS:

Registry ID: 110002728308

Environmental Interest/Information System

California Hazardous Waste Tracking System - Datamart (HWTS-DATAMART) provides California with information on hazardous waste shipments for generators, transporters, and treatment, storage, and disposal facilities.

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of

LA USD HOLLENBECK JH (Continued) **1000427598**

events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

ECHO:
Envid: 1000427598
Registry ID: 110002728308
DFR URL: http://echo.epa.gov/detailed_facility_report?fid=110002728308

D13 **SHELL SERVICE STATION** **RCRA-SQG** **1000595652**
NNW **400 S SOTO ST** **LUST** **CAD983596032**
1/8-1/4 **LOS ANGELES, CA 90033** **UST**
0.169 mi.
893 ft. **Site 1 of 5 in cluster D**

Relative: Higher

Actual: 316 ft.

RCRA-SQG:
Date form received by agency: 11/13/2001
Facility name: SHELL SERVICE STATION
Facility address: 400 S SOTO ST
S A P 135484
LOS ANGELES, CA 90033
EPA ID: CAD983596032
Mailing address: P O BOX 2648
HOUSTON, TX 772522648
Contact: SONDRA BIENVENU
Contact address: P O BOX 2648
HOUSTON, TX 772522648
Contact country: US
Contact telephone: (713) 241-5036
Contact email: Not reported
EPA Region: 09
Classification: Small Small Quantity Generator
Description: Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:
Owner/operator name: NOT REQUIRED
Owner/operator address: NOT REQUIRED
NOT REQUIRED, ME 99999
Owner/operator country: Not reported
Owner/operator telephone: (415) 555-1212
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Owner/operator name: EQUILON ENTERPRISES L L C
Owner/operator address: P O BOX 2648
HOUSTON, TX 77252
Owner/operator country: Not reported
Owner/operator telephone: (713) 241-5036
Legal status: Private

SHELL SERVICE STATION (Continued) **1000595652**

Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

. Waste code: D001
. Waste name: IGNITABLE WASTE

. Waste code: D018
. Waste name: BENZENE

Violation Status: No violations found

LUST:
Region: STATE
Global Id: T0603760383
Latitude: 34.040219
Longitude: -118.211558
Case Type: LUST Cleanup Site
Status: Completed - Case Closed
Status Date: 09/12/2012
Lead Agency: LOS ANGELES RWQCB (REGION 4)
Case Worker: MT
Local Agency: LOS ANGELES, CITY OF
RB Case Number: 900330389
LOC Case Number: Not reported
File Location: Regional Board
Potential Media Affect: Aquifer used for drinking water supply
Potential Contaminants of Concern: Gasoline
Site History: Not reported

Click here to access the California GeoTracker records for this facility:

Contact:
Global Id: T0603760383
Contact Type: Local Agency Caseworker
Contact Name: ELOY LUNA
Organization Name: LOS ANGELES, CITY OF
Address: 200 North Main Street, Suite 1780
City: LOS ANGELES
Email: eloy.luna@lacity.org
Phone Number: Not reported

SHELL SERVICE STATION (Continued) **1000595652**

Global Id: T0603760383
Contact Type: Regional Board Caseworker
Contact Name: MARYAM TAIDY
Organization Name: LOS ANGELES RWQCB (REGION 4)
Address: 320 W. 4TH ST., SUITE 200
City: LOS ANGELES
Email: mtaidy@waterboards.ca.gov
Phone Number: 2135766741

Status History:
Global Id: T0603760383
Status: Completed - Case Closed
Status Date: 09/12/2012

Global Id: T0603760383
Status: Open - Case Begin Date
Status Date: 02/02/2002

Global Id: T0603760383
Status: Open - Site Assessment
Status Date: 09/18/2002

Global Id: T0603760383
Status: Open - Site Assessment
Status Date: 11/04/2005

Global Id: T0603760383
Status: Open - Site Assessment
Status Date: 04/25/2006

Regulatory Activities:
Global Id: T0603760383
Action Type: RESPONSE
Date: 10/15/2010
Action: Monitoring Report - Semi-Annually

Global Id: T0603760383
Action Type: RESPONSE
Date: 04/15/2010
Action: Monitoring Report - Semi-Annually

Global Id: T0603760383
Action Type: RESPONSE
Date: 10/28/2009
Action: Soil and Water Investigation Workplan

Global Id: T0603760383
Action Type: RESPONSE
Date: 01/15/2006
Action: Monitoring Report - Quarterly

Global Id: T0603760383
Action Type: RESPONSE
Date: 11/01/2005
Action: Soil and Water Investigation Report

SHELL SERVICE STATION (Continued) **1000595652**

Global Id: T0603760383
Action Type: ENFORCEMENT
Date: 09/12/2012
Action: Staff Letter

Global Id: T0603760383
Action Type: RESPONSE
Date: 01/10/2011
Action: Site Assessment Report

Global Id: T0603760383
Action Type: RESPONSE
Date: 01/15/2009
Action: Monitoring Report - Quarterly

Global Id: T0603760383
Action Type: RESPONSE
Date: 07/15/2006
Action: Monitoring Report - Quarterly

Global Id: T0603760383
Action Type: RESPONSE
Date: 04/15/2011
Action: Monitoring Report - Semi-Annually

Global Id: T0603760383
Action Type: RESPONSE
Date: 06/20/2011
Action: Soil and Water Investigation Report

Global Id: T0603760383
Action Type: RESPONSE
Date: 10/15/2011
Action: Monitoring Report - Quarterly

Global Id: T0603760383
Action Type: RESPONSE
Date: 07/15/2009
Action: Monitoring Report - Semi-Annually

Global Id: T0603760383
Action Type: RESPONSE
Date: 04/15/2009
Action: Monitoring Report - Quarterly

Global Id: T0603760383
Action Type: RESPONSE
Date: 04/25/2006
Action: Soil and Water Investigation Workplan

Global Id: T0603760383
Action Type: RESPONSE
Date: 01/15/2007
Action: Monitoring Report - Quarterly

Global Id: T0603760383
Action Type: RESPONSE

SHELL SERVICE STATION (Continued) **1000595652**

Date: 04/15/2006
Action: Monitoring Report - Quarterly

Global Id: T0603760383
Action Type: RESPONSE
Date: 10/15/2006
Action: Monitoring Report - Quarterly

Global Id: T0603760383
Action Type: RESPONSE
Date: 10/15/2006
Action: Soil and Water Investigation Report

Global Id: T0603760383
Action Type: RESPONSE
Date: 04/15/2007
Action: Monitoring Report - Quarterly

Global Id: T0603760383
Action Type: RESPONSE
Date: 01/15/2012
Action: Monitoring Report - Quarterly

Global Id: T0603760383
Action Type: Other
Date: 09/18/2002
Action: Leak Reported

Global Id: T0603760383
Action Type: RESPONSE
Date: 04/15/2008
Action: Monitoring Report - Quarterly

Global Id: T0603760383
Action Type: RESPONSE
Date: 10/15/2007
Action: Monitoring Report - Quarterly

Global Id: T0603760383
Action Type: RESPONSE
Date: 01/15/2008
Action: Monitoring Report - Quarterly

Global Id: T0603760383
Action Type: ENFORCEMENT
Date: 06/15/2009
Action: Staff Letter

Global Id: T0603760383
Action Type: ENFORCEMENT
Date: 09/12/2012
Action: Closure/No Further Action Letter

Global Id: T0603760383
Action Type: ENFORCEMENT
Date: 06/04/2012
Action: Notification - Preclosure

SHELL SERVICE STATION (Continued) **1000595652**

Global Id: T0603760383
Action Type: RESPONSE
Date: 04/15/2012
Action: Monitoring Report - Quarterly

Global Id: T0603760383
Action Type: RESPONSE
Date: 08/08/2003
Action: Other Report / Document

Global Id: T0603760383
Action Type: Other
Date: 02/02/2002
Action: Leak Discovery

Global Id: T0603760383
Action Type: RESPONSE
Date: 10/15/2004
Action: Monitoring Report - Quarterly

Global Id: T0603760383
Action Type: RESPONSE
Date: 01/22/2008
Action: Interim Remedial Action Plan

Global Id: T0603760383
Action Type: RESPONSE
Date: 10/15/2008
Action: Monitoring Report - Quarterly

Global Id: T0603760383
Action Type: RESPONSE
Date: 07/15/2008
Action: Monitoring Report - Quarterly

Global Id: T0603760383
Action Type: REMEDIATION
Date: 02/02/2002
Action: Excavation

Global Id: T0603760383
Action Type: REMEDIATION
Date: 02/02/2002
Action: Other (Use Description Field)

Global Id: T0603760383
Action Type: ENFORCEMENT
Date: 07/07/2003
Action: Staff Letter

Global Id: T0603760383
Action Type: ENFORCEMENT
Date: 09/12/2012
Action: Closure/No Further Action Letter

Global Id: T0603760383
Action Type: RESPONSE

SHELL SERVICE STATION (Continued) **1000595652**

Date: 07/15/2007
Action: Monitoring Report - Quarterly

Global Id: T0603760383
Action Type: RESPONSE
Date: 10/15/2009
Action: Monitoring Report - Semi-Annually

Global Id: T0603760383
Action Type: RESPONSE
Date: 06/01/2010
Action: Soil and Water Investigation Workplan

LUST REG 4:
Region: 4
Regional Board: 04
County: Los Angeles
Facility Id: 900330389
Status: Leak being confirmed
Substance: Gasoline
Substance Quantity: Not reported
Local Case No: Not reported
Case Type: Soil
Abatement Method Used at the Site: Not reported
Global ID: T0603760383
W Global ID: Not reported
Staff: CEC
Local Agency: 19050
Cross Street: 4TH ST.
Enforcement Type: SEL
Date Leak Discovered: 2/2/2002
Date Leak First Reported: 9/18/2002
Date Leak Record Entered: Not reported
Date Confirmation Began: 9/18/2002
Date Leak Stopped: Not reported
Date Case Last Changed on Database: Not reported
Date the Case was Closed: Not reported
How Leak Discovered: OM
How Leak Stopped: Other Means
Cause of Leak: UNK
Leak Source: UNK
Operator: Not reported
Water System: Not reported
Well Name: Not reported
Approx. Dist To Production Well (ft): Not reported
Source of Cleanup Funding: UNK
Preliminary Site Assessment Workplan Submitted: Not reported
Preliminary Site Assessment Began: Not reported
Pollution Characterization Began: Not reported
Remediation Plan Submitted: Not reported
Remedial Action Underway: Not reported
Post Remedial Action Monitoring Began: Not reported
Enforcement Action Date: Not reported
Historical Max MTBE Date: Not reported
Hist Max MTBE Conc in Groundwater: Not reported
Hist Max MTBE Conc in Soil: Not reported

SHELL SERVICE STATION (Continued) **1000595652**

Significant Interim Remedial Action Taken: Not reported
GW Qualifier: Not reported
Soil Qualifier: Not reported
Organization: Not reported
Owner Contact: Not reported
Responsible Party: EDWARD PADEN
RP Address: 2255 N. ONTARIO ST.
Program: LUST
Lat/Long: 0 / 0
Local Agency Staff: Not reported
Beneficial Use: Not reported
Priority: Not reported
Cleanup Fund Id: Not reported
Suspended: Not reported
Assigned Name: Not reported
Summary: Not reported

UST:
Facility ID: 23924
Permitting Agency: LOS ANGELES, CITY OF
Latitude: 34.041509
Longitude: -118.210244

D14 **CHA SHELL** **SWEEPS UST** **S101585957**
NNW **400 S SOTO ST** **CA FID UST** **N/A**
1/8-1/4 **LOS ANGELES, CA 90033**
0.169 mi.
893 ft. **Site 2 of 5 in cluster D**

Relative:
Higher

Actual:
316 ft.

SWEEPS UST:
Status: Active
Comp Number: 4466
Number: 2
Board Of Equalization: Not reported
Referral Date: 02-25-93
Action Date: 05-03-94
Created Date: 02-29-88
Owner Tank Id: 0000004466
SWRCB Tank Id: 19-050-004466-000001
Tank Status: A
Capacity: 12000
Active Date: 02-19-93
Tank Use: M.V. FUEL
STG: P
Content: REG UNLEADED
Number Of Tanks: 4

Status: Active
Comp Number: 4466
Number: 2
Board Of Equalization: Not reported
Referral Date: 02-25-93
Action Date: 05-03-94
Created Date: 02-29-88
Owner Tank Id: 4466-2
SWRCB Tank Id: 19-050-004466-000002
Tank Status: A

CHA SHELL (Continued) **S101585957**

Capacity: 12000
Active Date: 02-19-93
Tank Use: M.V. FUEL
STG: P
Content: PRM UNLEADED
Number Of Tanks: Not reported

Status: Active
Comp Number: 4466
Number: 2
Board Of Equalization: Not reported
Referral Date: 02-25-93
Action Date: 05-03-94
Created Date: 02-29-88
Owner Tank Id: 4466-3
SWRCB Tank Id: 19-050-004466-000003
Tank Status: A
Capacity: 12000
Active Date: 02-19-93
Tank Use: M.V. FUEL
STG: P
Content: PREMIUM UNLE
Number Of Tanks: Not reported

Status: Active
Comp Number: 4466
Number: 2
Board Of Equalization: Not reported
Referral Date: 02-25-93
Action Date: 05-03-94
Created Date: 02-29-88
Owner Tank Id: 4466-4
SWRCB Tank Id: 19-050-004466-000004
Tank Status: A
Capacity: 550
Active Date: 02-19-93
Tank Use: OIL
STG: W
Content: WASTE OIL
Number Of Tanks: Not reported

CA FID UST:
Facility ID: 19034784
Regulated By: UTNKA
Regulated ID: Not reported
Cortese Code: Not reported
SIC Code: Not reported
Facility Phone: 2132610356
Mail To: Not reported
Mailing Address: 400 S SOTO ST
Mailing Address 2: Not reported
Mailing City,St,Zip: LOS ANGELES 900330000
Contact: Not reported
Contact Phone: Not reported
DUNs Number: Not reported
NPDES Number: Not reported
EPA ID: Not reported

CHA SHELL (Continued) **S101585957**

Comments: Not reported
Status: Active

D15 **WINALL #1** **LUST** **S109117772**
NNW **401 SOTO ST. S.** **N/A**
1/8-1/4 **LOS ANGELES, CA 90033**
0.172 mi.
908 ft. **Site 3 of 5 in cluster D**

Relative:
Higher

Actual:
315 ft.

LUST:

Region:	STATE
Global Id:	T0603739097
Latitude:	34.040368
Longitude:	-118.212153
Case Type:	LUST Cleanup Site
Status:	Open - Remediation
Status Date:	05/15/2013
Lead Agency:	LOS ANGELES RWQCB (REGION 4)
Case Worker:	MT
Local Agency:	LOS ANGELES, CITY OF
RB Case Number:	900330416
LOC Case Number:	11763
File Location:	Regional Board
Potential Media Affect:	Other Groundwater (uses other than drinking water), Soil
Potential Contaminants of Concern:	Gasoline
Site History:	Not reported

Click here to access the California GeoTracker records for this facility:

Contact:

Global Id:	T0603739097
Contact Type:	Local Agency Caseworker
Contact Name:	PATRICK KILLIAN
Organization Name:	LOS ANGELES, CITY OF
Address:	221 N FIGUEROA ST STE 1500
City:	LOS ANGELES
Email:	Not reported
Phone Number:	2134826527

Global Id:	T0603739097
Contact Type:	Regional Board Caseworker
Contact Name:	MARYAM TAIDY
Organization Name:	LOS ANGELES RWQCB (REGION 4)
Address:	320 W. 4TH ST., SUITE 200
City:	LOS ANGELES
Email:	mtaidy@waterboards.ca.gov
Phone Number:	2135766741

Status History:

Global Id:	T0603739097
Status:	Open - Case Begin Date
Status Date:	07/21/1998

Global Id:	T0603739097
Status:	Open - Referred
Status Date:	12/09/2008

Global Id:	T0603739097

WINALL #1 (Continued) **S109117772**

Status: Open - Remediation
Status Date: 05/15/2013

Global Id: T0603739097
Status: Open - Site Assessment
Status Date: 07/12/2007

Global Id: T0603739097
Status: Open - Site Assessment
Status Date: 02/19/2009

Regulatory Activities:
Global Id: T0603739097
Action Type: ENFORCEMENT
Date: 02/19/2009
Action: Staff Letter

Global Id: T0603739097
Action Type: ENFORCEMENT
Date: 02/23/2009
Action: Verbal Enforcement

Global Id: T0603739097
Action Type: RESPONSE
Date: 07/15/2013
Action: Monitoring Report - Semi-Annually

Global Id: T0603739097
Action Type: RESPONSE
Date: 10/15/2015
Action: Monitoring Report - Semi-Annually

Global Id: T0603739097
Action Type: REMEDIATION
Date: 07/13/2008
Action: Free Product Removal

Global Id: T0603739097
Action Type: RESPONSE
Date: 01/15/2011
Action: Monitoring Report - Semi-Annually

Global Id: T0603739097
Action Type: RESPONSE
Date: 01/15/2010
Action: Monitoring Report - Semi-Annually

Global Id: T0603739097
Action Type: RESPONSE
Date: 07/15/2009
Action: Monitoring Report - Quarterly

Global Id: T0603739097
Action Type: RESPONSE
Date: 09/09/2013
Action: Well Installation Report

WINALL #1 (Continued) **S109117772**

Global Id: T0603739097
Action Type: RESPONSE
Date: 07/15/2011
Action: Monitoring Report - Semi-Annually

Global Id: T0603739097
Action Type: RESPONSE
Date: 01/15/2009
Action: Monitoring Report - Quarterly

Global Id: T0603739097
Action Type: RESPONSE
Date: 07/15/2010
Action: Monitoring Report - Semi-Annually

Global Id: T0603739097
Action Type: ENFORCEMENT
Date: 05/15/2013
Action: Staff Letter

Global Id: T0603739097
Action Type: Other
Date: 08/30/1998
Action: Leak Reported

Global Id: T0603739097
Action Type: RESPONSE
Date: 03/22/2013
Action: CAP/RAP - Final Remediation / Design Plan - Regulator Responded

Global Id: T0603739097
Action Type: Other
Date: 07/21/1998
Action: Leak Discovery

Global Id: T0603739097
Action Type: RESPONSE
Date: 01/15/2012
Action: Monitoring Report - Semi-Annually

Global Id: T0603739097
Action Type: RESPONSE
Date: 08/31/2012
Action: Corrective Action Plan / Remedial Action Plan

Global Id: T0603739097
Action Type: RESPONSE
Date: 07/15/2014
Action: Monitoring Report - Semi-Annually

Global Id: T0603739097
Action Type: RESPONSE
Date: 01/15/2015
Action: Monitoring Report - Semi-Annually

Global Id: T0603739097
Action Type: RESPONSE

WINALL #1 (Continued) **S109117772**

Date: 01/15/2014
Action: Monitoring Report - Semi-Annually

Global Id: T0603739097
Action Type: ENFORCEMENT
Date: 08/03/2012
Action: Staff Letter

Global Id: T0603739097
Action Type: RESPONSE
Date: 07/15/2012
Action: Monitoring Report - Semi-Annually

Global Id: T0603739097
Action Type: RESPONSE
Date: 01/24/2011
Action: Interim Remedial Action Report

Global Id: T0603739097
Action Type: RESPONSE
Date: 01/23/2013
Action: Interim Remedial Action Report

Global Id: T0603739097
Action Type: RESPONSE
Date: 01/23/2013
Action: Site Assessment Report

Global Id: T0603739097
Action Type: RESPONSE
Date: 01/15/2013
Action: Monitoring Report - Semi-Annually

Global Id: T0603739097
Action Type: RESPONSE
Date: 07/15/2013
Action: CAP/RAP - Other Report

Global Id: T0603739097
Action Type: RESPONSE
Date: 12/10/2009
Action: Interim Remedial Action Report

Global Id: T0603739097
Action Type: RESPONSE
Date: 04/15/2009
Action: Monitoring Report - Quarterly

Global Id: T0603739097
Action Type: RESPONSE
Date: 01/14/2009
Action: Interim Remedial Action Report

Global Id: T0603739097
Action Type: RESPONSE
Date: 06/01/2010
Action: Interim Remedial Action Report

D16 **WINALL OIL COMPANY** **SWEEPS UST** **S101584254**
NNW **401 S SOTO ST** **CA FID UST** **N/A**
1/8-1/4 **LOS ANGELES, CA 90033**
0.175 mi.
925 ft. **Site 4 of 5 in cluster D**

Relative:
Higher

Actual:
315 ft.

SWEEPS UST:

Status:	Active
Comp Number:	4707
Number:	1
Board Of Equalization:	Not reported
Referral Date:	02-25-93
Action Date:	02-25-93
Created Date:	02-29-88
Owner Tank Id:	Not reported
SWRCB Tank Id:	Not reported
Tank Status:	Not reported
Capacity:	Not reported
Active Date:	Not reported
Tank Use:	Not reported
STG:	Not reported
Content:	Not reported
Number Of Tanks:	Not reported

CA FID UST:

Facility ID:	19009951
Regulated By:	UTNKA
Regulated ID:	Not reported
Cortese Code:	Not reported
SIC Code:	Not reported
Facility Phone:	2130000000
Mail To:	Not reported
Mailing Address:	401 S SOTO ST
Mailing Address 2:	Not reported
Mailing City,St,Zip:	LOS ANGELES 900330000
Contact:	Not reported
Contact Phone:	Not reported
DUNs Number:	Not reported
NPDES Number:	Not reported
EPA ID:	Not reported
Comments:	Not reported
Status:	Active

D17 **WINALL #1** **UST** **U003943019**
NNW **401 S SOTO ST** **N/A**
1/8-1/4 **LOS ANGELES, CA 90033**
0.175 mi.
925 ft. **Site 5 of 5 in cluster D**

Relative:
Higher

Actual:
315 ft.

UST:

Facility ID:	24378
Permitting Agency:	LOS ANGELES, CITY OF
Latitude:	34.041746
Longitude:	-118.210821

E18 **90668** **HIST UST** **U001561336**
NNW **2333 E 4TH ST** **N/A**
1/8-1/4 **LOS ANGELES, CA 90033**
0.219 mi.
1158 ft. **Site 1 of 3 in cluster E**

Relative:
Higher

Actual:
313 ft.

HIST UST:

File Number:	00026BFC
URL:	http://geotracker.waterboards.ca.gov/ustpdfs/pdf/00026BFC.pdf
Region:	STATE
Facility ID:	00000061874
Facility Type:	Gas Station
Other Type:	Not reported
Contact Name:	ELMIR, GHASSAN
Telephone:	2132678760
Owner Name:	CHEVRON U.S.A. INC.
Owner Address:	575 MARKET
Owner City,St,Zip:	SAN FRANCISCO, CA 94105
Total Tanks:	0004
Tank Num:	001
Container Num:	1
Year Installed:	1969
Tank Capacity:	00010000
Tank Used for:	PRODUCT
Type of Fuel:	Not reported
Container Construction Thickness:	0000250
Leak Detection:	Stock Inventor
Tank Num:	002
Container Num:	2
Year Installed:	1969
Tank Capacity:	00010000
Tank Used for:	PRODUCT
Type of Fuel:	Not reported
Container Construction Thickness:	0000250
Leak Detection:	Stock Inventor
Tank Num:	003
Container Num:	3
Year Installed:	1969
Tank Capacity:	00005000
Tank Used for:	PRODUCT
Type of Fuel:	Not reported
Container Construction Thickness:	0000250
Leak Detection:	Stock Inventor
Tank Num:	004
Container Num:	4
Year Installed:	1969
Tank Capacity:	00001000
Tank Used for:	WASTE
Type of Fuel:	Not reported
Container Construction Thickness:	0000130
Leak Detection:	Stock Inventor

Click here for Geo Tracker PDF:

E19
NNW
1/8-1/4
0.219 mi.
1158 ft.

CHEVRON STATION 90668
2333 E 4TH ST
LOS ANGELES, CA 90033

Site 2 of 3 in cluster E

SWEEPS UST **S101583841**
CA FID UST **N/A**

Relative:
Higher

Actual:
313 ft.

SWEEPS UST:

Status:	Not reported
Comp Number:	3470
Number:	Not reported
Board Of Equalization:	44-013017
Referral Date:	Not reported
Action Date:	Not reported
Created Date:	Not reported
Owner Tank Id:	Not reported
SWRCB Tank Id:	19-050-003470-000001
Tank Status:	Not reported
Capacity:	10000
Active Date:	Not reported
Tank Use:	CHEMICAL
STG:	PRODUCT
Content:	UNKNOWN
Number Of Tanks:	4

Status:	Not reported
Comp Number:	3470
Number:	Not reported
Board Of Equalization:	44-013017
Referral Date:	Not reported
Action Date:	Not reported
Created Date:	Not reported
Owner Tank Id:	Not reported
SWRCB Tank Id:	19-050-003470-000002
Tank Status:	Not reported
Capacity:	10000
Active Date:	Not reported
Tank Use:	CHEMICAL
STG:	PRODUCT
Content:	UNKNOWN
Number Of Tanks:	Not reported

Status:	Not reported
Comp Number:	3470
Number:	Not reported
Board Of Equalization:	44-013017
Referral Date:	Not reported
Action Date:	Not reported
Created Date:	Not reported
Owner Tank Id:	Not reported
SWRCB Tank Id:	19-050-003470-000003
Tank Status:	Not reported
Capacity:	5000
Active Date:	Not reported
Tank Use:	CHEMICAL
STG:	PRODUCT
Content:	UNKNOWN
Number Of Tanks:	Not reported

Status:	Not reported

CHEVRON STATION 90668 (Continued) **S101583841**

Comp Number:	3470
Number:	Not reported
Board Of Equalization:	44-013017
Referral Date:	Not reported
Action Date:	Not reported
Created Date:	Not reported
Owner Tank Id:	Not reported
SWRCB Tank Id:	19-050-003470-000004
Tank Status:	Not reported
Capacity:	1000
Active Date:	Not reported
Tank Use:	CHEMICAL
STG:	PRODUCT
Content:	UNKNOWN
Number Of Tanks:	Not reported

CA FID UST:

Facility ID:	19006724
Regulated By:	UTNKI
Regulated ID:	00061874
Cortese Code:	Not reported
SIC Code:	Not reported
Facility Phone:	2136947000
Mail To:	Not reported
Mailing Address:	575 MARKET ST
Mailing Address 2:	Not reported
Mailing City,St,Zip:	LOS ANGELES 900330000
Contact:	Not reported
Contact Phone:	Not reported
DUNs Number:	Not reported
NPDES Number:	Not reported
EPA ID:	Not reported
Comments:	Not reported
Status:	Inactive

E20 **EAST L A PHOTO AND STUDIO** **RCRA-SQG** **1000820264**
NW **2323 E 4TH ST** **FINDS** **CAD983662982**
1/8-1/4 **LOS ANGELES, CA 90033** **HAZNET**
0.225 mi. **ECHO**
1187 ft. **Site 3 of 3 in cluster E**

Relative:
Lower

Actual:
312 ft.

RCRA-SQG:

Date form received by agency:	03/30/1993
Facility name:	EAST L A PHOTO AND STUDIO
Facility address:	2323 E 4TH ST LOS ANGELES, CA 90033
EPA ID:	CAD983662982
Mailing address:	E 4TH ST LOS ANGELES, CA 90033
Contact:	ESTHER KIM
Contact address:	2323 E 4TH ST LOS ANGELES, CA 90033
Contact country:	US
Contact telephone:	(213) 264-5940
Contact email:	Not reported
EPA Region:	09
Classification:	Small Small Quantity Generator

EAST L A PHOTO AND STUDIO (Continued) **1000820264**

Description: Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	HYANG SOON KIM
Owner/operator address:	2323 E 4TH ST LOS ANGELES, CA 90033
Owner/operator country:	Not reported
Owner/operator telephone:	(213) 264-5940
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Violation Status: No violations found

FINDS:

Registry ID: 110002895341

Environmental Interest/Information System

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

HAZNET:

envid:	1000820264
Year:	1998
GEPAID:	CAD983662982
Contact:	HYUN MYUNG OH
Telephone:	0000000000
Mailing Name:	Not reported

EAST L A PHOTO AND STUDIO (Continued) **1000820264**

Mailing Address: 2323 E 4TH ST
Mailing City,St,Zip: LOS ANGELES, CA 900330000
Gen County: Not reported
TSD EPA ID: CAD108040858
TSD County: Not reported
Waste Category: Photochemicals/photoprocessing waste
Disposal Method: Recycler
Tons: .7338
Cat Decode: Photochemicals/photoprocessing waste
Method Decode: Recycler
Facility County: Los Angeles

envid: 1000820264
Year: 1997
GEPAID: CAD983662982
Contact: HYUN MYUNG OH
Telephone: 0000000000
Mailing Name: Not reported
Mailing Address: 2323 E 4TH ST
Mailing City,St,Zip: LOS ANGELES, CA 900330000
Gen County: Not reported
TSD EPA ID: CAD108040858
TSD County: Not reported
Waste Category: Photochemicals/photoprocessing waste
Disposal Method: Recycler
Tons: .5418
Cat Decode: Photochemicals/photoprocessing waste
Method Decode: Recycler
Facility County: Los Angeles

envid: 1000820264
Year: 1996
GEPAID: CAD983662982
Contact: HYUN MYUNG OH
Telephone: 0000000000
Mailing Name: Not reported
Mailing Address: 2323 E 4TH ST
Mailing City,St,Zip: LOS ANGELES, CA 900330000
Gen County: Not reported
TSD EPA ID: CAD108040858
TSD County: Not reported
Waste Category: Photochemicals/photoprocessing waste
Disposal Method: Recycler
Tons: .2500
Cat Decode: Photochemicals/photoprocessing waste
Method Decode: Recycler
Facility County: Los Angeles

ECHO:
Envid: 1000820264
Registry ID: 110002895341
DFR URL: http://echo.epa.gov/detailed_facility_report?fid=110002895341

21
SSW
1/4-1/2
0.382 mi.
2016 ft.

RODRIGUEZ RECYCLING GROUP INC
2503 WHITTIER BLVD
LOS ANGELES, CA 90023

SWRCY **S109612844**
N/A

Relative:
Lower

Actual:
282 ft.

SWRCY:

Reg Id:	208422
Cert Id:	RC208422.001
Mailing Address:	1533 Raymond Ave
Mailing City:	Glendale
Mailing State:	CA
Mailing Zip Code:	91201
Website:	Not reported
Email:	rspka007@me.com
Phone Number:	(323) 449-0707
Grand Father:	N
Rural:	N
Operation Begin Date:	03/21/2014
Aluminium:	Y
Glass:	Y
Plastic:	Y
Bimetal:	Y
Agency:	N/A
Monday Hours Of Operation:	8:00 am - 6:00 pm
Tuesday Hours Of Operation:	8:00 am - 6:00 pm
Wednesday Hours Of Operation:	8:00 am - 6:00 pm
Thursday Hours Of Operation:	8:00 am - 6:00 pm
Friday Hours Of Operation:	8:00 am - 6:00 pm
Saturday Hours Of Operation:	8:00 am - 6:00 pm
Sunday Hours Of Operation:	8:00 am - 6:00 pm
Organization ID:	194912
Organization Name:	Rodriguez Recycling Group Inc

22
ENE
1/4-1/2
0.394 mi.
2080 ft.

EAST L A RECYCLING CENTER
2750 E 1ST ST
LOS ANGELES, CA 90033

SWRCY **S107136883**
N/A

Relative:
Higher

Actual:
315 ft.

SWRCY:

Reg Id:	25046
Cert Id:	RC11354
Mailing Address:	3249 W El Segundo Blvd
Mailing City:	Hawthorne
Mailing State:	CA
Mailing Zip Code:	90250
Website:	Not reported
Email:	Not reported
Phone Number:	(213) 235-0050
Grand Father:	N
Rural:	N
Operation Begin Date:	12/01/2002
Aluminium:	Y
Glass:	Y
Plastic:	Y
Bimetal:	Y
Agency:	N/A
Monday Hours Of Operation:	9:00 am - 4:45 pm; Closed 1:00 pm - 1:30 pm
Tuesday Hours Of Operation:	9:00 am - 4:45 pm; Closed 1:00 pm - 1:30 pm

EAST L A RECYCLING CENTER (Continued) **S107136883**

Wednesday Hours Of Operation:	9:00 am - 4:45 pm; Closed 1:00 pm - 1:30 pm
Thursday Hours Of Operation:	9:00 am - 4:45 pm; Closed 1:00 pm - 1:30 pm
Friday Hours Of Operation:	9:00 am - 4:45 pm; Closed 1:00 pm - 1:30 pm
Saturday Hours Of Operation:	9:00 am - 4:45 pm; Closed 1:00 pm - 1:30 pm
Sunday Hours Of Operation:	CLOSED
Organization ID:	31689
Organization Name:	E & M Recycling Company

F23 **M & Y SERVICE STATION** **HIST CORTESE** **U001561360**
NE **2701 001ST** **N/A**
1/4-1/2 **LOS ANGELES, CA 90033**
0.400 mi.
2112 ft. **Site 1 of 2 in cluster F**

Relative:
Higher

Actual:
313 ft.

HIST CORTESE:

Region:	CORTESE
Facility County Code:	19
Reg By:	LTNKA
Reg Id:	900330143

F24 **M & Y SERVICE STATION** **LUST** **S105036164**
NE **2701 001ST ST E** **N/A**
1/4-1/2 **LOS ANGELES, CA 90033**
0.400 mi.
2112 ft. **Site 2 of 2 in cluster F**

Relative:
Higher

Actual:
313 ft.

LUST:

Region:	STATE
Global Id:	T0603700833
Latitude:	34.0420041
Longitude:	-118.2059948
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	01/14/1997
Lead Agency:	LOS ANGELES RWQCB (REGION 4)
Case Worker:	YR
Local Agency:	LOS ANGELES, CITY OF
RB Case Number:	900330143
LOC Case Number:	Not reported
File Location:	Not reported
Potential Media Affect:	Aquifer used for drinking water supply
Potential Contaminants of Concern:	Gasoline
Site History:	Not reported

Click here to access the California GeoTracker records for this facility:

Contact:

Global Id:	T0603700833
Contact Type:	Regional Board Caseworker
Contact Name:	YUE RONG
Organization Name:	LOS ANGELES RWQCB (REGION 4)
Address:	320 W. 4TH ST., SUITE 200
City:	Los Angeles
Email:	yrong@waterboards.ca.gov
Phone Number:	Not reported

Global Id: T0603700833

M & Y SERVICE STATION (Continued) **S105036164**

Contact Type: Local Agency Caseworker
Contact Name: ELOY LUNA
Organization Name: LOS ANGELES, CITY OF
Address: 200 North Main Street, Suite 1780
City: LOS ANGELES
Email: eloy.luna@lacity.org
Phone Number: Not reported

Status History:
Global Id: T0603700833
Status: Completed - Case Closed
Status Date: 01/14/1997

Global Id: T0603700833
Status: Open - Case Begin Date
Status Date: 08/21/1991

Global Id: T0603700833
Status: Open - Remediation
Status Date: 09/12/1995

Regulatory Activities:
Global Id: T0603700833
Action Type: Other
Date: 08/21/1991
Action: Leak Reported

LUST REG 4:
Region: 4
Regional Board: 04
County: Los Angeles
Facility Id: 900330143
Status: Case Closed
Substance: Gasoline
Substance Quantity: Not reported
Local Case No: Not reported
Case Type: Groundwater
Abatement Method Used at the Site: VE
Global ID: T0603700833
W Global ID: Not reported
Staff: UNK
Local Agency: 19050
Cross Street: MOTT ST
Enforcement Type: Not reported
Date Leak Discovered: Not reported
Date Leak First Reported: 8/21/1991
Date Leak Record Entered: 1/18/1996
Date Confirmation Began: Not reported
Date Leak Stopped: Not reported
Date Case Last Changed on Database: 2/6/1997
Date the Case was Closed: 1/14/1997
How Leak Discovered: Not reported
How Leak Stopped: Not reported
Cause of Leak: Not reported
Leak Source: Not reported

M & Y SERVICE STATION (Continued) **S105036164**

Operator:	Not reported	
Water System:	Not reported	
Well Name:	Not reported	
Approx. Dist To Production Well (ft):		7538.9172814599735755553043085
Source of Cleanup Funding:		Not reported
Preliminary Site Assessment Workplan Submitted:		Not reported
Preliminary Site Assessment Began:		Not reported
Pollution Characterization Began:		Not reported
Remediation Plan Submitted:		Not reported
Remedial Action Underway:		9/12/1995
Post Remedial Action Monitoring Began:		Not reported
Enforcement Action Date:		Not reported
Historical Max MTBE Date:		1/1/1965
Hist Max MTBE Conc in Groundwater:		16
Hist Max MTBE Conc in Soil:		Not reported
Significant Interim Remedial Action Taken:		Not reported
GW Qualifier:	Not reported	
Soil Qualifier:	Not reported	
Organization:	Not reported	
Owner Contact:	Not reported	
Responsible Party:	M & Y SERVICE STATION	
RP Address:	2701 E 1ST ST, LOS ANGELES CA 90033	
Program:	LUST	
Lat/Long:	34.0420041 / -1	
Local Agency Staff:	PEJ	
Beneficial Use:	Not reported	
Priority:	Not reported	
Cleanup Fund Id:	Not reported	
Suspended:	Not reported	
Assigned Name:	Not reported	
Summary:	01/03/97 GROUNDWATER MONITORING WELL ABANDONMENT	02/06/97

25
South
1/4-1/2
0.420 mi.
2219 ft.

QUINTERO TIRES **LUST** **S102435585**
2726 WHITTIER BLVD **HIST CORTESE** **N/A**
LOS ANGELES, CA 90023

Relative:
Higher

Actual:
319 ft.

LUST:

Region:	STATE
Global Id:	T0603700669
Latitude:	34.03213
Longitude:	-118.211379
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	11/04/1998
Lead Agency:	LOS ANGELES, CITY OF
Case Worker:	WR
Local Agency:	LOS ANGELES, CITY OF
RB Case Number:	900230189
LOC Case Number:	Not reported
File Location:	Not reported
Potential Media Affect:	Soil
Potential Contaminants of Concern:	Gasoline
Site History:	Not reported

QUINTERO TIRES (Continued) **S102435585**

Click here to access the California GeoTracker records for this facility:

Contact:

Global Id:	T0603700669
Contact Type:	Regional Board Caseworker
Contact Name:	YUE RONG
Organization Name:	LOS ANGELES RWQCB (REGION 4)
Address:	320 W. 4TH ST., SUITE 200
City:	Los Angeles
Email:	yrong@waterboards.ca.gov
Phone Number:	Not reported

Global Id:	T0603700669
Contact Type:	Local Agency Caseworker
Contact Name:	TBD
Organization Name:	LOS ANGELES, CITY OF
Address:	200 N. MAIN ST. RM. 970
City:	LOS ANGELES
Email:	Not reported
Phone Number:	2134826528

Status History:

Global Id:	T0603700669
Status:	Completed - Case Closed
Status Date:	11/04/1998

Global Id:	T0603700669
Status:	Open - Case Begin Date
Status Date:	09/15/1993

Global Id:	T0603700669
Status:	Open - Site Assessment
Status Date:	01/09/1995

Regulatory Activities:

Global Id:	T0603700669
Action Type:	Other
Date:	09/15/1993
Action:	Leak Stopped

Global Id:	T0603700669
Action Type:	Other
Date:	09/15/1993
Action:	Leak Discovery

Global Id:	T0603700669
Action Type:	Other
Date:	01/09/1995
Action:	Leak Reported

LUST REG 4:

Region:	4
Regional Board:	04
County:	Los Angeles

QUINTERO TIRES (Continued) **S102435585**

Facility Id:	900230189	
Status:	Case Closed	
Substance:	Gasoline	
Substance Quantity:	Not reported	
Local Case No:	Not reported	
Case Type:	Soil	
Abatement Method Used at the Site:		VE
Global ID:	T0603700669	
W Global ID:	Not reported	
Staff:	UNK	
Local Agency:	19050	
Cross Street:	MARIETTA ST	
Enforcement Type:	Not reported	
Date Leak Discovered:	9/15/1993	
Date Leak First Reported:		1/9/1995
Date Leak Record Entered:	11/28/1995	
Date Confirmation Began:	Not reported	
Date Leak Stopped:	9/15/1993	
Date Case Last Changed on Database:		11/4/1998
Date the Case was Closed:		11/4/1998
How Leak Discovered:	Tank Closure	
How Leak Stopped:	Not reported	
Cause of Leak:	Corrosion	
Leak Source:	Tank	
Operator:	OLD CASE #951128-01	
Water System:	Not reported	
Well Name:	Not reported	
Approx. Dist To Production Well (ft):		6613.2684208312216053167461574
Source of Cleanup Funding:		Tank
Preliminary Site Assessment Workplan Submitted:		Not reported
Preliminary Site Assessment Began:		Not reported
Pollution Characterization Began:		1/9/1995
Remediation Plan Submitted:		Not reported
Remedial Action Underway:		Not reported
Post Remedial Action Monitoring Began:		Not reported
Enforcement Action Date:		Not reported
Historical Max MTBE Date:		Not reported
Hist Max MTBE Conc in Groundwater:		Not reported
Hist Max MTBE Conc in Soil:		Not reported
Significant Interim Remedial Action Taken:		Not reported
GW Qualifier:	Not reported	
Soil Qualifier:	Not reported	
Organization:	Not reported	
Owner Contact:	Not reported	
Responsible Party:	PETRA TORREZ	
RP Address:	2720 WHITTIER BLVD LOS ANGELES 90023	
Program:	LUST	
Lat/Long:	34.0321936 / -1	
Local Agency Staff:	PEJ	
Beneficial Use:	Not reported	
Priority:	Not reported	
Cleanup Fund Id:	Not reported	
Suspended:	Not reported	
Assigned Name:	Not reported	
Summary:	06/24/97 - PRE-APPROVAL OF CORRECTIVE ACTION COSTS	

QUINTERO TIRES (Continued) **S102435585**

HIST CORTESE:
Region: CORTESE
Facility County Code: 19
Reg By: LTNKA
Reg Id: 900230189

26
West
1/4-1/2
0.423 mi.
2233 ft.

LINDA VISTA HOSPITAL **LUST** **S104773321**
610 SAINT LOUIS ST S **N/A**
LOS ANGELES, CA 90023

Relative:
Higher

Actual:
321 ft.

LUST:
Region: STATE
Global Id: T0603792895
Latitude: 34.0389285
Longitude: -118.2174375
Case Type: LUST Cleanup Site
Status: Completed - Case Closed
Status Date: 10/29/2004
Lead Agency: LOS ANGELES RWQCB (REGION 4)
Case Worker: DMB
Local Agency: LOS ANGELES, CITY OF
RB Case Number: 900230289
LOC Case Number: Not reported
File Location: Not reported
Potential Media Affect: Aquifer used for drinking water supply
Potential Contaminants of Concern: Diesel
Site History: Not reported

Click here to access the California GeoTracker records for this facility:

Contact:
Global Id: T0603792895
Contact Type: Regional Board Caseworker
Contact Name: DAVID M. BJOSTAD
Organization Name: LOS ANGELES RWQCB (REGION 4)
Address: 320 W. 4th Street, Suite 200
City: Los Angeles
Email: dbjostad@waterboards.ca.gov
Phone Number: Not reported

Global Id: T0603792895
Contact Type: Local Agency Caseworker
Contact Name: ELOY LUNA
Organization Name: LOS ANGELES, CITY OF
Address: 200 North Main Street, Suite 1780
City: LOS ANGELES
Email: eloy.luna@lacity.org
Phone Number: Not reported

Status History:
Global Id: T0603792895
Status: Completed - Case Closed
Status Date: 10/29/2004

Global Id: T0603792895

LINDA VISTA HOSPITAL (Continued) **S104773321**

Status: Open - Case Begin Date
Status Date: 08/04/2000

Global Id: T0603792895
Status: Open - Site Assessment
Status Date: 08/04/2000

Global Id: T0603792895
Status: Open - Site Assessment
Status Date: 10/02/2000

Global Id: T0603792895
Status: Open - Site Assessment
Status Date: 11/01/2000

Global Id: T0603792895
Status: Open - Site Assessment
Status Date: 12/12/2000

Regulatory Activities:
Global Id: T0603792895
Action Type: ENFORCEMENT
Date: 12/12/2000
Action: Staff Letter

Global Id: T0603792895
Action Type: ENFORCEMENT
Date: 10/29/2004
Action: Closure/No Further Action Letter

Global Id: T0603792895
Action Type: Other
Date: 10/20/2000
Action: Leak Reported

Global Id: T0603792895
Action Type: RESPONSE
Date: 01/14/2005
Action: Unknown

Global Id: T0603792895
Action Type: RESPONSE
Date: 04/15/2004
Action: Monitoring Report - Quarterly

Global Id: T0603792895
Action Type: RESPONSE
Date: 07/15/2004
Action: Monitoring Report - Quarterly

Global Id: T0603792895
Action Type: ENFORCEMENT
Date: 10/15/2004
Action: Notification - Preclosure

LINDA VISTA HOSPITAL (Continued) **S104773321**

LUST REG 4:

Region:	4	
Regional Board:	04	
County:	Los Angeles	
Facility Id:	900230289	
Status:	Pollution Characterization	
Substance:	Diesel	
Substance Quantity:	Not reported	
Local Case No:	Not reported	
Case Type:	Groundwater	
Abatement Method Used at the Site:		Not reported
Global ID:	T0603792895	
W Global ID:	Not reported	
Staff:	RVJ	
Local Agency:	19050	
Cross Street:	Not reported	
Enforcement Type:	LET	
Date Leak Discovered:	Not reported	
Date Leak First Reported:		10/20/2000
Date Leak Record Entered:	Not reported	
Date Confirmation Began:	8/4/2000	
Date Leak Stopped:	Not reported	
Date Case Last Changed on Database:		2/23/2001
Date the Case was Closed:		Not reported
How Leak Discovered:	Not reported	
How Leak Stopped:	Not reported	
Cause of Leak:	Not reported	
Leak Source:	Not reported	
Operator:	Not reported	
Water System:	Not reported	
Well Name:	Not reported	
Approx. Dist To Production Well (ft):		9622.878000194255066521003 48
Source of Cleanup Funding:		Not reported
Preliminary Site Assessment Workplan Submitted:		10/2/2000
Preliminary Site Assessment Began:		11/1/2000
Pollution Characterization Began:		12/12/2000
Remediation Plan Submitted:		Not reported
Remedial Action Underway:		Not reported
Post Remedial Action Monitoring Began:		10/20/2000
Enforcement Action Date:		Not reported
Historical Max MTBE Date:		1/1/1965
Hist Max MTBE Conc in Groundwater:		5
Hist Max MTBE Conc in Soil:		.01
Significant Interim Remedial Action Taken:		Not reported
GW Qualifier:	<	
Soil Qualifier:	<	
Organization:	Not reported	
Owner Contact:	Not reported	
Responsible Party:	REID RINER/STEVE SHEA	
RP Address:	2727 N. CENTRAL AVE., STE. #500	
Program:	LUST	
Lat/Long:	34.0388 / -1	
Local Agency Staff:	PEJ	
Beneficial Use:	Not reported	
Priority:	Not reported	
Cleanup Fund Id:	Not reported	
Suspended:	Not reported	

LINDA VISTA HOSPITAL (Continued) **S104773321**

Assigned Name: Not reported
Summary: REQUEST UN URF FROM LA CITY FD. (INSPECTOR DAVID CASTANEDA), 1-2000 GAL-DIESEL UST REMOVED 7/96, CONTINUE QMR; 2/23/01 1ST QTR GW MON RPT 2001

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27 **MOBIL #11-EKT** **LUST** **S102433538**
SW **909 SOTO ST S** **HIST CORTESE** **N/A**
1/4-1/2 **LOS ANGELES, CA 90023**
0.434 mi.
2291 ft.

Relative:
Lower

Actual:
307 ft.

LUST:

Region:	STATE
Global Id:	T0603700674
Latitude:	34.0341026
Longitude:	-118.21594
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	10/21/2009
Lead Agency:	LOS ANGELES RWQCB (REGION 4)
Case Worker:	MT
Local Agency:	LOS ANGELES, CITY OF
RB Case Number:	900230234
LOC Case Number:	Not reported
File Location:	Regional Board
Potential Media Affect:	Aquifer used for drinking water supply
Potential Contaminants of Concern:	Waste Oil / Motor / Hydraulic / Lubricating
Site History:	Not reported

Click here to access the California GeoTracker records for this facility:

Contact:

Global Id:	T0603700674
Contact Type:	Local Agency Caseworker
Contact Name:	ELOY LUNA
Organization Name:	LOS ANGELES, CITY OF
Address:	200 North Main Street, Suite 1780
City:	LOS ANGELES
Email:	eloy.luna@lacity.org
Phone Number:	Not reported

Global Id:	T0603700674
Contact Type:	Regional Board Caseworker
Contact Name:	MARYAM TAIDY
Organization Name:	LOS ANGELES RWQCB (REGION 4)
Address:	320 W. 4TH ST., SUITE 200
City:	LOS ANGELES
Email:	mtaidy@waterboards.ca.gov
Phone Number:	2135766741

Status History:

Global Id:	T0603700674
Status:	Completed - Case Closed
Status Date:	10/21/2009

Global Id:	T0603700674
Status:	Open - Case Begin Date
Status Date:	06/04/1986

MOBIL #11-EKT (Continued) **S102433538**

Global Id: T0603700674
Status: Open - Remediation
Status Date: 09/18/2009

Global Id: T0603700674
Status: Open - Site Assessment
Status Date: 06/01/1988

Global Id: T0603700674
Status: Open - Site Assessment
Status Date: 02/10/2004

Regulatory Activities:

Global Id: T0603700674
Action Type: ENFORCEMENT
Date: 01/17/2003
Action: * No Action

Global Id: T0603700674
Action Type: ENFORCEMENT
Date: 09/18/2009
Action: Closure/No Further Action Letter

Global Id: T0603700674
Action Type: Other
Date: 06/04/1986
Action: Leak Stopped

Global Id: T0603700674
Action Type: RESPONSE
Date: 12/18/2008
Action: Soil and Water Investigation Report

Global Id: T0603700674
Action Type: ENFORCEMENT
Date: 09/18/2009
Action: Notification - Preclosure

Global Id: T0603700674
Action Type: RESPONSE
Date: 04/15/2009
Action: Monitoring Report - Quarterly

Global Id: T0603700674
Action Type: RESPONSE
Date: 10/31/2005
Action: Soil and Water Investigation Report

Global Id: T0603700674
Action Type: RESPONSE
Date: 01/15/2005
Action: Monitoring Report - Quarterly

Global Id: T0603700674
Action Type: RESPONSE
Date: 07/15/2005
Action: Monitoring Report - Quarterly

MOBIL #11-EKT (Continued) **S102433538**

Global Id: T0603700674
Action Type: RESPONSE
Date: 01/15/2007
Action: Monitoring Report - Quarterly

Global Id: T0603700674
Action Type: RESPONSE
Date: 10/15/2005
Action: Monitoring Report - Quarterly

Global Id: T0603700674
Action Type: RESPONSE
Date: 01/15/2006
Action: Monitoring Report - Quarterly

Global Id: T0603700674
Action Type: RESPONSE
Date: 07/15/2007
Action: Monitoring Report - Quarterly

Global Id: T0603700674
Action Type: RESPONSE
Date: 10/15/2007
Action: Monitoring Report - Quarterly

Global Id: T0603700674
Action Type: Other
Date: 06/04/1986
Action: Leak Discovery

Global Id: T0603700674
Action Type: Other
Date: 06/09/1986
Action: Leak Reported

Global Id: T0603700674
Action Type: RESPONSE
Date: 01/15/2003
Action: Monitoring Report - Quarterly

Global Id: T0603700674
Action Type: RESPONSE
Date: 07/15/2006
Action: Monitoring Report - Quarterly

Global Id: T0603700674
Action Type: RESPONSE
Date: 04/15/2006
Action: Monitoring Report - Quarterly

Global Id: T0603700674
Action Type: RESPONSE
Date: 04/15/2008
Action: Monitoring Report - Quarterly

Global Id: T0603700674
Action Type: RESPONSE

MOBIL #11-EKT (Continued) **S102433538**

Date: 10/15/2006
Action: Monitoring Report - Quarterly

Global Id: T0603700674
Action Type: RESPONSE
Date: 06/15/2004
Action: CAP/RAP - Feasibility Study Report

Global Id: T0603700674
Action Type: RESPONSE
Date: 04/15/2007
Action: Monitoring Report - Quarterly

Global Id: T0603700674
Action Type: ENFORCEMENT
Date: 06/15/2009
Action: Staff Letter

Global Id: T0603700674
Action Type: RESPONSE
Date: 02/10/2004
Action: Soil and Water Investigation Workplan

Global Id: T0603700674
Action Type: RESPONSE
Date: 04/15/2004
Action: Monitoring Report - Quarterly

Global Id: T0603700674
Action Type: RESPONSE
Date: 01/15/2004
Action: Monitoring Report - Quarterly

Global Id: T0603700674
Action Type: RESPONSE
Date: 01/15/2008
Action: Monitoring Report - Quarterly

Global Id: T0603700674
Action Type: RESPONSE
Date: 10/15/2003
Action: Monitoring Report - Quarterly

Global Id: T0603700674
Action Type: RESPONSE
Date: 01/15/2009
Action: Monitoring Report - Quarterly

Global Id: T0603700674
Action Type: RESPONSE
Date: 07/15/2009
Action: Monitoring Report - Quarterly

Global Id: T0603700674
Action Type: RESPONSE
Date: 10/15/2008
Action: Monitoring Report - Quarterly

MOBIL #11-EKT (Continued) **S102433538**

Global Id: T0603700674
Action Type: RESPONSE
Date: 07/15/2004
Action: Monitoring Report - Quarterly

Global Id: T0603700674
Action Type: RESPONSE
Date: 07/15/2008
Action: Monitoring Report - Quarterly

Global Id: T0603700674
Action Type: RESPONSE
Date: 04/15/2003
Action: Monitoring Report - Quarterly

Global Id: T0603700674
Action Type: RESPONSE
Date: 07/15/2003
Action: Monitoring Report - Quarterly

Global Id: T0603700674
Action Type: RESPONSE
Date: 08/13/2008
Action: Soil and Water Investigation Workplan

Global Id: T0603700674
Action Type: RESPONSE
Date: 10/15/2004
Action: Monitoring Report - Quarterly

Global Id: T0603700674
Action Type: RESPONSE
Date: 08/10/2005
Action: Interim Remedial Action Plan

Global Id: T0603700674
Action Type: RESPONSE
Date: 07/16/2004
Action: Unknown

Global Id: T0603700674
Action Type: RESPONSE
Date: 04/15/2005
Action: Monitoring Report - Quarterly

Global Id: T0603700674
Action Type: REMEDIATION
Date: 05/24/2006
Action: Soil Vapor Extraction (SVE)

LUST REG 4:
Region: 4
Regional Board: 04
County: Los Angeles
Facility Id: 900230234
Status: Pollution Characterization

MOBIL #11-EKT (Continued) **S102433538**

Substance:	Waste Oil	
Substance Quantity:	Not reported	
Local Case No:	Not reported	
Case Type:	Soil	
Abatement Method Used at the Site:		Not reported
Global ID:	T0603700674	
W Global ID:	Not reported	
Staff:	RVJ	
Local Agency:	19050	
Cross Street:	WHITTIER	
Enforcement Type:	None Taken	
Date Leak Discovered:	6/4/1986	
Date Leak First Reported:		6/9/1986
Date Leak Record Entered:	12/31/1986	
Date Confirmation Began:	Not reported	
Date Leak Stopped:	6/4/1986	
Date Case Last Changed on Database:		10/10/2002
Date the Case was Closed:		Not reported
How Leak Discovered:	Tank Test	
How Leak Stopped:	Not reported	
Cause of Leak:	UNK	
Leak Source:	Tank	
Operator:	KHEIR, EMILE	
Water System:	Not reported	
Well Name:	Not reported	
Approx. Dist To Production Well (ft):		7973.061763646431263007387319
Source of Cleanup Funding:		Tank
Preliminary Site Assessment Workplan Submitted:		Not reported
Preliminary Site Assessment Began:		Not reported
Pollution Characterization Began:		2/10/2004
Remediation Plan Submitted:		Not reported
Remedial Action Underway:		Not reported
Post Remedial Action Monitoring Began:		Not reported
Enforcement Action Date:		Not reported
Historical Max MTBE Date:		11/24/2003
Hist Max MTBE Conc in Groundwater:		73.3
Hist Max MTBE Conc in Soil:		13
Significant Interim Remedial Action Taken:		Not reported
GW Qualifier:	=	
Soil Qualifier:	=	
Organization:	Not reported	
Owner Contact:	Not reported	
Responsible Party:	NICK PUIG	
RP Address:	3700 W. 190TH ST., TPT-2	
Program:	LUST	
Lat/Long:	34.0341026 / -1	
Local Agency Staff:	PEJ	
Beneficial Use:	Not reported	
Priority:	Not reported	
Cleanup Fund Id:	Not reported	
Suspended:	Not reported	
Assigned Name:	Not reported	
Summary:	REG GASOLINE LEAK REPORTED 9/1/87. 6000 GAL CAP, 15 YRS.	

HIST CORTESE:

Region:	CORTESE
Facility County Code:	19

MOBIL #11-EKT (Continued) **S102433538**

Reg By: LTNKA
Reg Id: 900230234

28
NNW
1/4-1/2
0.463 mi.
2443 ft.

MARLENE'S MUFFLER SHOP FORMER SERVICE STATION **LUST** **S104916137**
2239 001ST ST E **N/A**
BOYLE HEIGHTS, CA 90033

Relative:
Lower

Actual:
301 ft.

LUST:

Region:	STATE
Global Id:	T0603700848
Latitude:	34.0444961
Longitude:	-118.211311
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	10/27/2015
Lead Agency:	LOS ANGELES RWQCB (REGION 4)
Case Worker:	JW
Local Agency:	LOS ANGELES, CITY OF
RB Case Number:	900330298
LOC Case Number:	Not reported
File Location:	Regional Board
Potential Media Affect:	Soil
Potential Contaminants of Concern:	Gasoline
Site History:	Not reported

Click here to access the California GeoTracker records for this facility:

Contact:

Global Id:	T0603700848
Contact Type:	Regional Board Caseworker
Contact Name:	JIMMIE WOO
Organization Name:	LOS ANGELES RWQCB (REGION 4)
Address:	320 WEST 4TH STREET, SUITE 200
City:	LOS ANGELES
Email:	jwoo@waterboards.ca.gov
Phone Number:	2135766600

Global Id:	T0603700848
Contact Type:	Local Agency Caseworker
Contact Name:	ELOY LUNA
Organization Name:	LOS ANGELES, CITY OF
Address:	200 North Main Street, Suite 1780
City:	LOS ANGELES
Email:	eloy.luna@lacity.org
Phone Number:	Not reported

Status History:

Global Id:	T0603700848
Status:	Completed - Case Closed
Status Date:	10/27/2015

Global Id:	T0603700848
Status:	Open - Case Begin Date
Status Date:	12/01/1991

Global Id:	T0603700848

MARLENE'S MUFFLER SHOP FORMER SERVICE STATION (Continued) **S104916137**

Status: Open - Eligible for Closure
Status Date: 06/10/2014

Global Id: T0603700848
Status: Open - Remediation
Status Date: 06/06/2007

Global Id: T0603700848
Status: Open - Remediation
Status Date: 08/14/2007

Global Id: T0603700848
Status: Open - Remediation
Status Date: 01/16/2008

Global Id: T0603700848
Status: Open - Remediation
Status Date: 10/29/2010

Global Id: T0603700848
Status: Open - Site Assessment
Status Date: 12/01/1991

Global Id: T0603700848
Status: Open - Site Assessment
Status Date: 07/10/2001

Global Id: T0603700848
Status: Open - Site Assessment
Status Date: 01/17/2002

Global Id: T0603700848
Status: Open - Site Assessment
Status Date: 07/15/2002

Global Id: T0603700848
Status: Open - Site Assessment
Status Date: 04/27/2010

Global Id: T0603700848
Status: Open - Verification Monitoring
Status Date: 01/21/1992

Regulatory Activities:
Global Id: T0603700848
Action Type: ENFORCEMENT
Date: 01/27/2003
Action: Staff Letter

Global Id: T0603700848
Action Type: ENFORCEMENT
Date: 10/27/2015
Action: Closure/No Further Action Letter

Global Id: T0603700848
Action Type: RESPONSE
Date: 07/15/2013

MARLENE'S MUFFLER SHOP FORMER SERVICE STATION (Continued) **S104916137**

Action: Monitoring Report - Semi-Annually

Global Id: T0603700848
Action Type: RESPONSE
Date: 10/15/2005
Action: Monitoring Report - Quarterly

Global Id: T0603700848
Action Type: ENFORCEMENT
Date: 06/05/2014
Action: Notification - Preclosure

Global Id: T0603700848
Action Type: RESPONSE
Date: 01/15/2011
Action: Remedial Progress Report

Global Id: T0603700848
Action Type: RESPONSE
Date: 01/15/2011
Action: Monitoring Report - Semi-Annually

Global Id: T0603700848
Action Type: RESPONSE
Date: 01/15/2014
Action: Soil and Water Investigation Report

Global Id: T0603700848
Action Type: RESPONSE
Date: 07/15/2005
Action: Monitoring Report - Quarterly

Global Id: T0603700848
Action Type: RESPONSE
Date: 10/22/2015
Action: Well Destruction Report

Global Id: T0603700848
Action Type: ENFORCEMENT
Date: 09/16/2008
Action: Notice to Comply

Global Id: T0603700848
Action Type: RESPONSE
Date: 04/04/2011
Action: Clean Up Fund - 5-Year Review Summary

Global Id: T0603700848
Action Type: RESPONSE
Date: 07/15/2011
Action: Interim Remedial Action Report

Global Id: T0603700848
Action Type: RESPONSE
Date: 01/15/2014
Action: Monitoring Report - Semi-Annually

MARLENE'S MUFFLER SHOP FORMER SERVICE STATION (Continued) **S104916137**

Global Id: T0603700848
Action Type: Other
Date: 12/03/1991
Action: Leak Discovery

Global Id: T0603700848
Action Type: RESPONSE
Date: 01/15/2012
Action: Monitoring Report - Semi-Annually

Global Id: T0603700848
Action Type: RESPONSE
Date: 10/28/2011
Action: Soil and Water Investigation Workplan

Global Id: T0603700848
Action Type: RESPONSE
Date: 01/15/2012
Action: Soil and Water Investigation Report

Global Id: T0603700848
Action Type: Other
Date: 01/21/1992
Action: Leak Reported

Global Id: T0603700848
Action Type: RESPONSE
Date: 07/15/2002
Action: Soil and Water Investigation Workplan

Global Id: T0603700848
Action Type: RESPONSE
Date: 04/15/2003
Action: Soil and Water Investigation Report

Global Id: T0603700848
Action Type: RESPONSE
Date: 04/15/2003
Action: Monitoring Report - Quarterly

Global Id: T0603700848
Action Type: RESPONSE
Date: 01/15/2012
Action: Other Report / Document

Global Id: T0603700848
Action Type: ENFORCEMENT
Date: 10/29/2010
Action: Staff Letter

Global Id: T0603700848
Action Type: ENFORCEMENT
Date: 12/01/2011
Action: Staff Letter

Global Id: T0603700848
Action Type: RESPONSE

MARLENE'S MUFFLER SHOP FORMER SERVICE STATION (Continued) **S104916137**

Date: 07/15/2011
Action: Monitoring Report - Quarterly

Global Id: T0603700848
Action Type: RESPONSE
Date: 04/15/2007
Action: Remedial Progress Report

Global Id: T0603700848
Action Type: RESPONSE
Date: 07/15/2007
Action: Remedial Progress Report

Global Id: T0603700848
Action Type: RESPONSE
Date: 10/15/2007
Action: Remedial Progress Report

Global Id: T0603700848
Action Type: ENFORCEMENT
Date: 04/27/2010
Action: Staff Letter

Global Id: T0603700848
Action Type: ENFORCEMENT
Date: 09/23/2013
Action: Staff Letter

Global Id: T0603700848
Action Type: RESPONSE
Date: 07/12/2012
Action: Remedial Progress Report

Global Id: T0603700848
Action Type: ENFORCEMENT
Date: 04/10/2008
Action: Staff Letter

Global Id: T0603700848
Action Type: RESPONSE
Date: 10/15/2012
Action: Monitoring Report - Semi-Annually

Global Id: T0603700848
Action Type: RESPONSE
Date: 07/15/2008
Action: Soil and Water Investigation Workplan

Global Id: T0603700848
Action Type: RESPONSE
Date: 04/15/2008
Action: Monitoring Report - Quarterly

Global Id: T0603700848
Action Type: REMEDIATION
Date: 02/01/2007
Action: Soil Vapor Extraction (SVE)

MARLENE'S MUFFLER SHOP FORMER SERVICE STATION (Continued) **S104916137**

Global Id: T0603700848
Action Type: ENFORCEMENT
Date: 01/17/2002
Action: Staff Letter

Global Id: T0603700848
Action Type: ENFORCEMENT
Date: 09/29/2011
Action: Staff Letter

Global Id: T0603700848
Action Type: ENFORCEMENT
Date: 06/15/2009
Action: Staff Letter

Global Id: T0603700848
Action Type: RESPONSE
Date: 08/24/2004
Action: Interim Remedial Action Plan

Global Id: T0603700848
Action Type: RESPONSE
Date: 04/15/2003
Action: CAP/RAP - Feasibility Study Report

Global Id: T0603700848
Action Type: RESPONSE
Date: 01/15/2011
Action: CAP/RAP - Final Remediation / Design Plan

Global Id: T0603700848
Action Type: RESPONSE
Date: 10/05/2009
Action: Clean Up Fund - 5-Year Review Summary

Global Id: T0603700848
Action Type: RESPONSE
Date: 01/15/2013
Action: Monitoring Report - Semi-Annually

Global Id: T0603700848
Action Type: RESPONSE
Date: 07/15/2013
Action: Remedial Progress Report

Global Id: T0603700848
Action Type: RESPONSE
Date: 04/15/2005
Action: Monitoring Report - Quarterly

Global Id: T0603700848
Action Type: RESPONSE
Date: 01/15/2006
Action: Monitoring Report - Quarterly

Global Id: T0603700848
Action Type: RESPONSE

MARLENE'S MUFFLER SHOP FORMER SERVICE STATION (Continued) **S104916137**

Date: 07/15/2008
Action: Remedial Progress Report

Global Id: T0603700848
Action Type: RESPONSE
Date: 01/15/2011
Action: Well Installation Report

LUST REG 4:
Region: 4
Regional Board: 04
County: Los Angeles
Facility Id: 900330298
Status: Pollution Characterization
Substance: Gasoline
Substance Quantity: Not reported
Local Case No: Not reported
Case Type: Soil
Abatement Method Used at the Site: Not reported
Global ID: T0603700848
W Global ID: Not reported
Staff: JW
Local Agency: 19050
Cross Street: BREED ST.
Enforcement Type: SEL
Date Leak Discovered: 12/3/1991
Date Leak First Reported: 1/21/1992
Date Leak Record Entered: 4/14/1992
Date Confirmation Began: Not reported
Date Leak Stopped: Not reported
Date Case Last Changed on Database: 7/15/2002
Date the Case was Closed: Not reported
How Leak Discovered: Tank Closure
How Leak Stopped: Not reported
Cause of Leak: Overfill
Leak Source: Tank
Operator: Not reported
Water System: Not reported
Well Name: Not reported
Approx. Dist To Production Well (ft): 9378.529954294025315108920322
Source of Cleanup Funding: Tank
Preliminary Site Assessment Workplan Submitted: 12/1/1991
Preliminary Site Assessment Began: 7/10/2001
Pollution Characterization Began: 7/15/2002
Remediation Plan Submitted: Not reported
Remedial Action Underway: Not reported
Post Remedial Action Monitoring Began: 1/21/1992
Enforcement Action Date: Not reported
Historical Max MTBE Date: Not reported
Hist Max MTBE Conc in Groundwater: Not reported
Hist Max MTBE Conc in Soil: Not reported
Significant Interim Remedial Action Taken: Not reported
GW Qualifier: Not reported
Soil Qualifier: Not reported
Organization: Not reported
Owner Contact: Not reported

MARLENE'S MUFFLER SHOP FORMER SERVICE STATION (Continued) **S104916137**

Responsible Party:	MR. MARIO DE LA TORRE
RP Address:	305 N. SOTO ST., SUITE D
Program:	LUST
Lat/Long:	34.0444961 / -1
Local Agency Staff:	PEJ
Beneficial Use:	Not reported
Priority:	Not reported
Cleanup Fund Id:	Not reported
Suspended:	Not reported
Assigned Name:	Not reported
Summary:	Not reported

G29 **SHELL SERVICE STATION** **RCRA-SQG 1000288385**
NW **2005 E FOURTH / CUMMINGS** **LUST CAD981405012**
1/4-1/2 **LOS ANGELES, CA 90033**
0.468 mi.
2469 ft. **Site 1 of 2 in cluster G**

Relative:
Lower

Actual:
282 ft.

RCRA-SQG:

Date form received by agency:	02/26/2004
Facility name:	SHELL SERVICE STATION
Facility address:	2005 E FOURTH / CUMMINGS SAP #135549 LOS ANGELES, CA 90033
EPA ID:	CAD981405012
Mailing address:	SHELL OIL PRODUCTS US 12700 NORTHBOROUGH DR MFT240G HOUSTON, TX 770672508
Contact:	ED A PADEN
Contact address:	Not reported Not reported
Contact country:	US
Contact telephone:	(310) 816-2075
Contact email:	EAPADEN@SHELLOPUS.COM
EPA Region:	09
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	SHELL OIL PRODUCTS US
Owner/operator address:	Not reported Not reported
Owner/operator country:	US
Owner/operator telephone:	Not reported
Legal status:	Private
Owner/Operator Type:	Operator
Owner/Op start date:	08/01/1998
Owner/Op end date:	Not reported
Owner/operator name:	EQUILON ENTERPRISES LLC DBA SHELL OIL PR
Owner/operator address:	PO BOX 2648 HOUSTON, TX 77252
Owner/operator country:	US

SHELL SERVICE STATION (Continued) **1000288385**

Owner/operator telephone: Not reported
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: 08/01/1998
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

. Waste code: D001
. Waste name: IGNITABLE WASTE

. Waste code: D018
. Waste name: BENZENE

Historical Generators:
Date form received by agency: 02/26/2004
Site name: SHELL SERVICE STATION
Classification: Small Quantity Generator

Date form received by agency: 09/18/2000
Site name: FORMER SHELL SERVICE STATION
Classification: Small Quantity Generator

. Waste code: D000
. Waste name: Not Defined

. Waste code: D001
. Waste name: IGNITABLE WASTE

. Waste code: D018
. Waste name: BENZENE

Date form received by agency: 09/01/1996
Site name: FORMER SHELL SERVICE STATION
Classification: Small Quantity Generator

Date form received by agency: 04/13/1990
Site name: SHELL OIL CO 204-4539-9601
Classification: Large Quantity Generator

Violation Status: No violations found

SHELL SERVICE STATION (Continued) **1000288385**

LUST:

Region:	STATE
Global Id:	T0603700849
Latitude:	34.0425812
Longitude:	-118.2161581
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	05/31/1990
Lead Agency:	LOS ANGELES, CITY OF
Case Worker:	EL
Local Agency:	LOS ANGELES, CITY OF
RB Case Number:	900330307
LOC Case Number:	Not reported
File Location:	Not reported
Potential Media Affect:	Soil
Potential Contaminants of Concern:	Gasoline
Site History:	Not reported

Click here to access the California GeoTracker records for this facility:

Contact:

Global Id:	T0603700849
Contact Type:	Regional Board Caseworker
Contact Name:	YUE RONG
Organization Name:	LOS ANGELES RWQCB (REGION 4)
Address:	320 W. 4TH ST., SUITE 200
City:	Los Angeles
Email:	yrong@waterboards.ca.gov
Phone Number:	Not reported

Global Id:	T0603700849
Contact Type:	Local Agency Caseworker
Contact Name:	ELOY LUNA
Organization Name:	LOS ANGELES, CITY OF
Address:	200 North Main Street, Suite 1780
City:	LOS ANGELES
Email:	eloy.luna@lacity.org
Phone Number:	Not reported

Status History:

Global Id:	T0603700849
Status:	Completed - Case Closed
Status Date:	05/31/1990

Global Id:	T0603700849
Status:	Open - Case Begin Date
Status Date:	02/01/1989

Global Id:	T0603700849
Status:	Open - Site Assessment
Status Date:	04/17/1989

Regulatory Activities:

Global Id:	T0603700849
Action Type:	Other
Date:	02/01/1989

SHELL SERVICE STATION (Continued) **1000288385**

Action: Leak Discovery

Global Id: T0603700849
Action Type: Other
Date: 04/17/1989
Action: Leak Reported

LUST REG 4:

Region:	4	
Regional Board:	04	
County:	Los Angeles	
Facility Id:	900330307	
Status:	Case Closed	
Substance:	Gasoline	
Substance Quantity:	Not reported	
Local Case No:	Not reported	
Case Type:	Soil	
Abatement Method Used at the Site:		Not reported
Global ID:	T0603700849	
W Global ID:	W0605100649	
Staff:	UNK	
Local Agency:	19050	
Cross Street:	CUMMINGS	
Enforcement Type:	Not reported	
Date Leak Discovered:	2/1/1989	
Date Leak First Reported:		4/17/1989
Date Leak Record Entered:	12/12/1991	
Date Confirmation Began:	Not reported	
Date Leak Stopped:	Not reported	
Date Case Last Changed on Database:		10/25/1991
Date the Case was Closed:		5/31/1990
How Leak Discovered:	Subsurface Monitoring	
How Leak Stopped:	Not reported	
Cause of Leak:	UNK	
Leak Source:	UNK	
Operator:	KOBAISSI, MAHMOUD M.	
Water System:	DAVE GRIFFITH L A D W P	
Well Name:	Not reported	
Approx. Dist To Production Well (ft):		10252.55502416246825687665718
Source of Cleanup Funding:		UNK
Preliminary Site Assessment Workplan Submitted:		Not reported
Preliminary Site Assessment Began:		4/17/1989
Pollution Characterization Began:		Not reported
Remediation Plan Submitted:		Not reported
Remedial Action Underway:		Not reported
Post Remedial Action Monitoring Began:		Not reported
Enforcement Action Date:		Not reported
Historical Max MTBE Date:		Not reported
Hist Max MTBE Conc in Groundwater:		Not reported
Hist Max MTBE Conc in Soil:		Not reported
Significant Interim Remedial Action Taken:		Not reported
GW Qualifier:	Not reported	
Soil Qualifier:	Not reported	
Organization:	Not reported	
Owner Contact:	Not reported	
Responsible Party:	SHELL OIL CO.	

SHELL SERVICE STATION (Continued) **1000288385**

RP Address:	SAME AS ABOVE
Program:	LUST
Lat/Long:	34.0425812 / -1
Local Agency Staff:	PEJ
Beneficial Use:	Not reported
Priority:	Not reported
Cleanup Fund Id:	Not reported
Suspended:	Not reported
Assigned Name:	2600649-001GEN
Summary:	Not reported

G30 **SHELL - KOBASSI** **LUST** **S107619947**
NW **2005 4TH STREET, EAST** **N/A**
1/4-1/2 **LOS ANGELES, CA**
0.468 mi.
2469 ft. **Site 2 of 2 in cluster G**

Relative:
Lower

Actual:
282 ft.

LUST:

Region:	STATE
Global Id:	T0603732654
Latitude:	34.042984
Longitude:	-118.216054
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	08/24/2012
Lead Agency:	LOS ANGELES RWQCB (REGION 4)
Case Worker:	AT
Local Agency:	LOS ANGELES, CITY OF
RB Case Number:	900330307A
LOC Case Number:	30343
File Location:	Regional Board
Potential Media Affect:	Other Groundwater (uses other than drinking water), Soil
Potential Contaminants of Concern:	Gasoline
Site History:	Not reported

Click here to access the California GeoTracker records for this facility:

Contact:

Global Id:	T0603732654
Contact Type:	Local Agency Caseworker
Contact Name:	ELOY LUNA
Organization Name:	LOS ANGELES, CITY OF
Address:	200 North Main Street, Suite 1780
City:	LOS ANGELES
Email:	eloy.luna@lacity.org
Phone Number:	Not reported

Global Id:	T0603732654
Contact Type:	Regional Board Caseworker
Contact Name:	ARMAN TOUMARI
Organization Name:	LOS ANGELES RWQCB (REGION 4)
Address:	320 WEST 4TH STREET, SUITE 200
City:	LOS ANGELES
Email:	atoumari@waterboards.ca.gov
Phone Number:	2135766708

Status History:

Global Id:	T0603732654

SHELL - KOBASSI (Continued) **S107619947**

Status: Completed - Case Closed
Status Date: 08/24/2012

Global Id: T0603732654
Status: Open - Case Begin Date
Status Date: 06/02/2003

Global Id: T0603732654
Status: Open - Site Assessment
Status Date: 09/01/2003

Global Id: T0603732654
Status: Open - Site Assessment
Status Date: 07/13/2007

Global Id: T0603732654
Status: Open - Site Assessment
Status Date: 04/24/2008

Regulatory Activities:

Global Id: T0603732654
Action Type: RESPONSE
Date: 07/15/2008
Action: Monitoring Report - Quarterly

Global Id: T0603732654
Action Type: RESPONSE
Date: 04/15/2010
Action: Monitoring Report - Quarterly

Global Id: T0603732654
Action Type: REMEDIATION
Date: 06/12/2003
Action: Excavation

Global Id: T0603732654
Action Type: ENFORCEMENT
Date: 08/24/2012
Action: Closure/No Further Action Letter

Global Id: T0603732654
Action Type: ENFORCEMENT
Date: 07/10/2012
Action: Notification - Preclosure

Global Id: T0603732654
Action Type: RESPONSE
Date: 04/15/2011
Action: Monitoring Report - Quarterly

Global Id: T0603732654
Action Type: RESPONSE
Date: 07/15/2009
Action: Monitoring Report - Quarterly

Global Id: T0603732654
Action Type: RESPONSE

SHELL - KOBASSI (Continued) **S107619947**

Date: 10/15/2009
Action: Monitoring Report - Quarterly

Global Id: T0603732654
Action Type: RESPONSE
Date: 01/16/2007
Action: Other Report / Document

Global Id: T0603732654
Action Type: RESPONSE
Date: 10/15/2011
Action: Monitoring Report - Quarterly

Global Id: T0603732654
Action Type: RESPONSE
Date: 10/15/2010
Action: Monitoring Report - Quarterly

Global Id: T0603732654
Action Type: Other
Date: 06/15/2003
Action: Leak Reported

Global Id: T0603732654
Action Type: Other
Date: 06/02/2003
Action: Leak Discovery

Global Id: T0603732654
Action Type: ENFORCEMENT
Date: 08/24/2012
Action: Closure/No Further Action Letter

Global Id: T0603732654
Action Type: RESPONSE
Date: 03/19/2012
Action: Site Assessment Report

Global Id: T0603732654
Action Type: RESPONSE
Date: 04/15/2012
Action: Monitoring Report - Quarterly

Global Id: T0603732654
Action Type: RESPONSE
Date: 04/15/2008
Action: Monitoring Report - Quarterly

Global Id: T0603732654
Action Type: ENFORCEMENT
Date: 11/16/2006
Action: Staff Letter

Global Id: T0603732654
Action Type: RESPONSE
Date: 11/19/2012
Action: Well Destruction Report

SHELL - KOBASSI (Continued) **S107619947**

Global Id: T0603732654
Action Type: RESPONSE
Date: 01/15/2008
Action: Monitoring Report - Quarterly

Global Id: T0603732654
Action Type: RESPONSE
Date: 04/24/2008
Action: Soil and Water Investigation Workplan

Global Id: T0603732654
Action Type: RESPONSE
Date: 10/15/2008
Action: Monitoring Report - Quarterly

Global Id: T0603732654
Action Type: RESPONSE
Date: 01/15/2009
Action: Monitoring Report - Quarterly

Global Id: T0603732654
Action Type: RESPONSE
Date: 07/13/2007
Action: Soil and Water Investigation Workplan

Global Id: T0603732654
Action Type: RESPONSE
Date: 10/15/2007
Action: Monitoring Report - Quarterly

Global Id: T0603732654
Action Type: RESPONSE
Date: 04/15/2009
Action: Monitoring Report - Quarterly

Global Id: T0603732654
Action Type: RESPONSE
Date: 01/15/2008
Action: Soil and Water Investigation Report

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31 **SOTO STREET** **ENVIROSTOR** **S103620300**
SW **1010 SOTO STREET** **SCH** **N/A**
1/2-1 **LOS ANGELES, CA 90023**
0.586 mi.
3094 ft.

Relative:
Lower

Actual:
298 ft.

ENVIROSTOR:
Facility ID: 19000004
Status: Inactive - Action Required
Status Date: 05/30/2000
Site Code: 304173
Site Type: School Investigation
Site Type Detailed: School
Acres: 4.35
NPL: NO
Regulatory Agencies: SMBRP
Lead Agency: SMBRP

SOTO STREET (Continued) **S103620300**

Program Manager: Not reported
Supervisor: Javier Hinojosa
Division Branch: Southern California Schools & Brownfields Outreach
Assembly: 53
Senate: 24
Special Program: Not reported
Restricted Use: NO
Site Mgmt Req: NONE SPECIFIED
Funding: School District
Latitude: 34.0319
Longitude: -118.2161
APN: NONE SPECIFIED
Past Use: * UNKNOWN, NURSERY
Potential COC: Arsenic Chlordane DDD DDE DDT
Confirmed COC: 30001-NO 30004-NO 30006-NO 30007-NO 30008-NO
Potential Description: SOIL
Alias Name: LA USD-SOTO ST.SCHOOL/CDE
Alias Type: Alternate Name
Alias Name: SOTO STREET SCHOOL (PROPOSED)
Alias Type: Alternate Name
Alias Name: 304173
Alias Type: Project Code (Site Code)
Alias Name: 19000004
Alias Type: Envirostor ID Number

Completed Info:
Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Phase 1
Completed Date: 05/30/2000
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Environmental Oversight Agreement
Completed Date: 02/10/2000
Comments: Not reported

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

SCH:

Facility ID: 19000004
Site Type: School Investigation
Site Type Detail: School
Site Mgmt. Req.: NONE SPECIFIED
Acres: 4.35
National Priorities List: NO
Cleanup Oversight Agencies: SMBRP

SOTO STREET (Continued) **S103620300**

Lead Agency:	SMBRP
Lead Agency Description:	DTSC - Site Cleanup Program
Project Manager:	Not reported
Supervisor:	Javier Hinojosa
Division Branch:	Southern California Schools & Brownfields Outreach
Site Code:	304173
Assembly:	53
Senate:	24
Special Program Status:	Not reported
Status:	Inactive - Action Required
Status Date:	05/30/2000
Restricted Use:	NO
Funding:	School District
Latitude:	34.0319
Longitude:	-118.2161
APN:	NONE SPECIFIED
Past Use:	* UNKNOWN, NURSERY
Potential COC:	Arsenic, Chlordane, DDD, DDE, DDT
Confirmed COC:	30001-NO, 30004-NO, 30006-NO, 30007-NO, 30008-NO
Potential Description:	SOIL
Alias Name:	LA USD-SOTO ST.SCHOOL/CDE
Alias Type:	Alternate Name
Alias Name:	SOTO STREET SCHOOL (PROPOSED)
Alias Type:	Alternate Name
Alias Name:	304173
Alias Type:	Project Code (Site Code)
Alias Name:	19000004
Alias Type:	Envirostor ID Number

Completed Info:

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Phase 1
Completed Date:	05/30/2000
Comments:	Not reported
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Environmental Oversight Agreement
Completed Date:	02/10/2000
Comments:	Not reported
Future Area Name:	Not reported
Future Sub Area Name:	Not reported
Future Document Type:	Not reported
Future Due Date:	Not reported
Schedule Area Name:	Not reported
Schedule Sub Area Name:	Not reported
Schedule Document Type:	Not reported
Schedule Due Date:	Not reported
Schedule Revised Date:	Not reported

32
South
1/2-1
0.604 mi.
3187 ft.

CENTRAL REGION MIDDLE SCHOOL #9, SITE 26
2821 EAST 7TH STREET
LOS ANGELES, CA 90023

ENVIROSTOR
SCH

S108484726
N/A

Relative:
Lower

Actual:
306 ft.

ENVIROSTOR:

Facility ID:	60000584
Status:	Inactive - Needs Evaluation
Status Date:	01/29/2008
Site Code:	304560
Site Type:	School Investigation
Site Type Detailed:	School
Acres:	7.75
NPL:	NO
Regulatory Agencies:	SMBRP
Lead Agency:	SMBRP
Program Manager:	Not reported
Supervisor:	Javier Hinojosa
Division Branch:	Southern California Schools & Brownfields Outreach
Assembly:	53
Senate:	24
Special Program:	Not reported
Restricted Use:	NO
Site Mgmt Req:	NONE SPECIFIED
Funding:	School District
Latitude:	34.02989
Longitude:	-118.2094
APN:	NONE SPECIFIED
Past Use:	MACHINE SHOP, MAINTENANCE / CLEANING, NURSERY, SCHOOL - ELEMENTARY, SCHOOL - HIGH SCHOOL
Potential COC:	Under Investigation
Confirmed COC:	31001-NO
Potential Description:	SOIL, SV
Alias Name:	304560
Alias Type:	Project Code (Site Code)
Alias Name:	60000584
Alias Type:	Envirostor ID Number

Completed Info:

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Cost Recovery Closeout Memo
Completed Date:	09/18/2012
Comments:	Not reported
Future Area Name:	Not reported
Future Sub Area Name:	Not reported
Future Document Type:	Not reported
Future Due Date:	Not reported
Schedule Area Name:	Not reported
Schedule Sub Area Name:	Not reported
Schedule Document Type:	Not reported
Schedule Due Date:	Not reported
Schedule Revised Date:	Not reported

SCH:

Facility ID:	60000584

CENTRAL REGION MIDDLE SCHOOL #9, SITE 26 (Continued) **S108484726**

Site Type:	School Investigation
Site Type Detail:	School
Site Mgmt. Req.:	NONE SPECIFIED
Acres:	7.75
National Priorities List:	NO
Cleanup Oversight Agencies:	SMBRP
Lead Agency:	SMBRP
Lead Agency Description:	DTSC - Site Cleanup Program
Project Manager:	Not reported
Supervisor:	Javier Hinojosa
Division Branch:	Southern California Schools & Brownfields Outreach
Site Code:	304560
Assembly:	53
Senate:	24
Special Program Status:	Not reported
Status:	Inactive - Needs Evaluation
Status Date:	01/29/2008
Restricted Use:	NO
Funding:	School District
Latitude:	34.02989
Longitude:	-118.2094
APN:	NONE SPECIFIED
Past Use:	MACHINE SHOP, MAINTENANCE / CLEANING, NURSERY, SCHOOL - ELEMENTARY, SCHOOL - HIGH SCHOOL
Potential COC:	Under Investigation
Confirmed COC:	31001-NO
Potential Description:	SOIL, SV
Alias Name:	304560
Alias Type:	Project Code (Site Code)
Alias Name:	60000584
Alias Type:	Envirostor ID Number

Completed Info:

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Cost Recovery Closeout Memo
Completed Date:	09/18/2012
Comments:	Not reported
Future Area Name:	Not reported
Future Sub Area Name:	Not reported
Future Document Type:	Not reported
Future Due Date:	Not reported
Schedule Area Name:	Not reported
Schedule Sub Area Name:	Not reported
Schedule Document Type:	Not reported
Schedule Due Date:	Not reported
Schedule Revised Date:	Not reported

H33 **CAPRI PUMPING SERVICE** **HIST Cal-Sites** **S101480942**
SSE **3128 WHITTIER BLVD.** **N/A**
1/2-1 **LOS ANGELES, CA 90023**
0.684 mi.
3613 ft. **Site 1 of 2 in cluster H**

Relative:
Lower

Actual:
294 ft.

Calsite:

Region:	GLENDALE
Facility ID:	19490015
Facility Type:	RP
Type:	RESPONSIBLE PARTY
Branch:	SA
Branch Name:	SO CAL - GLENDALE
File Name:	Not reported
State Senate District:	01011986
Status:	CERTIFIED AS HAVING BEEN REMEDIED SATISFACTORILY UNDER DTSC OVERSIGHT
Status Name:	CERTIFIED
Lead Agency:	N/A
NPL:	Not reported
SIC Code:	49
SIC Name:	ELECTRIC, GAS & SANITARY SERVICES
Access:	Not reported
Cortese:	Not reported
Hazardous Ranking Score:	Not reported
Date Site Hazard Ranked:	Not reported
Groundwater Contamination:	Not reported
Staff Member Responsible for Site:	Not reported
Supervisor Responsible for Site:	Not reported
Region Water Control Board:	LA
Region Water Control Board Name:	LOS ANGELES
Lat/Long Direction:	Not reported
Lat/Long (dms):	0 0 0 / 0 0 0
Lat/long Method:	Not reported
Lat/Long Description:	Not reported
State Assembly District Code:	46
State Senate District Code:	22
Facility ID:	19490015
Activity:	DISC
Activity Name:	DISCOVERY
AWP Code:	Not reported
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	10051980
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	CERT
Definition of Status:	CERTIFIED
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0

CAPRI PUMPING SERVICE (Continued) **S101480942**

Unknown Type:	0
Facility ID:	19490015
Activity:	CERT
Activity Name:	CERTIFICATION
AWP Code:	Not reported
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	01011986
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	CERT
Definition of Status:	CERTIFIED
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Alternate Address:	3128 WHITTIER BLVD.
Alternate City,St,Zip:	LOS ANGELES, CA 90023
Background Info:	Not reported
Comments Date:	01011983
Comments:	This is the date the site was first listed AWP pursuant to
Comments Date:	01011983
Comments:	Section 25356.
Comments Date:	02271981
Comments:	HMMS/Enforcement Clean Up.
Comments Date:	08191991
Comments:	Records Search: Site Certified as of January 1986.
Comments Date:	10051980
Comments:	Facility Identified: Eckhardt Survey.
Comments Date:	10151980
Comments:	HMMS/Enforcement Clean Up.
Comments Date:	10151980
Comments:	Refugio Carrasco - Owner and President
Comments Date:	11051984
Comments:	Emergency response removal of 120 drums of cyanide, acids and
Comments Date:	11051984
Comments:	metals. Contaminated soils and wastes were characterized and
Comments Date:	11051984
Comments:	removed at a cost of $1.4 million.
ID Name:	EPA IDENTIFICATION NUMBER
ID Value:	CAD000042879
Alternate Name:	CAPRI TREATMENT PLANTCAPRI PUMPING SERVICE
Special Programs Code:	Not reported
Special Programs Name:	Not reported

H34 **CONTAMINATED TRANSFER SITE** **RESPONSE** **S106843378**
SSE **3128 WHITTIER BLVD** **ENVIROSTOR** **N/A**
1/2-1 **LOS ANGELES, CA 90023** **LDS**
0.684 mi. **LA Co. Site Mitigation**
3613 ft. **Site 2 of 2 in cluster H**

Relative:
Lower

Actual:
294 ft.

RESPONSE:

Facility ID:	19490015
Site Type:	State Response
Site Type Detail:	State Response or NPL
Acres:	0.9
National Priorities List:	NO
Cleanup Oversight Agencies:	NONE SPECIFIED
Lead Agency Description:	Not reported
Project Manager:	Not reported
Supervisor:	Sayareh Amirebrahimi
Division Branch:	Cleanup Chatsworth
Site Code:	Not reported
Site Mgmt. Req.:	NONE SPECIFIED
Assembly:	53
Senate:	24
Special Program Status:	Not reported
Status:	Certified
Status Date:	01/01/1986
Restricted Use:	NO
Funding:	Responsible Party
Latitude:	34.02912
Longitude:	-118.2049
APN:	5189-002-041, 5189002041
Past Use:	HAZARDOUS WASTE HAULER, HAZARDOUS WASTE STORAGE - TANKS/CONTAINERS, HAZARDOUS WASTE TREATMENT
Potential COC :	* UNSPECIFIED ACID SOLUTION Cyanide (free
Confirmed COC:	* UNSPECIFIED ACID SOLUTION Cyanide (free
Potential Description:	SOIL, SV
Alias Name:	CAPRI TREATMENT PLANT
Alias Type:	Alternate Name
Alias Name:	5189-002-041
Alias Type:	APN
Alias Name:	5189002041
Alias Type:	APN
Alias Name:	CAD000042879
Alias Type:	EPA Identification Number
Alias Name:	110002626178
Alias Type:	EPA (FRS #)
Alias Name:	19490015
Alias Type:	Envirostor ID Number

Completed Info:

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Certification
Completed Date:	01/01/1986
Comments:	Not reported
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	* Discovery
Completed Date:	10/05/1980
Comments:	Facility Identified: Eckhardt Survey.

CONTAMINATED TRANSFER SITE (Continued) **S106843378**

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Triage Meeting
Completed Date: 05/27/2015
Comments: Not reported

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

ENVIROSTOR:
Facility ID: 19490015
Status: Certified
Status Date: 01/01/1986
Site Code: Not reported
Site Type: State Response
Site Type Detailed: State Response or NPL
Acres: 0.9
NPL: NO
Regulatory Agencies: NONE SPECIFIED
Lead Agency: NONE SPECIFIED
Program Manager: Not reported
Supervisor: Sayareh Amirebrahimi
Division Branch: Cleanup Chatsworth
Assembly: 53
Senate: 24
Special Program: Not reported
Restricted Use: NO
Site Mgmt Req: NONE SPECIFIED
Funding: Responsible Party
Latitude: 34.02912
Longitude: -118.2049
APN: 5189-002-041, 5189002041
Past Use: HAZARDOUS WASTE HAULER, HAZARDOUS WASTE STORAGE - TANKS/CONTAINERS, HAZARDOUS WASTE TREATMENT
Potential COC: * UNSPECIFIED ACID SOLUTION Cyanide (free
Confirmed COC: * UNSPECIFIED ACID SOLUTION Cyanide (free
Potential Description: SOIL, SV
Alias Name: CAPRI TREATMENT PLANT
Alias Type: Alternate Name
Alias Name: 5189-002-041
Alias Type: APN
Alias Name: 5189002041
Alias Type: APN
Alias Name: CAD000042879
Alias Type: EPA Identification Number
Alias Name: 110002626178
Alias Type: EPA (FRS #)
Alias Name: 19490015
Alias Type: Envirostor ID Number

CONTAMINATED TRANSFER SITE (Continued) **S106843378**

Completed Info:

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Certification
Completed Date:	01/01/1986
Comments:	Not reported

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	* Discovery
Completed Date:	10/05/1980
Comments:	Facility Identified: Eckhardt Survey.

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Triage Meeting
Completed Date:	05/27/2015
Comments:	Not reported

Future Area Name:	Not reported
Future Sub Area Name:	Not reported
Future Document Type:	Not reported
Future Due Date:	Not reported
Schedule Area Name:	Not reported
Schedule Sub Area Name:	Not reported
Schedule Document Type:	Not reported
Schedule Due Date:	Not reported
Schedule Revised Date:	Not reported

LDS:

Global Id:	T10000005514
Latitude:	34.02912
Longitude:	-118.2049
Case Type:	Land Disposal Site
Status:	Open - Inactive
Status Date:	12/30/2013
Lead Agency:	LOS ANGELES RWQCB (REGION 4)
Caseworker:	WY
Local Agency:	Not reported
RB Case Number:	83-022
LOC Case Number:	Not reported
File Location:	Not reported
Potential Media Affect:	Not reported
EDR Link ID:	T10000005514
Potential Contaminants of Concern:	Not reported
Site History:	Not reported

Click here to access the California GeoTracker records for this facility:

LA Co. Site Mitigation:

Facility ID:	FA0029643
Site ID:	SD0010923
Jurisdiction:	State
Case ID:	RO0010923

CONTAMINATED TRANSFER SITE (Continued) **S106843378**

Abated: Yes
Assigned To: Not reported
Entered Date: 05/11/2004

I35 **SILVA PROPERTY** **ENVIROSTOR** **S111842232**
SSE **3201 WHITTIER BLVD** **N/A**
1/2-1 **LOS ANGELES, CA 90023**
0.727 mi.
3840 ft. **Site 1 of 2 in cluster I**

Relative:
Lower

Actual:
284 ft.

ENVIROSTOR:
Facility ID: 60001677
Status: No Further Action
Status Date: 04/21/2000
Site Code: Not reported
Site Type: Evaluation
Site Type Detailed: Evaluation
Acres: 0
NPL: NO
Regulatory Agencies: LOS ANGELES COUNTY
Lead Agency: LOS ANGELES COUNTY
Program Manager: Not reported
Supervisor: Douglas Bautista
Division Branch: Cleanup Cypress
Assembly: 58
Senate: 24
Special Program: Not reported
Restricted Use: NO
Site Mgmt Req: NONE SPECIFIED
Funding: EPA Grant
Latitude: 34.02966
Longitude: -118.2040
APN: NONE SPECIFIED
Past Use: NONE SPECIFIED
Potential COC: NONE SPECIFIED No Contaminants found
Confirmed COC: No Contaminants found
Potential Description: NONE SPECIFIED
Alias Name: 60001677
Alias Type: Envirostor ID Number

Completed Info:
Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Screening
Completed Date: 04/21/2000
Comments: no further action

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

I36 **MADRID PROPERTY** **ENVIROSTOR** **S112057186**
SSE **3207 WHITTIER BLVD** **N/A**
1/2-1 **LOS ANGELES, CA 90023**
0.735 mi.
3879 ft. **Site 2 of 2 in cluster I**

Relative:
Lower

Actual:
284 ft.

ENVIROSTOR:

Facility ID:	60001702
Status:	No Further Action
Status Date:	04/21/2000
Site Code:	Not reported
Site Type:	Evaluation
Site Type Detailed:	Evaluation
Acres:	0
NPL:	NO
Regulatory Agencies:	LOS ANGELES COUNTY
Lead Agency:	LOS ANGELES COUNTY
Program Manager:	Not reported
Supervisor:	Douglas Bautista
Division Branch:	Cleanup Cypress
Assembly:	46
Senate:	24
Special Program:	Not reported
Restricted Use:	NO
Site Mgmt Req:	NONE SPECIFIED
Funding:	EPA Grant
Latitude:	34.02952
Longitude:	-118.2038
APN:	NONE SPECIFIED
Past Use:	NONE SPECIFIED
Potential COC:	NONE SPECIFIED No Contaminants found
Confirmed COC:	No Contaminants found
Potential Description:	NONE SPECIFIED
Alias Name:	60001702
Alias Type:	Envirostor ID Number

Completed Info:

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Site Screening
Completed Date:	04/21/2000
Comments:	No further action
Future Area Name:	Not reported
Future Sub Area Name:	Not reported
Future Document Type:	Not reported
Future Due Date:	Not reported
Schedule Area Name:	Not reported
Schedule Sub Area Name:	Not reported
Schedule Document Type:	Not reported
Schedule Due Date:	Not reported
Schedule Revised Date:	Not reported

37
WSW
1/2-1
0.951 mi.
5022 ft.

SANTA FE/W.A. GRANT
2144 EAST 7TH STREET
LOS ANGELES, CA 90021

ENVIROSTOR **S102860873**
VCP **N/A**
LA Co. Site Mitigation

Relative:
Lower

Actual:
243 ft.

ENVIROSTOR:

Facility ID:	19330375
Status:	No Further Action
Status Date:	09/16/1996
Site Code:	300582
Site Type:	Voluntary Cleanup
Site Type Detailed:	Voluntary Cleanup
Acres:	2.3
NPL:	NO
Regulatory Agencies:	DTSC
Lead Agency:	DTSC
Program Manager:	Shahir Haddad
Supervisor:	Sayareh Amirebrahimi
Division Branch:	Cleanup Chatsworth
Assembly:	53
Senate:	24
Special Program:	Voluntary Cleanup Program
Restricted Use:	NO
Site Mgmt Req:	NONE SPECIFIED
Funding:	Responsible Party
Latitude:	34.03444
Longitude:	-118.2277
APN:	NONE SPECIFIED
Past Use:	MANUFACTURING - OTHER, RESIDENTIAL AREA
Potential COC:	Lead No Contaminants found
Confirmed COC:	31000-NO
Potential Description:	SOIL, SOIL
Alias Name:	ATCHISON, TOPEKA AND SANTA FE RAILWAY CO
Alias Type:	Alternate Name
Alias Name:	SANTA FE RAILWAY COMPANY
Alias Type:	Alternate Name
Alias Name:	SANTA FE/W. ACOMPANY
Alias Type:	Alternate Name
Alias Name:	W.A. GRANT & COMPANY
Alias Type:	Alternate Name
Alias Name:	110033609995
Alias Type:	EPA (FRS #)
Alias Name:	300582
Alias Type:	Project Code (Site Code)
Alias Name:	19330375
Alias Type:	Envirostor ID Number

Completed Info:

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Voluntary Cleanup Agreement
Completed Date:	05/31/1996
Comments:	DTSC signed a Voluntary Cleanup Agreement with Santa Fe for the completion and review of a Preliminary Endangerment Assessment.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Preliminary Endangerment Assessment Report
Completed Date:	09/04/1996

SANTA FE/W.A. GRANT (Continued) **S102860873**

Comments: DTSC reviewed a Preliminary Endangerment Assessment for the site under a Voluntary Cleanup Agreement. Based on the information and data presented, DTSC determined that the hazardous constituents remaining at the site do not constitute a threat to human health or the environment.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Screening
Completed Date: 09/13/1995
Comments: The Department received a Non-Emergency Hazardous Substance Release Report dated January 31, 1995. Review of the document indicates that the site is contaminated with elevated levels of heavy metals such as lead, copper and zinc. Foundry operations existed at the site from at least 1906 until 1990, operated by W.G. Grant & Co. Santa Fe Railway is the current owner of the site. RP removed USTs from the site without any regulatory agency oversight. Due to evidence of a release, DTSC is recommending that a PEA be conducted to evaluate the site. On September 13, 1995, DTSC notified the RP thereof.

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

VCP:
Facility ID: 19330375
Site Type: Voluntary Cleanup
Site Type Detail: Voluntary Cleanup
Site Mgmt. Req.: NONE SPECIFIED
Acres: 2.3
National Priorities List: NO
Cleanup Oversight Agencies: DTSC
Lead Agency: DTSC
Lead Agency Description: * DTSC
Project Manager: Shahir Haddad
Supervisor: Sayareh Amirebrahimi
Division Branch: Cleanup Chatsworth
Site Code: 300582
Assembly: 53
Senate: 24
Special Programs Code: Voluntary Cleanup Program
Status: No Further Action
Status Date: 09/16/1996
Restricted Use: NO
Funding: Responsible Party
Lat/Long: 34.03444 / -118.2277
APN: NONE SPECIFIED
Past Use: MANUFACTURING - OTHER, RESIDENTIAL AREA
Potential COC: 30013,31000
Confirmed COC: 31000-NO
Potential Description: SOIL, SOIL

SANTA FE/W.A. GRANT (Continued) **S102860873**

Alias Name:	ATCHISON, TOPEKA AND SANTA FE RAILWAY CO
Alias Type:	Alternate Name
Alias Name:	SANTA FE RAILWAY COMPANY
Alias Type:	Alternate Name
Alias Name:	SANTA FE/W. ACOMPANY
Alias Type:	Alternate Name
Alias Name:	W.A. GRANT & COMPANY
Alias Type:	Alternate Name
Alias Name:	110033609995
Alias Type:	EPA (FRS #)
Alias Name:	300582
Alias Type:	Project Code (Site Code)
Alias Name:	19330375
Alias Type:	Envirostor ID Number

Completed Info:

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Voluntary Cleanup Agreement
Completed Date:	05/31/1996
Comments:	DTSC signed a Voluntary Cleanup Agreement with Santa Fe for the completion and review of a Preliminary Endangerment Assessment.

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Preliminary Endangerment Assessment Report
Completed Date:	09/04/1996
Comments:	DTSC reviewed a Preliminary Endangerment Assessment for the site under a Voluntary Cleanup Agreement. Based on the information and data presented, DTSC determined that the hazardous constituents remaining at the site do not constitute a threat to human health or the environment.

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Site Screening
Completed Date:	09/13/1995
Comments:	The Department received a Non-Emergency Hazardous Substance Release Report dated January 31, 1995. Review of the document indicates that the site is contaminated with elevated levels of heavy metals such as lead, copper and zinc. Foundry operations existed at the site from at least 1906 until 1990, operated by W.G. Grant & Co. Santa Fe Railway is the current owner of the site. RP removed USTs from the site without any regulatory agency oversight. Due to evidence of a release, DTSC is recommending that a PEA be conducted to evaluate the site. On September 13, 1995, DTSC notified the RP thereof.

Future Area Name:	Not reported
Future Sub Area Name:	Not reported
Future Document Type:	Not reported
Future Due Date:	Not reported
Schedule Area Name:	Not reported
Schedule Sub Area Name:	Not reported
Schedule Document Type:	Not reported
Schedule Due Date:	Not reported
Schedule Revised Date:	Not reported

SANTA FE/W.A. GRANT (Continued) **S102860873**

LA Co. Site Mitigation:
Facility ID: Not reported
Site ID: Not reported
Jurisdiction: Not reported
Case ID: Not reported
Abated: Not reported
Assigned To: Not reported
Entered Date: Not reported

Count: 3 records. ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
LOS ANGELES	S105628628	DENA NEW PRIMARY CENTER	HOSTETTER STREET/ORME AVENUE	90023	ENVIROSTOR, SCH
LOS ANGELES	S107770251	CENTRAL REGION HIGH SCHOOL #15	MARENGO STREET / CHICAGO STREE	90033	ENVIROSTOR, SCH
LOS ANGELES	S106387104	ACTA NORTH - UNION PACIFIC RAILROA	SOTO	90021	SLIC

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

Number of Days to Update: Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL: National Priority List

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 03/07/2016
Date Data Arrived at EDR: 04/05/2016
Date Made Active in Reports: 04/15/2016
Number of Days to Update: 10

Source: EPA
Telephone: N/A
Last EDR Contact: 04/05/2016
Next Scheduled EDR Contact: 04/18/2016
Data Release Frequency: Quarterly

NPL Site Boundaries

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)
Telephone: 202-564-7333

EPA Region 1
Telephone 617-918-1143

EPA Region 6
Telephone: 214-655-6659

EPA Region 3
Telephone 215-814-5418

EPA Region 7
Telephone: 913-551-7247

EPA Region 4
Telephone 404-562-8033

EPA Region 8
Telephone: 303-312-6774

EPA Region 5
Telephone 312-886-6686

EPA Region 9
Telephone: 415-947-4246

EPA Region 10
Telephone 206-553-8665

Proposed NPL: Proposed National Priority List Sites

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 03/07/2016
Date Data Arrived at EDR: 04/05/2016
Date Made Active in Reports: 04/15/2016
Number of Days to Update: 10

Source: EPA
Telephone: N/A
Last EDR Contact: 04/05/2016
Next Scheduled EDR Contact: 04/18/2016
Data Release Frequency: Quarterly

NPL LIENS: Federal Superfund Liens

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/1991
Date Data Arrived at EDR: 02/02/1994
Date Made Active in Reports: 03/30/1994
Number of Days to Update: 56

Source: EPA
Telephone: 202-564-4267
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Federal Delisted NPL site list

Delisted NPL: National Priority List Deletions

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 03/07/2016
Date Data Arrived at EDR: 04/05/2016
Date Made Active in Reports: 04/15/2016
Number of Days to Update: 10

Source: EPA
Telephone: N/A
Last EDR Contact: 04/05/2016
Next Scheduled EDR Contact: 04/18/2016
Data Release Frequency: Quarterly

Federal CERCLIS list

FEDERAL FACILITY: Federal Facility Site Information listing

A listing of National Priority List (NPL) and Base Realignment and Closure (BRAC) sites found in the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) Database where EPA Federal Facilities Restoration and Reuse Office is involved in cleanup activities.

Date of Government Version: 03/26/2015
Date Data Arrived at EDR: 04/08/2015
Date Made Active in Reports: 06/11/2015
Number of Days to Update: 64

Source: Environmental Protection Agency
Telephone: 703-603-8704
Last EDR Contact: 04/08/2016
Next Scheduled EDR Contact: 07/18/2016
Data Release Frequency: Varies

SEMS: Superfund Enterprise Management System

SEMS (Superfund Enterprise Management System) tracks hazardous waste sites, potentially hazardous waste sites, and remedial activities performed in support of EPA's Superfund Program across the United States. The list was formerly know as CERCLIS, renamed to SEMS by the EPA in 2015. The list contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This dataset also contains sites which are either proposed to or on the National Priorities List (NPL) and the sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 03/07/2016
Date Data Arrived at EDR: 04/05/2016
Date Made Active in Reports: 04/15/2016
Number of Days to Update: 10

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 04/05/2016
Next Scheduled EDR Contact: 08/01/2016
Data Release Frequency: Quarterly

Federal CERCLIS NFRAP site list

SEMS-ARCHIVE: Superfund Enterprise Management System Archive

SEMS-ARCHIVE (Superfund Enterprise Management System Archive) tracks sites that have no further interest under the Federal Superfund Program based on available information. The list was formerly known as the CERCLIS-NFRAP, renamed to SEMS ARCHIVE by the EPA in 2015. EPA may perform a minimal level of assessment work at a site while it is archived if site conditions change and/or new information becomes available. Archived sites have been removed and archived from the inventory of SEMS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list the site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. The decision does not necessarily mean that there is no hazard associated with a given site; it only means that. based upon available information, the location is not judged to be potential NPL site.

Date of Government Version: 03/07/2016
Date Data Arrived at EDR: 04/05/2016
Date Made Active in Reports: 04/15/2016
Number of Days to Update: 10

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 04/05/2016
Next Scheduled EDR Contact: 08/01/2016
Data Release Frequency: Quarterly

Federal RCRA CORRACTS facilities list

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 12/09/2015
Date Data Arrived at EDR: 03/02/2016
Date Made Active in Reports: 04/05/2016
Number of Days to Update: 34

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 03/30/2016
Next Scheduled EDR Contact: 07/11/2016
Data Release Frequency: Quarterly

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF: RCRA - Treatment, Storage and Disposal

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 12/09/2015
Date Data Arrived at EDR: 03/02/2016
Date Made Active in Reports: 04/05/2016
Number of Days to Update: 34

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 03/30/2016
Next Scheduled EDR Contact: 07/11/2016
Data Release Frequency: Quarterly

Federal RCRA generators list

RCRA-LQG: RCRA - Large Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 12/09/2015
Date Data Arrived at EDR: 03/02/2016
Date Made Active in Reports: 04/05/2016
Number of Days to Update: 34

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 03/30/2016
Next Scheduled EDR Contact: 07/11/2016
Data Release Frequency: Quarterly

RCRA-SQG: RCRA - Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 12/09/2015
Date Data Arrived at EDR: 03/02/2016
Date Made Active in Reports: 04/05/2016
Number of Days to Update: 34

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 03/30/2016
Next Scheduled EDR Contact: 07/11/2016
Data Release Frequency: Quarterly

RCRA-CESQG: RCRA - Conditionally Exempt Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 12/09/2015
Date Data Arrived at EDR: 03/02/2016
Date Made Active in Reports: 04/05/2016
Number of Days to Update: 34

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 03/30/2016
Next Scheduled EDR Contact: 07/11/2016
Data Release Frequency: Varies

Federal institutional controls / engineering controls registries

LUCIS: Land Use Control Information System

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 05/28/2015
Date Data Arrived at EDR: 05/29/2015
Date Made Active in Reports: 06/11/2015
Number of Days to Update: 13

Source: Department of the Navy
Telephone: 843-820-7326
Last EDR Contact: 02/16/2016
Next Scheduled EDR Contact: 05/30/2016
Data Release Frequency: Varies

US ENG CONTROLS: Engineering Controls Sites List

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 09/10/2015
Date Data Arrived at EDR: 09/11/2015
Date Made Active in Reports: 11/03/2015
Number of Days to Update: 53

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 02/29/2016
Next Scheduled EDR Contact: 06/13/2016
Data Release Frequency: Varies

US INST CONTROL: Sites with Institutional Controls

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 09/10/2015
Date Data Arrived at EDR: 09/11/2015
Date Made Active in Reports: 11/03/2015
Number of Days to Update: 53

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 02/29/2016
Next Scheduled EDR Contact: 06/13/2016
Data Release Frequency: Varies

Federal ERNS list

ERNS: Emergency Response Notification System

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 06/22/2015
Date Data Arrived at EDR: 06/26/2015
Date Made Active in Reports: 09/16/2015
Number of Days to Update: 82

Source: National Response Center, United States Coast Guard
Telephone: 202-267-2180
Last EDR Contact: 03/30/2016
Next Scheduled EDR Contact: 07/11/2016
Data Release Frequency: Annually

State- and tribal - equivalent NPL

RESPONSE: State Response Sites

Identifies confirmed release sites where DTSC is involved in remediation, either in a lead or oversight capacity. These confirmed release sites are generally high-priority and high potential risk.

Date of Government Version: 02/01/2016
Date Data Arrived at EDR: 02/03/2016
Date Made Active in Reports: 03/22/2016
Number of Days to Update: 48

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 02/03/2016
Next Scheduled EDR Contact: 05/16/2016
Data Release Frequency: Quarterly

State- and tribal - equivalent CERCLIS

ENVIROSTOR: EnviroStor Database

The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifes sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

Date of Government Version: 02/01/2016
Date Data Arrived at EDR: 02/03/2016
Date Made Active in Reports: 03/22/2016
Number of Days to Update: 48

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 02/03/2016
Next Scheduled EDR Contact: 05/16/2016
Data Release Frequency: Quarterly

State and tribal landfill and/or solid waste disposal site lists

SWF/LF (SWIS): Solid Waste Information System

Active, Closed and Inactive Landfills. SWF/LF records typically contain an inve ntory of solid waste disposal facilities or landfills. These may be active or i nactive facilities or open dumps that failed to meet RCRA Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 02/15/2016
Date Data Arrived at EDR: 02/17/2016
Date Made Active in Reports: 04/01/2016
Number of Days to Update: 44

Source: Department of Resources Recycling and Recovery
Telephone: 916-341-6320
Last EDR Contact: 02/17/2016
Next Scheduled EDR Contact: 05/30/2016
Data Release Frequency: Quarterly

State and tribal leaking storage tank lists

LUST REG 4: Underground Storage Tank Leak List

Los Angeles, Ventura counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/07/2004
Date Data Arrived at EDR: 09/07/2004
Date Made Active in Reports: 10/12/2004
Number of Days to Update: 35

Source: California Regional Water Quality Control Board Los Angeles Region (4)
Telephone: 213-576-6710
Last EDR Contact: 09/06/2011
Next Scheduled EDR Contact: 12/19/2011
Data Release Frequency: No Update Planned

LUST REG 8: Leaking Underground Storage Tanks

California Regional Water Quality Control Board Santa Ana Region (8). For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/14/2005
Date Data Arrived at EDR: 02/15/2005
Date Made Active in Reports: 03/28/2005
Number of Days to Update: 41

Source: California Regional Water Quality Control Board Santa Ana Region (8)
Telephone: 909-782-4496
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: Varies

LUST REG 9: Leaking Underground Storage Tank Report

Orange, Riverside, San Diego counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 03/01/2001
Date Data Arrived at EDR: 04/23/2001
Date Made Active in Reports: 05/21/2001
Number of Days to Update: 28

Source: California Regional Water Quality Control Board San Diego Region (9)
Telephone: 858-637-5595
Last EDR Contact: 09/26/2011
Next Scheduled EDR Contact: 01/09/2012
Data Release Frequency: No Update Planned

LUST REG 7: Leaking Underground Storage Tank Case Listing

Leaking Underground Storage Tank locations. Imperial, Riverside, San Diego, Santa Barbara counties.

Date of Government Version: 02/26/2004
Date Data Arrived at EDR: 02/26/2004
Date Made Active in Reports: 03/24/2004
Number of Days to Update: 27

Source: California Regional Water Quality Control Board Colorado River Basin Region (7)
Telephone: 760-776-8943
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

LUST REG 6V: Leaking Underground Storage Tank Case Listing

Leaking Underground Storage Tank locations. Inyo, Kern, Los Angeles, Mono, San Bernardino counties.

Date of Government Version: 06/07/2005
Date Data Arrived at EDR: 06/07/2005
Date Made Active in Reports: 06/29/2005
Number of Days to Update: 22

Source: California Regional Water Quality Control Board Victorville Branch Office (6)
Telephone: 760-241-7365
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

LUST REG 6L: Leaking Underground Storage Tank Case Listing

For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/09/2003
Date Data Arrived at EDR: 09/10/2003
Date Made Active in Reports: 10/07/2003
Number of Days to Update: 27

Source: California Regional Water Quality Control Board Lahontan Region (6)
Telephone: 530-542-5572
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

LUST REG 5: Leaking Underground Storage Tank Database

Leaking Underground Storage Tank locations. Alameda, Alpine, Amador, Butte, Colusa, Contra Costa, Calveras, El Dorado, Fresno, Glenn, Kern, Kings, Lake, Lassen, Madera, Mariposa, Merced, Modoc, Napa, Nevada, Placer, Plumas, Sacramento, San Joaquin, Shasta, Solano, Stanislaus, Sutter, Tehama, Tulare, Tuolumne, Yolo, Yuba counties.

Date of Government Version: 07/01/2008
Date Data Arrived at EDR: 07/22/2008
Date Made Active in Reports: 07/31/2008
Number of Days to Update: 9

Source: California Regional Water Quality Control Board Central Valley Region (5)
Telephone: 916-464-4834
Last EDR Contact: 07/01/2011
Next Scheduled EDR Contact: 10/17/2011
Data Release Frequency: No Update Planned

LUST REG 3: Leaking Underground Storage Tank Database

Leaking Underground Storage Tank locations. Monterey, San Benito, San Luis Obispo, Santa Barbara, Santa Cruz counties.

Date of Government Version: 05/19/2003
Date Data Arrived at EDR: 05/19/2003
Date Made Active in Reports: 06/02/2003
Number of Days to Update: 14

Source: California Regional Water Quality Control Board Central Coast Region (3)
Telephone: 805-542-4786
Last EDR Contact: 07/18/2011
Next Scheduled EDR Contact: 10/31/2011
Data Release Frequency: No Update Planned

LUST REG 2: Fuel Leak List

Leaking Underground Storage Tank locations. Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, Sonoma counties.

Date of Government Version: 09/30/2004
Date Data Arrived at EDR: 10/20/2004
Date Made Active in Reports: 11/19/2004
Number of Days to Update: 30

Source: California Regional Water Quality Control Board San Francisco Bay Region (2)
Telephone: 510-622-2433
Last EDR Contact: 09/19/2011
Next Scheduled EDR Contact: 01/02/2012
Data Release Frequency: Quarterly

LUST REG 1: Active Toxic Site Investigation

Del Norte, Humboldt, Lake, Mendocino, Modoc, Siskiyou, Sonoma, Trinity counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/01/2001
Date Data Arrived at EDR: 02/28/2001
Date Made Active in Reports: 03/29/2001
Number of Days to Update: 29

Source: California Regional Water Quality Control Board North Coast (1)
Telephone: 707-570-3769
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

LUST: Geotracker's Leaking Underground Fuel Tank Report

Leaking Underground Storage Tank Incident Reports. LUST records contain an inventory of reported leaking underground storage tank incidents. Not all states maintain these records, and the information stored varies by state. For more information on a particular leaking underground storage tank sites, please contact the appropriate regulatory agency.

Date of Government Version: 12/14/2015
Date Data Arrived at EDR: 12/14/2015
Date Made Active in Reports: 02/08/2016
Number of Days to Update: 56

Source: State Water Resources Control Board
Telephone: see region list
Last EDR Contact: 03/16/2016
Next Scheduled EDR Contact: 06/27/2016
Data Release Frequency: Quarterly

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 03/30/2015
Date Data Arrived at EDR: 04/28/2015
Date Made Active in Reports: 06/22/2015
Number of Days to Update: 55

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 04/29/2016
Next Scheduled EDR Contact: 08/08/2016
Data Release Frequency: Varies

INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 01/08/2015
Date Data Arrived at EDR: 01/08/2015
Date Made Active in Reports: 02/09/2015
Number of Days to Update: 32

Source: Environmental Protection Agency
Telephone: 415-972-3372
Last EDR Contact: 04/27/2016
Next Scheduled EDR Contact: 08/08/2016
Data Release Frequency: Quarterly

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 01/07/2016
Date Data Arrived at EDR: 01/08/2016
Date Made Active in Reports: 02/18/2016
Number of Days to Update: 41

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 04/29/2016
Next Scheduled EDR Contact: 08/08/2016
Data Release Frequency: Quarterly

INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land
A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 10/27/2015
Date Data Arrived at EDR: 10/29/2015
Date Made Active in Reports: 01/04/2016
Number of Days to Update: 67

Source: EPA Region 1
Telephone: 617-918-1313
Last EDR Contact: 04/29/2016
Next Scheduled EDR Contact: 08/08/2016
Data Release Frequency: Varies

INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 11/24/2015
Date Data Arrived at EDR: 12/01/2015
Date Made Active in Reports: 01/04/2016
Number of Days to Update: 34

Source: EPA Region 4
Telephone: 404-562-8677
Last EDR Contact: 04/26/2016
Next Scheduled EDR Contact: 08/08/2016
Data Release Frequency: Semi-Annually

INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 10/13/2015
Date Data Arrived at EDR: 10/23/2015
Date Made Active in Reports: 02/18/2016
Number of Days to Update: 118

Source: EPA Region 8
Telephone: 303-312-6271
Last EDR Contact: 04/27/2016
Next Scheduled EDR Contact: 08/08/2016
Data Release Frequency: Quarterly

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 08/20/2015
Date Data Arrived at EDR: 10/30/2015
Date Made Active in Reports: 02/18/2016
Number of Days to Update: 111

Source: EPA Region 6
Telephone: 214-665-6597
Last EDR Contact: 04/29/2016
Next Scheduled EDR Contact: 08/08/2016
Data Release Frequency: Varies

INDIAN LUST R5: Leaking Underground Storage Tanks on Indian Land
Leaking underground storage tanks located on Indian Land in Michigan, Minnesota and Wisconsin.

Date of Government Version: 11/04/2015
Date Data Arrived at EDR: 11/13/2015
Date Made Active in Reports: 01/04/2016
Number of Days to Update: 52

Source: EPA, Region 5
Telephone: 312-886-7439
Last EDR Contact: 04/27/2016
Next Scheduled EDR Contact: 08/08/2016
Data Release Frequency: Varies

SLIC: Statewide SLIC Cases

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 12/14/2015
Date Data Arrived at EDR: 12/14/2015
Date Made Active in Reports: 02/08/2016
Number of Days to Update: 56

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 03/16/2016
Next Scheduled EDR Contact: 06/27/2016
Data Release Frequency: Varies

SLIC REG 1: Active Toxic Site Investigations

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2003
Date Data Arrived at EDR: 04/07/2003
Date Made Active in Reports: 04/25/2003
Number of Days to Update: 18

Source: California Regional Water Quality Control Board, North Coast Region (1)
Telephone: 707-576-2220
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

SLIC REG 2: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/30/2004
Date Data Arrived at EDR: 10/20/2004
Date Made Active in Reports: 11/19/2004
Number of Days to Update: 30

Source: Regional Water Quality Control Board San Francisco Bay Region (2)
Telephone: 510-286-0457
Last EDR Contact: 09/19/2011
Next Scheduled EDR Contact: 01/02/2012
Data Release Frequency: Quarterly

SLIC REG 3: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/18/2006
Date Data Arrived at EDR: 05/18/2006
Date Made Active in Reports: 06/15/2006
Number of Days to Update: 28

Source: California Regional Water Quality Control Board Central Coast Region (3)
Telephone: 805-549-3147
Last EDR Contact: 07/18/2011
Next Scheduled EDR Contact: 10/31/2011
Data Release Frequency: Semi-Annually

SLIC REG 4: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/17/2004
Date Data Arrived at EDR: 11/18/2004
Date Made Active in Reports: 01/04/2005
Number of Days to Update: 47

Source: Region Water Quality Control Board Los Angeles Region (4)
Telephone: 213-576-6600
Last EDR Contact: 07/01/2011
Next Scheduled EDR Contact: 10/17/2011
Data Release Frequency: Varies

SLIC REG 5: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/01/2005
Date Data Arrived at EDR: 04/05/2005
Date Made Active in Reports: 04/21/2005
Number of Days to Update: 16

Source: Regional Water Quality Control Board Central Valley Region (5)
Telephone: 916-464-3291
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: Semi-Annually

SLIC REG 6V: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/24/2005
Date Data Arrived at EDR: 05/25/2005
Date Made Active in Reports: 06/16/2005
Number of Days to Update: 22

Source: Regional Water Quality Control Board, Victorville Branch
Telephone: 619-241-6583
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: Semi-Annually

SLIC REG 6L: SLIC Sites
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/07/2004
Date Data Arrived at EDR: 09/07/2004
Date Made Active in Reports: 10/12/2004
Number of Days to Update: 35

Source: California Regional Water Quality Control Board, Lahontan Region
Telephone: 530-542-5574
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

SLIC REG 7: SLIC List
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/24/2004
Date Data Arrived at EDR: 11/29/2004
Date Made Active in Reports: 01/04/2005
Number of Days to Update: 36

Source: California Regional Quality Control Board, Colorado River Basin Region
Telephone: 760-346-7491
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

SLIC REG 8: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2008
Date Data Arrived at EDR: 04/03/2008
Date Made Active in Reports: 04/14/2008
Number of Days to Update: 11

Source: California Region Water Quality Control Board Santa Ana Region (8)
Telephone: 951-782-3298
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: Semi-Annually

SLIC REG 9: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/10/2007
Date Data Arrived at EDR: 09/11/2007
Date Made Active in Reports: 09/28/2007
Number of Days to Update: 17

Source: California Regional Water Quality Control Board San Diego Region (9)
Telephone: 858-467-2980
Last EDR Contact: 08/08/2011
Next Scheduled EDR Contact: 11/21/2011
Data Release Frequency: Annually

State and tribal registered storage tank lists

FEMA UST: Underground Storage Tank Listing
A listing of all FEMA owned underground storage tanks.

Date of Government Version: 01/01/2010
Date Data Arrived at EDR: 02/16/2010
Date Made Active in Reports: 04/12/2010
Number of Days to Update: 55

Source: FEMA
Telephone: 202-646-5797
Last EDR Contact: 04/11/2016
Next Scheduled EDR Contact: 07/25/2016
Data Release Frequency: Varies

UST: Active UST Facilities
Active UST facilities gathered from the local regulatory agencies

Date of Government Version: 12/14/2015
Date Data Arrived at EDR: 12/14/2015
Date Made Active in Reports: 02/08/2016
Number of Days to Update: 56
Source: SWRCB
Telephone: 916-341-5851
Last EDR Contact: 03/16/2016
Next Scheduled EDR Contact: 06/27/2016
Data Release Frequency: Semi-Annually

AST: Aboveground Petroleum Storage Tank Facilities
A listing of aboveground storage tank petroleum storage tank locations.

Date of Government Version: 08/01/2009
Date Data Arrived at EDR: 09/10/2009
Date Made Active in Reports: 10/01/2009
Number of Days to Update: 21
Source: California Environmental Protection Agency
Telephone: 916-327-5092
Last EDR Contact: 03/11/2016
Next Scheduled EDR Contact: 07/11/2016
Data Release Frequency: Quarterly

INDIAN UST R5: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).

Date of Government Version: 11/05/2015
Date Data Arrived at EDR: 11/13/2015
Date Made Active in Reports: 01/04/2016
Number of Days to Update: 52
Source: EPA Region 5
Telephone: 312-886-6136
Last EDR Contact: 04/27/2016
Next Scheduled EDR Contact: 08/08/2016
Data Release Frequency: Varies

INDIAN UST R6: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

Date of Government Version: 08/20/2015
Date Data Arrived at EDR: 10/30/2015
Date Made Active in Reports: 02/18/2016
Number of Days to Update: 111
Source: EPA Region 6
Telephone: 214-665-7591
Last EDR Contact: 04/29/2016
Next Scheduled EDR Contact: 08/08/2016
Data Release Frequency: Semi-Annually

INDIAN UST R10: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).

Date of Government Version: 01/07/2016
Date Data Arrived at EDR: 01/08/2016
Date Made Active in Reports: 02/18/2016
Number of Days to Update: 41
Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 04/29/2016
Next Scheduled EDR Contact: 08/08/2016
Data Release Frequency: Quarterly

INDIAN UST R8: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).

Date of Government Version: 10/13/2015
Date Data Arrived at EDR: 10/23/2015
Date Made Active in Reports: 02/18/2016
Number of Days to Update: 118
Source: EPA Region 8
Telephone: 303-312-6137
Last EDR Contact: 04/29/2016
Next Scheduled EDR Contact: 08/08/2016
Data Release Frequency: Quarterly

INDIAN UST R1: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).

Date of Government Version: 10/20/2015
Date Data Arrived at EDR: 10/29/2015
Date Made Active in Reports: 01/04/2016
Number of Days to Update: 67

Source: EPA, Region 1
Telephone: 617-918-1313
Last EDR Contact: 04/29/2016
Next Scheduled EDR Contact: 08/08/2016
Data Release Frequency: Varies

INDIAN UST R7: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).

Date of Government Version: 09/23/2014
Date Data Arrived at EDR: 11/25/2014
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 65

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 04/29/2016
Next Scheduled EDR Contact: 08/08/2016
Data Release Frequency: Varies

INDIAN UST R9: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).

Date of Government Version: 12/14/2014
Date Data Arrived at EDR: 02/13/2015
Date Made Active in Reports: 03/13/2015
Number of Days to Update: 28

Source: EPA Region 9
Telephone: 415-972-3368
Last EDR Contact: 04/27/2016
Next Scheduled EDR Contact: 08/08/2016
Data Release Frequency: Quarterly

INDIAN UST R4: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Tribal Nations)

Date of Government Version: 11/24/2015
Date Data Arrived at EDR: 12/01/2015
Date Made Active in Reports: 01/04/2016
Number of Days to Update: 34

Source: EPA Region 4
Telephone: 404-562-9424
Last EDR Contact: 04/26/2016
Next Scheduled EDR Contact: 08/08/2016
Data Release Frequency: Semi-Annually

State and tribal voluntary cleanup sites

VCP: Voluntary Cleanup Program Properties

Contains low threat level properties with either confirmed or unconfirmed releases and the project proponents have request that DTSC oversee investigation and/or cleanup activities and have agreed to provide coverage for DTSC's costs.

Date of Government Version: 02/01/2016
Date Data Arrived at EDR: 02/03/2016
Date Made Active in Reports: 03/22/2016
Number of Days to Update: 48

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 02/03/2016
Next Scheduled EDR Contact: 05/16/2016
Data Release Frequency: Quarterly

INDIAN VCP R1: Voluntary Cleanup Priority Listing

A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 07/27/2015
Date Data Arrived at EDR: 09/29/2015
Date Made Active in Reports: 02/18/2016
Number of Days to Update: 142

Source: EPA, Region 1
Telephone: 617-918-1102
Last EDR Contact: 04/01/2016
Next Scheduled EDR Contact: 07/11/2016
Data Release Frequency: Varies

INDIAN VCP R7: Voluntary Cleanup Priority Lisitng
A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008
Date Data Arrived at EDR: 04/22/2008
Date Made Active in Reports: 05/19/2008
Number of Days to Update: 27

Source: EPA, Region 7
Telephone: 913-551-7365
Last EDR Contact: 04/20/2009
Next Scheduled EDR Contact: 07/20/2009
Data Release Frequency: Varies

State and tribal Brownfields sites

BROWNFIELDS: Considered Brownfieds Sites Listing
A listing of sites the SWRCB considers to be Brownfields since these are sites have come to them through the MOA Process.

Date of Government Version: 12/04/2015
Date Data Arrived at EDR: 12/08/2015
Date Made Active in Reports: 01/21/2016
Number of Days to Update: 44

Source: State Water Resources Control Board
Telephone: 916-323-7905
Last EDR Contact: 03/07/2016
Next Scheduled EDR Contact: 06/20/2016
Data Release Frequency: Varies

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS: A Listing of Brownfields Sites
Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. Assessment, Cleanup and Redevelopment Exchange System (ACRES) stores information reported by EPA Brownfields grant recipients on brownfields properties assessed or cleaned up with grant funding as well as information on Targeted Brownfields Assessments performed by EPA Regions. A listing of ACRES Brownfield sites is obtained from Cleanups in My Community. Cleanups in My Community provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

Date of Government Version: 12/22/2015
Date Data Arrived at EDR: 12/23/2015
Date Made Active in Reports: 02/18/2016
Number of Days to Update: 57

Source: Environmental Protection Agency
Telephone: 202-566-2777
Last EDR Contact: 03/22/2016
Next Scheduled EDR Contact: 07/04/2016
Data Release Frequency: Semi-Annually

Local Lists of Landfill / Solid Waste Disposal Sites

WMUDS/SWAT: Waste Management Unit Database
Waste Management Unit Database System. WMUDS is used by the State Water Resources Control Board staff and the Regional Water Quality Control Boards for program tracking and inventory of waste management units. WMUDS is composed of the following databases: Facility Information, Scheduled Inspections Information, Waste Management Unit Information, SWAT Program Information, SWAT Report Summary Information, SWAT Report Summary Data, Chapter 15 (formerly Subchapter 15) Information, Chapter 15 Monitoring Parameters, TPCA Program Information, RCRA Program Information, Closure Information, and Interested Parties Information.

Date of Government Version: 04/01/2000
Date Data Arrived at EDR: 04/10/2000
Date Made Active in Reports: 05/10/2000
Number of Days to Update: 30

Source: State Water Resources Control Board
Telephone: 916-227-4448
Last EDR Contact: 02/08/2016
Next Scheduled EDR Contact: 05/23/2016
Data Release Frequency: No Update Planned

SWRCY: Recycler Database
A listing of recycling facilities in California.

Date of Government Version: 12/14/2015
Date Data Arrived at EDR: 12/17/2015
Date Made Active in Reports: 02/08/2016
Number of Days to Update: 53

Source: Department of Conservation
Telephone: 916-323-3836
Last EDR Contact: 03/16/2016
Next Scheduled EDR Contact: 06/27/2016
Data Release Frequency: Quarterly

HAULERS: Registered Waste Tire Haulers Listing
A listing of registered waste tire haulers.

Date of Government Version: 11/23/2015
Date Data Arrived at EDR: 11/24/2015
Date Made Active in Reports: 01/21/2016
Number of Days to Update: 58

Source: Integrated Waste Management Board
Telephone: 916-341-6422
Last EDR Contact: 02/14/2016
Next Scheduled EDR Contact: 05/30/2016
Data Release Frequency: Varies

INDIAN ODI: Report on the Status of Open Dumps on Indian Lands
Location of open dumps on Indian land.

Date of Government Version: 12/31/1998
Date Data Arrived at EDR: 12/03/2007
Date Made Active in Reports: 01/24/2008
Number of Days to Update: 52

Source: Environmental Protection Agency
Telephone: 703-308-8245
Last EDR Contact: 04/27/2016
Next Scheduled EDR Contact: 08/15/2016
Data Release Frequency: Varies

DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations
A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside County and northern Imperial County, California.

Date of Government Version: 01/12/2009
Date Data Arrived at EDR: 05/07/2009
Date Made Active in Reports: 09/21/2009
Number of Days to Update: 137

Source: EPA, Region 9
Telephone: 415-947-4219
Last EDR Contact: 04/21/2016
Next Scheduled EDR Contact: 08/08/2016
Data Release Frequency: No Update Planned

ODI: Open Dump Inventory
An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985
Date Data Arrived at EDR: 08/09/2004
Date Made Active in Reports: 09/17/2004
Number of Days to Update: 39

Source: Environmental Protection Agency
Telephone: 800-424-9346
Last EDR Contact: 06/09/2004
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL: National Clandestine Laboratory Register
A listing of clandestine drug lab locations that have been removed from the DEAs National Clandestine Laboratory Register.

Date of Government Version: 09/17/2015
Date Data Arrived at EDR: 12/04/2015
Date Made Active in Reports: 02/18/2016
Number of Days to Update: 76

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 03/01/2016
Next Scheduled EDR Contact: 06/13/2016
Data Release Frequency: No Update Planned

HIST CAL-SITES: Calsites Database
The Calsites database contains potential or confirmed hazardous substance release properties. In 1996, California EPA reevaluated and significantly reduced the number of sites in the Calsites database. No longer updated by the state agency. It has been replaced by ENVIROSTOR.

Date of Government Version: 08/08/2005
Date Data Arrived at EDR: 08/03/2006
Date Made Active in Reports: 08/24/2006
Number of Days to Update: 21

Source: Department of Toxic Substance Control
Telephone: 916-323-3400
Last EDR Contact: 02/23/2009
Next Scheduled EDR Contact: 05/25/2009
Data Release Frequency: No Update Planned

SCH: School Property Evaluation Program

This category contains proposed and existing school sites that are being evaluated by DTSC for possible hazardous materials contamination. In some cases, these properties may be listed in the CalSites category depending on the level of threat to public health and safety or the environment they pose.

Date of Government Version: 02/01/2016
Date Data Arrived at EDR: 02/03/2016
Date Made Active in Reports: 03/22/2016
Number of Days to Update: 48

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 02/03/2016
Next Scheduled EDR Contact: 05/16/2016
Data Release Frequency: Quarterly

CDL: Clandestine Drug Labs

A listing of drug lab locations. Listing of a location in this database does not indicate that any illegal drug lab materials were or were not present there, and does not constitute a determination that the location either requires or does not require additional cleanup work.

Date of Government Version: 09/30/2015
Date Data Arrived at EDR: 01/19/2016
Date Made Active in Reports: 03/22/2016
Number of Days to Update: 63

Source: Department of Toxic Substances Control
Telephone: 916-255-6504
Last EDR Contact: 04/21/2016
Next Scheduled EDR Contact: 07/25/2016
Data Release Frequency: Varies

TOXIC PITS: Toxic Pits Cleanup Act Sites

Toxic PITS Cleanup Act Sites. TOXIC PITS identifies sites suspected of containing hazardous substances where cleanup has not yet been completed.

Date of Government Version: 07/01/1995
Date Data Arrived at EDR: 08/30/1995
Date Made Active in Reports: 09/26/1995
Number of Days to Update: 27

Source: State Water Resources Control Board
Telephone: 916-227-4364
Last EDR Contact: 01/26/2009
Next Scheduled EDR Contact: 04/27/2009
Data Release Frequency: No Update Planned

US CDL: Clandestine Drug Labs

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 09/17/2015
Date Data Arrived at EDR: 12/04/2015
Date Made Active in Reports: 02/18/2016
Number of Days to Update: 76

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 03/01/2016
Next Scheduled EDR Contact: 06/13/2016
Data Release Frequency: Quarterly

Local Lists of Registered Storage Tanks

SWEEPS UST: SWEEPS UST Listing

Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and maintained by a company contacted by the SWRCB in the early 1990's. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.

Date of Government Version: 06/01/1994
Date Data Arrived at EDR: 07/07/2005
Date Made Active in Reports: 08/11/2005
Number of Days to Update: 35

Source: State Water Resources Control Board
Telephone: N/A
Last EDR Contact: 06/03/2005
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

UST MENDOCINO: Mendocino County UST Database
A listing of underground storage tank locations in Mendocino County.

Date of Government Version: 11/25/2015
Date Data Arrived at EDR: 12/01/2015
Date Made Active in Reports: 12/17/2015
Number of Days to Update: 16

Source: Department of Public Health
Telephone: 707-463-4466
Last EDR Contact: 03/28/2016
Next Scheduled EDR Contact: 06/13/2016
Data Release Frequency: Annually

HIST UST: Hazardous Substance Storage Container Database
The Hazardous Substance Storage Container Database is a historical listing of UST sites. Refer to local/county source for current data.

Date of Government Version: 10/15/1990
Date Data Arrived at EDR: 01/25/1991
Date Made Active in Reports: 02/12/1991
Number of Days to Update: 18

Source: State Water Resources Control Board
Telephone: 916-341-5851
Last EDR Contact: 07/26/2001
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

CA FID UST: Facility Inventory Database
The Facility Inventory Database (FID) contains a historical listing of active and inactive underground storage tank locations from the State Water Resource Control Board. Refer to local/county source for current data.

Date of Government Version: 10/31/1994
Date Data Arrived at EDR: 09/05/1995
Date Made Active in Reports: 09/29/1995
Number of Days to Update: 24

Source: California Environmental Protection Agency
Telephone: 916-341-5851
Last EDR Contact: 12/28/1998
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

Local Land Records

LIENS: Environmental Liens Listing
A listing of property locations with environmental liens for California where DTSC is a lien holder.

Date of Government Version: 12/17/2015
Date Data Arrived at EDR: 12/22/2015
Date Made Active in Reports: 02/08/2016
Number of Days to Update: 48

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 03/07/2016
Next Scheduled EDR Contact: 06/20/2016
Data Release Frequency: Varies

LIENS 2: CERCLA Lien Information
A Federal CERCLA ('Superfund') lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 02/18/2014
Date Data Arrived at EDR: 03/18/2014
Date Made Active in Reports: 04/24/2014
Number of Days to Update: 37

Source: Environmental Protection Agency
Telephone: 202-564-6023
Last EDR Contact: 04/26/2016
Next Scheduled EDR Contact: 08/08/2016
Data Release Frequency: Varies

DEED: Deed Restriction Listing

Site Mitigation and Brownfields Reuse Program Facility Sites with Deed Restrictions & Hazardous Waste Management Program Facility Sites with Deed / Land Use Restriction. The DTSC Site Mitigation and Brownfields Reuse Program (SMBRP) list includes sites cleaned up under the program's oversight and generally does not include current or former hazardous waste facilities that required a hazardous waste facility permit. The list represents deed restrictions that are active. Some sites have multiple deed restrictions. The DTSC Hazardous Waste Management Program (HWMP) has developed a list of current or former hazardous waste facilities that have a recorded land use restriction at the local county recorder's office. The land use restrictions on this list were required by the DTSC HWMP as a result of the presence of hazardous substances that remain on site after the facility (or part of the facility) has been closed or cleaned up. The types of land use restriction include deed notice, deed restriction, or a land use restriction that binds current and future owners.

Date of Government Version: 12/07/2015
Date Data Arrived at EDR: 12/08/2015
Date Made Active in Reports: 01/21/2016
Number of Days to Update: 44

Source: DTSC and SWRCB
Telephone: 916-323-3400
Last EDR Contact: 03/08/2016
Next Scheduled EDR Contact: 06/20/2016
Data Release Frequency: Semi-Annually

Records of Emergency Release Reports

HMIRS: Hazardous Materials Information Reporting System

Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 06/24/2015
Date Data Arrived at EDR: 06/26/2015
Date Made Active in Reports: 09/02/2015
Number of Days to Update: 68

Source: U.S. Department of Transportation
Telephone: 202-366-4555
Last EDR Contact: 03/30/2016
Next Scheduled EDR Contact: 07/11/2016
Data Release Frequency: Annually

CHMIRS: California Hazardous Material Incident Report System

California Hazardous Material Incident Reporting System. CHMIRS contains information on reported hazardous material incidents (accidental releases or spills).

Date of Government Version: 12/16/2015
Date Data Arrived at EDR: 01/27/2016
Date Made Active in Reports: 03/22/2016
Number of Days to Update: 55

Source: Office of Emergency Services
Telephone: 916-845-8400
Last EDR Contact: 04/27/2016
Next Scheduled EDR Contact: 08/08/2016
Data Release Frequency: Varies

LDS: Land Disposal Sites Listing

The Land Disposal program regulates of waste discharge to land for treatment, storage and disposal in waste management units.

Date of Government Version: 12/14/2015
Date Data Arrived at EDR: 12/14/2015
Date Made Active in Reports: 02/08/2016
Number of Days to Update: 56

Source: State Water Qualilty Control Board
Telephone: 866-480-1028
Last EDR Contact: 03/16/2016
Next Scheduled EDR Contact: 06/27/2016
Data Release Frequency: Quarterly

MCS: Military Cleanup Sites Listing

The State Water Resources Control Board and nine Regional Water Quality Control Boards partner with the Department of Defense (DoD) through the Defense and State Memorandum of Agreement (DSMOA) to oversee the investigation and remediation of water quality issues at military facilities.

Date of Government Version: 12/14/2015
Date Data Arrived at EDR: 12/14/2015
Date Made Active in Reports: 02/08/2016
Number of Days to Update: 56

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 03/16/2016
Next Scheduled EDR Contact: 06/27/2016
Data Release Frequency: Quarterly

SPILLS 90: SPILLS90 data from FirstSearch

Spills 90 includes those spill and release records available exclusively from FirstSearch databases. Typically, they may include chemical, oil and/or hazardous substance spills recorded after 1990. Duplicate records that are already included in EDR incident and release records are not included in Spills 90.

Date of Government Version: 06/06/2012
Date Data Arrived at EDR: 01/03/2013
Date Made Active in Reports: 02/22/2013
Number of Days to Update: 50

Source: FirstSearch
Telephone: N/A
Last EDR Contact: 01/03/2013
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

Other Ascertainable Records

RCRA NonGen / NLR: RCRA - Non Generators / No Longer Regulated

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

Date of Government Version: 12/09/2015
Date Data Arrived at EDR: 03/02/2016
Date Made Active in Reports: 04/05/2016
Number of Days to Update: 34

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 03/30/2016
Next Scheduled EDR Contact: 07/11/2016
Data Release Frequency: Varies

FUDS: Formerly Used Defense Sites

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 01/31/2015
Date Data Arrived at EDR: 07/08/2015
Date Made Active in Reports: 10/13/2015
Number of Days to Update: 97

Source: U.S. Army Corps of Engineers
Telephone: 202-528-4285
Last EDR Contact: 03/11/2016
Next Scheduled EDR Contact: 06/20/2016
Data Release Frequency: Varies

DOD: Department of Defense Sites

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 11/10/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 62

Source: USGS
Telephone: 888-275-8747
Last EDR Contact: 04/15/2016
Next Scheduled EDR Contact: 07/25/2016
Data Release Frequency: Semi-Annually

FEDLAND: Federal and Indian Lands

Federally and Indian administrated lands of the United States. Lands included are administrated by: Army Corps of Engineers, Bureau of Reclamation, National Wild and Scenic River, National Wildlife Refuge, Public Domain Land, Wilderness, Wilderness Study Area, Wildlife Management Area, Bureau of Indian Affairs, Bureau of Land Management, Department of Justice, Forest Service, Fish and Wildlife Service, National Park Service.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 02/06/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 339

Source: U.S. Geological Survey
Telephone: 888-275-8747
Last EDR Contact: 04/15/2016
Next Scheduled EDR Contact: 07/25/2016
Data Release Frequency: N/A

SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners Listing

The State Coalition for Remediation of Drycleaners was established in 1998, with support from the U.S. EPA Office of Superfund Remediation and Technology Innovation. It is comprised of representatives of states with established drycleaner remediation programs. Currently the member states are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

Date of Government Version: 03/07/2011
Date Data Arrived at EDR: 03/09/2011
Date Made Active in Reports: 05/02/2011
Number of Days to Update: 54

Source: Environmental Protection Agency
Telephone: 615-532-8599
Last EDR Contact: 02/19/2016
Next Scheduled EDR Contact: 05/30/2016
Data Release Frequency: Varies

US FIN ASSUR: Financial Assurance Information

All owners and operators of facilities that treat, store, or dispose of hazardous waste are required to provide proof that they will have sufficient funds to pay for the clean up, closure, and post-closure care of their facilities.

Date of Government Version: 09/01/2015
Date Data Arrived at EDR: 09/03/2015
Date Made Active in Reports: 11/03/2015
Number of Days to Update: 61

Source: Environmental Protection Agency
Telephone: 202-566-1917
Last EDR Contact: 02/16/2016
Next Scheduled EDR Contact: 05/30/2016
Data Release Frequency: Quarterly

EPA WATCH LIST: EPA WATCH LIST

EPA maintains a "Watch List" to facilitate dialogue between EPA, state and local environmental agencies on enforcement matters relating to facilities with alleged violations identified as either significant or high priority. Being on the Watch List does not mean that the facility has actually violated the law only that an investigation by EPA or a state or local environmental agency has led those organizations to allege that an unproven violation has in fact occurred. Being on the Watch List does not represent a higher level of concern regarding the alleged violations that were detected, but instead indicates cases requiring additional dialogue between EPA, state and local agencies - primarily because of the length of time the alleged violation has gone unaddressed or unresolved.

Date of Government Version: 08/30/2013
Date Data Arrived at EDR: 03/21/2014
Date Made Active in Reports: 06/17/2014
Number of Days to Update: 88

Source: Environmental Protection Agency
Telephone: 617-520-3000
Last EDR Contact: 02/09/2016
Next Scheduled EDR Contact: 05/23/2016
Data Release Frequency: Quarterly

2020 COR ACTION: 2020 Corrective Action Program List

The EPA has set ambitious goals for the RCRA Corrective Action program by creating the 2020 Corrective Action Universe. This RCRA cleanup baseline includes facilities expected to need corrective action. The 2020 universe contains a wide variety of sites. Some properties are heavily contaminated while others were contaminated but have since been cleaned up. Still others have not been fully investigated yet, and may require little or no remediation. Inclusion in the 2020 Universe does not necessarily imply failure on the part of a facility to meet its RCRA obligations.

Date of Government Version: 04/22/2013
Date Data Arrived at EDR: 03/03/2015
Date Made Active in Reports: 03/09/2015
Number of Days to Update: 6

Source: Environmental Protection Agency
Telephone: 703-308-4044
Last EDR Contact: 02/12/2016
Next Scheduled EDR Contact: 05/23/2016
Data Release Frequency: Varies

TSCA: Toxic Substances Control Act

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2012
Date Data Arrived at EDR: 01/15/2015
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 14

Source: EPA
Telephone: 202-260-5521
Last EDR Contact: 03/24/2016
Next Scheduled EDR Contact: 07/04/2016
Data Release Frequency: Every 4 Years

TRIS: Toxic Chemical Release Inventory System

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 11/24/2015
Date Made Active in Reports: 04/05/2016
Number of Days to Update: 133

Source: EPA
Telephone: 202-566-0250
Last EDR Contact: 02/24/2016
Next Scheduled EDR Contact: 06/06/2016
Data Release Frequency: Annually

SSTS: Section 7 Tracking Systems

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 12/31/2009
Date Data Arrived at EDR: 12/10/2010
Date Made Active in Reports: 02/25/2011
Number of Days to Update: 77

Source: EPA
Telephone: 202-564-4203
Last EDR Contact: 04/25/2016
Next Scheduled EDR Contact: 08/08/2016
Data Release Frequency: Annually

ROD: Records Of Decision

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 11/25/2013
Date Data Arrived at EDR: 12/12/2013
Date Made Active in Reports: 02/24/2014
Number of Days to Update: 74

Source: EPA
Telephone: 703-416-0223
Last EDR Contact: 03/08/2016
Next Scheduled EDR Contact: 06/20/2016
Data Release Frequency: Annually

RMP: Risk Management Plans

When Congress passed the Clean Air Act Amendments of 1990, it required EPA to publish regulations and guidance for chemical accident prevention at facilities using extremely hazardous substances. The Risk Management Program Rule (RMP Rule) was written to implement Section 112(r) of these amendments. The rule, which built upon existing industry codes and standards, requires companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program, which includes a(n): Hazard assessment that details the potential effects of an accidental release, an accident history of the last five years, and an evaluation of worst-case and alternative accidental releases; Prevention program that includes safety precautions and maintenance, monitoring, and employee training measures; and Emergency response program that spells out emergency health care, employee training measures and procedures for informing the public and response agencies (e.g the fire department) should an accident occur.

Date of Government Version: 08/01/2015
Date Data Arrived at EDR: 08/26/2015
Date Made Active in Reports: 11/03/2015
Number of Days to Update: 69

Source: Environmental Protection Agency
Telephone: 202-564-8600
Last EDR Contact: 04/25/2016
Next Scheduled EDR Contact: 08/08/2016
Data Release Frequency: Varies

RAATS: RCRA Administrative Action Tracking System

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995
Date Data Arrived at EDR: 07/03/1995
Date Made Active in Reports: 08/07/1995
Number of Days to Update: 35

Source: EPA
Telephone: 202-564-4104
Last EDR Contact: 06/02/2008
Next Scheduled EDR Contact: 09/01/2008
Data Release Frequency: No Update Planned

PRP: Potentially Responsible Parties
A listing of verified Potentially Responsible Parties

Date of Government Version: 10/25/2013
Date Data Arrived at EDR: 10/17/2014
Date Made Active in Reports: 10/20/2014
Number of Days to Update: 3
Source: EPA
Telephone: 202-564-6023
Last EDR Contact: 02/12/2016
Next Scheduled EDR Contact: 05/23/2016
Data Release Frequency: Quarterly

PADS: PCB Activity Database System
PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 07/01/2014
Date Data Arrived at EDR: 10/15/2014
Date Made Active in Reports: 11/17/2014
Number of Days to Update: 33
Source: EPA
Telephone: 202-566-0500
Last EDR Contact: 04/12/2016
Next Scheduled EDR Contact: 07/25/2016
Data Release Frequency: Annually

ICIS: Integrated Compliance Information System
The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 01/23/2015
Date Data Arrived at EDR: 02/06/2015
Date Made Active in Reports: 03/09/2015
Number of Days to Update: 31
Source: Environmental Protection Agency
Telephone: 202-564-5088
Last EDR Contact: 04/08/2016
Next Scheduled EDR Contact: 07/25/2016
Data Release Frequency: Quarterly

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25
Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Telephone: 202-566-1667
Last EDR Contact: 02/22/2016
Next Scheduled EDR Contact: 06/06/2016
Data Release Frequency: Quarterly

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25
Source: EPA
Telephone: 202-566-1667
Last EDR Contact: 02/22/2016
Next Scheduled EDR Contact: 06/06/2016
Data Release Frequency: Quarterly

MLTS: Material Licensing Tracking System
MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 03/07/2016
Date Data Arrived at EDR: 03/18/2016
Date Made Active in Reports: 04/15/2016
Number of Days to Update: 28
Source: Nuclear Regulatory Commission
Telephone: 301-415-7169
Last EDR Contact: 02/08/2016
Next Scheduled EDR Contact: 05/23/2016
Data Release Frequency: Quarterly

COAL ASH DOE: Steam-Electric Plant Operation Data
A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 08/07/2009
Date Made Active in Reports: 10/22/2009
Number of Days to Update: 76
Source: Department of Energy
Telephone: 202-586-8719
Last EDR Contact: 04/15/2016
Next Scheduled EDR Contact: 07/25/2016
Data Release Frequency: Varies

COAL ASH EPA: Coal Combustion Residues Surface Impoundments List
A listing of coal combustion residues surface impoundments with high hazard potential ratings.

Date of Government Version: 07/01/2014
Date Data Arrived at EDR: 09/10/2014
Date Made Active in Reports: 10/20/2014
Number of Days to Update: 40
Source: Environmental Protection Agency
Telephone: N/A
Last EDR Contact: 03/11/2016
Next Scheduled EDR Contact: 06/20/2016
Data Release Frequency: Varies

PCB TRANSFORMER: PCB Transformer Registration Database
The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 02/01/2011
Date Data Arrived at EDR: 10/19/2011
Date Made Active in Reports: 01/10/2012
Number of Days to Update: 83
Source: Environmental Protection Agency
Telephone: 202-566-0517
Last EDR Contact: 04/26/2016
Next Scheduled EDR Contact: 08/08/2016
Data Release Frequency: Varies

RADINFO: Radiation Information Database
The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

Date of Government Version: 07/07/2015
Date Data Arrived at EDR: 07/09/2015
Date Made Active in Reports: 09/16/2015
Number of Days to Update: 69
Source: Environmental Protection Agency
Telephone: 202-343-9775
Last EDR Contact: 04/08/2016
Next Scheduled EDR Contact: 07/18/2016
Data Release Frequency: Quarterly

HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing
A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40
Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2007
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

HIST FTTS INSP: FIFRA/TSCA Tracking System Inspection & Enforcement Case Listing
A complete inspection and enforcement case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2008
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

DOT OPS: Incident and Accident Data

Department of Transporation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 07/31/2012
Date Data Arrived at EDR: 08/07/2012
Date Made Active in Reports: 09/18/2012
Number of Days to Update: 42

Source: Department of Transporation, Office of Pipeline Safety
Telephone: 202-366-4595
Last EDR Contact: 02/03/2016
Next Scheduled EDR Contact: 05/16/2016
Data Release Frequency: Varies

CONSENT: Superfund (CERCLA) Consent Decrees

Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 04/17/2015
Date Made Active in Reports: 06/02/2015
Number of Days to Update: 46

Source: Department of Justice, Consent Decree Library
Telephone: Varies
Last EDR Contact: 03/24/2016
Next Scheduled EDR Contact: 07/11/2016
Data Release Frequency: Varies

BRS: Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/2013
Date Data Arrived at EDR: 02/24/2015
Date Made Active in Reports: 09/30/2015
Number of Days to Update: 218

Source: EPA/NTIS
Telephone: 800-424-9346
Last EDR Contact: 02/26/2016
Next Scheduled EDR Contact: 06/06/2016
Data Release Frequency: Biennially

INDIAN RESERV: Indian Reservations

This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 12/08/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 34

Source: USGS
Telephone: 202-208-3710
Last EDR Contact: 04/15/2016
Next Scheduled EDR Contact: 07/25/2016
Data Release Frequency: Semi-Annually

FUSRAP: Formerly Utilized Sites Remedial Action Program

DOE established the Formerly Utilized Sites Remedial Action Program (FUSRAP) in 1974 to remediate sites where radioactive contamination remained from Manhattan Project and early U.S. Atomic Energy Commission (AEC) operations.

Date of Government Version: 11/23/2015
Date Data Arrived at EDR: 11/24/2015
Date Made Active in Reports: 02/18/2016
Number of Days to Update: 86

Source: Department of Energy
Telephone: 202-586-3559
Last EDR Contact: 02/08/2016
Next Scheduled EDR Contact: 05/23/2016
Data Release Frequency: Varies

UMTRA: Uranium Mill Tailings Sites

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

Date of Government Version: 09/14/2010
Date Data Arrived at EDR: 10/07/2011
Date Made Active in Reports: 03/01/2012
Number of Days to Update: 146

Source: Department of Energy
Telephone: 505-845-0011
Last EDR Contact: 03/28/2016
Next Scheduled EDR Contact: 06/06/2016
Data Release Frequency: Varies

LEAD SMELTER 1: Lead Smelter Sites

A listing of former lead smelter site locations.

Date of Government Version: 11/25/2014
Date Data Arrived at EDR: 11/26/2014
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 64

Source: Environmental Protection Agency
Telephone: 703-603-8787
Last EDR Contact: 04/07/2016
Next Scheduled EDR Contact: 07/18/2016
Data Release Frequency: Varies

LEAD SMELTER 2: Lead Smelter Sites

A list of several hundred sites in the U.S. where secondary lead smelting was done from 1931and 1964. These sites may pose a threat to public health through ingestion or inhalation of contaminated soil or dust

Date of Government Version: 04/05/2001
Date Data Arrived at EDR: 10/27/2010
Date Made Active in Reports: 12/02/2010
Number of Days to Update: 36

Source: American Journal of Public Health
Telephone: 703-305-6451
Last EDR Contact: 12/02/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

US AIRS (AFS): Aerometric Information Retrieval System Facility Subsystem (AFS)

The database is a sub-system of Aerometric Information Retrieval System (AIRS). AFS contains compliance data on air pollution point sources regulated by the U.S. EPA and/or state and local air regulatory agencies. This information comes from source reports by various stationary sources of air pollution, such as electric power plants, steel mills, factories, and universities, and provides information about the air pollutants they produce. Action, air program, air program pollutant, and general level plant data. It is used to track emissions and compliance data from industrial plants.

Date of Government Version: 10/20/2015
Date Data Arrived at EDR: 10/27/2015
Date Made Active in Reports: 01/04/2016
Number of Days to Update: 69

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 03/24/2016
Next Scheduled EDR Contact: 07/11/2016
Data Release Frequency: Annually

US AIRS MINOR: Air Facility System Data

A listing of minor source facilities.

Date of Government Version: 10/20/2015
Date Data Arrived at EDR: 10/27/2015
Date Made Active in Reports: 01/04/2016
Number of Days to Update: 69

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 03/24/2016
Next Scheduled EDR Contact: 07/11/2016
Data Release Frequency: Annually

US MINES: Mines Master Index File

Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 02/09/2016
Date Data Arrived at EDR: 03/02/2016
Date Made Active in Reports: 04/15/2016
Number of Days to Update: 44

Source: Department of Labor, Mine Safety and Health Administration
Telephone: 303-231-5959
Last EDR Contact: 03/02/2016
Next Scheduled EDR Contact: 06/13/2016
Data Release Frequency: Semi-Annually

US MINES 2: Ferrous and Nonferrous Metal Mines Database Listing

This map layer includes ferrous (ferrous metal mines are facilities that extract ferrous metals, such as iron ore or molybdenum) and nonferrous (Nonferrous metal mines are facilities that extract nonferrous metals, such as gold, silver, copper, zinc, and lead) metal mines in the United States.

Date of Government Version: 12/05/2005
Date Data Arrived at EDR: 02/29/2008
Date Made Active in Reports: 04/18/2008
Number of Days to Update: 49

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 03/04/2016
Next Scheduled EDR Contact: 06/13/2016
Data Release Frequency: Varies

US MINES 3: Active Mines & Mineral Plants Database Listing

Active Mines and Mineral Processing Plant operations for commodities monitored by the Minerals Information Team of the USGS.

Date of Government Version: 04/14/2011
Date Data Arrived at EDR: 06/08/2011
Date Made Active in Reports: 09/13/2011
Number of Days to Update: 97

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 03/04/2016
Next Scheduled EDR Contact: 06/13/2016
Data Release Frequency: Varies

FINDS: Facility Index System/Facility Registry System

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 07/20/2015
Date Data Arrived at EDR: 09/09/2015
Date Made Active in Reports: 11/03/2015
Number of Days to Update: 55

Source: EPA
Telephone: (415) 947-8000
Last EDR Contact: 03/08/2016
Next Scheduled EDR Contact: 06/20/2016
Data Release Frequency: Quarterly

CA BOND EXP. PLAN: Bond Expenditure Plan

Department of Health Services developed a site-specific expenditure plan as the basis for an appropriation of Hazardous Substance Cleanup Bond Act funds. It is not updated.

Date of Government Version: 01/01/1989
Date Data Arrived at EDR: 07/27/1994
Date Made Active in Reports: 08/02/1994
Number of Days to Update: 6

Source: Department of Health Services
Telephone: 916-255-2118
Last EDR Contact: 05/31/1994
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

CORTESE: "Cortese" Hazardous Waste & Substances Sites List

The sites for the list are designated by the State Water Resource Control Board (LUST), the Integrated Waste Board (SWF/LS), and the Department of Toxic Substances Control (Cal-Sites).

Date of Government Version: 12/28/2015
Date Data Arrived at EDR: 12/29/2015
Date Made Active in Reports: 01/21/2016
Number of Days to Update: 23

Source: CAL EPA/Office of Emergency Information
Telephone: 916-323-3400
Last EDR Contact: 03/30/2016
Next Scheduled EDR Contact: 07/11/2016
Data Release Frequency: Quarterly

DRYCLEANERS: Cleaner Facilities

A list of drycleaner related facilities that have EPA ID numbers. These are facilities with certain SIC codes: power laundries, family and commercial; garment pressing and cleaner's agents; linen supply; coin-operated laundries and cleaning; drycleaning plants, except rugs; carpet and upholster cleaning; industrial launderers; laundry and garment services.

Date of Government Version: 02/08/2016
Date Data Arrived at EDR: 02/24/2016
Date Made Active in Reports: 04/01/2016
Number of Days to Update: 37

Source: Department of Toxic Substance Control
Telephone: 916-327-4498
Last EDR Contact: 02/05/2016
Next Scheduled EDR Contact: 06/20/2016
Data Release Frequency: Annually

EMI: Emissions Inventory Data

Toxics and criteria pollutant emissions data collected by the ARB and local air pollution agencies.

Date of Government Version: 12/31/2013
Date Data Arrived at EDR: 09/25/2015
Date Made Active in Reports: 11/05/2015
Number of Days to Update: 41

Source: California Air Resources Board
Telephone: 916-322-2990
Last EDR Contact: 03/22/2016
Next Scheduled EDR Contact: 07/04/2016
Data Release Frequency: Varies

ENF: Enforcement Action Listing

A listing of Water Board Enforcement Actions. Formal is everything except Oral/Verbal Communication, Notice of Violation, Expedited Payment Letter, and Staff Enforcement Letter.

Date of Government Version: 01/26/2016
Date Data Arrived at EDR: 01/29/2016
Date Made Active in Reports: 03/22/2016
Number of Days to Update: 53

Source: State Water Resoruces Control Board
Telephone: 916-445-9379
Last EDR Contact: 04/21/2016
Next Scheduled EDR Contact: 08/08/2016
Data Release Frequency: Varies

Financial Assurance 1: Financial Assurance Information Listing

Financial Assurance information

Date of Government Version: 01/28/2016
Date Data Arrived at EDR: 01/29/2016
Date Made Active in Reports: 03/22/2016
Number of Days to Update: 53

Source: Department of Toxic Substances Control
Telephone: 916-255-3628
Last EDR Contact: 04/21/2016
Next Scheduled EDR Contact: 08/08/2016
Data Release Frequency: Varies

Financial Assurance 2: Financial Assurance Information Listing

A listing of financial assurance information for solid waste facilities. Financial assurance is intended to ensure that resources are available to pay for the cost of closure, post-closure care, and corrective measures if the owner or operator of a regulated facility is unable or unwilling to pay.

Date of Government Version: 02/17/2016
Date Data Arrived at EDR: 02/23/2016
Date Made Active in Reports: 04/01/2016
Number of Days to Update: 38

Source: California Integrated Waste Management Board
Telephone: 916-341-6066
Last EDR Contact: 02/16/2016
Next Scheduled EDR Contact: 05/30/2016
Data Release Frequency: Varies

HAZNET: Facility and Manifest Data

Facility and Manifest Data. The data is extracted from the copies of hazardous waste manifests received each year by the DTSC. The annual volume of manifests is typically 700,000 - 1,000,000 annually, representing approximately 350,000 - 500,000 shipments. Data are from the manifests submitted without correction, and therefore many contain some invalid values for data elements such as generator ID, TSD ID, waste category, and disposal method. This database begins with calendar year 1993.

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 10/14/2015
Date Made Active in Reports: 12/11/2015
Number of Days to Update: 58

Source: California Environmental Protection Agency
Telephone: 916-255-1136
Last EDR Contact: 04/15/2016
Next Scheduled EDR Contact: 07/25/2016
Data Release Frequency: Annually

HIST CORTESE: Hazardous Waste & Substance Site List

The sites for the list are designated by the State Water Resource Control Board [LUST], the Integrated Waste Board [SWF/LS], and the Department of Toxic Substances Control [CALSITES]. This listing is no longer updated by the state agency.

Date of Government Version: 04/01/2001
Date Data Arrived at EDR: 01/22/2009
Date Made Active in Reports: 04/08/2009
Number of Days to Update: 76

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 01/22/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

HWP: EnviroStor Permitted Facilities Listing
Detailed information on permitted hazardous waste facilities and corrective action ("cleanups") tracked in EnviroStor.

Date of Government Version: 02/22/2016
Date Data Arrived at EDR: 02/24/2016
Date Made Active in Reports: 04/01/2016
Number of Days to Update: 37
Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 02/24/2016
Next Scheduled EDR Contact: 06/06/2016
Data Release Frequency: Quarterly

HWT: Registered Hazardous Waste Transporter Database
A listing of hazardous waste transporters. In California, unless specifically exempted, it is unlawful for any person to transport hazardous wastes unless the person holds a valid registration issued by DTSC. A hazardous waste transporter registration is valid for one year and is assigned a unique registration number.

Date of Government Version: 01/11/2016
Date Data Arrived at EDR: 01/13/2016
Date Made Active in Reports: 02/22/2016
Number of Days to Update: 40
Source: Department of Toxic Substances Control
Telephone: 916-440-7145
Last EDR Contact: 04/12/2016
Next Scheduled EDR Contact: 07/25/2016
Data Release Frequency: Quarterly

MINES: Mines Site Location Listing
A listing of mine site locations from the Office of Mine Reclamation.

Date of Government Version: 12/14/2015
Date Data Arrived at EDR: 12/17/2015
Date Made Active in Reports: 02/08/2016
Number of Days to Update: 53
Source: Department of Conservation
Telephone: 916-322-1080
Last EDR Contact: 03/16/2016
Next Scheduled EDR Contact: 06/27/2016
Data Release Frequency: Varies

MWMP: Medical Waste Management Program Listing
The Medical Waste Management Program (MWMP) ensures the proper handling and disposal of medical waste by permitting and inspecting medical waste Offsite Treatment Facilities (PDF) and Transfer Stations (PDF) throughout the state. MWMP also oversees all Medical Waste Transporters.

Date of Government Version: 11/10/2015
Date Data Arrived at EDR: 12/08/2015
Date Made Active in Reports: 01/21/2016
Number of Days to Update: 44
Source: Department of Public Health
Telephone: 916-558-1784
Last EDR Contact: 03/08/2016
Next Scheduled EDR Contact: 06/20/2016
Data Release Frequency: Varies

NPDES: NPDES Permits Listing
A listing of NPDES permits, including stormwater.

Date of Government Version: 02/16/2016
Date Data Arrived at EDR: 02/17/2016
Date Made Active in Reports: 04/01/2016
Number of Days to Update: 44
Source: State Water Resources Control Board
Telephone: 916-445-9379
Last EDR Contact: 02/17/2016
Next Scheduled EDR Contact: 05/30/2016
Data Release Frequency: Quarterly

PEST LIC: Pesticide Regulation Licenses Listing
A listing of licenses and certificates issued by the Department of Pesticide Regulation. The DPR issues licenses and/or certificates to: Persons and businesses that apply or sell pesticides; Pest control dealers and brokers; Persons who advise on agricultural pesticide applications.

Date of Government Version: 12/07/2015
Date Data Arrived at EDR: 12/08/2015
Date Made Active in Reports: 01/21/2016
Number of Days to Update: 44
Source: Department of Pesticide Regulation
Telephone: 916-445-4038
Last EDR Contact: 03/08/2016
Next Scheduled EDR Contact: 06/20/2016
Data Release Frequency: Quarterly

PROC: Certified Processors Database
A listing of certified processors.

Date of Government Version: 12/14/2015
Date Data Arrived at EDR: 12/17/2015
Date Made Active in Reports: 03/01/2016
Number of Days to Update: 75
Source: Department of Conservation
Telephone: 916-323-3836
Last EDR Contact: 03/16/2016
Next Scheduled EDR Contact: 06/27/2016
Data Release Frequency: Quarterly

NOTIFY 65: Proposition 65 Records
Listings of all Proposition 65 incidents reported to counties by the State Water Resources Control Board and the Regional Water Quality Control Board. This database is no longer updated by the reporting agency.

Date of Government Version: 09/10/2015
Date Data Arrived at EDR: 01/05/2016
Date Made Active in Reports: 02/12/2016
Number of Days to Update: 38
Source: State Water Resources Control Board
Telephone: 916-445-3846
Last EDR Contact: 04/18/2016
Next Scheduled EDR Contact: 07/04/2016
Data Release Frequency: No Update Planned

UIC: UIC Listing
A listing of wells identified as underground injection wells, in the California Oil and Gas Wells database.

Date of Government Version: 07/23/2015
Date Data Arrived at EDR: 09/15/2015
Date Made Active in Reports: 10/13/2015
Number of Days to Update: 28
Source: Deaprtment of Conservation
Telephone: 916-445-2408
Last EDR Contact: 03/16/2016
Next Scheduled EDR Contact: 06/27/2016
Data Release Frequency: Varies

WASTEWATER PITS: Oil Wastewater Pits Listing
Water officials discovered that oil producers have been dumping chemical-laden wastewater into hundreds of unlined pits that are operating without proper permits. Inspections completed by the Central Valley Regional Water Quality Control Board revealed the existence of previously unidentified waste sites. The water board?s review found that more than one-third of the region?s active disposal pits are operating without permission.

Date of Government Version: 04/15/2015
Date Data Arrived at EDR: 04/17/2015
Date Made Active in Reports: 06/23/2015
Number of Days to Update: 67
Source: RWQCB, Central Valley Region
Telephone: 559-445-5577
Last EDR Contact: 01/15/2016
Next Scheduled EDR Contact: 04/25/2016
Data Release Frequency: Varies

WDS: Waste Discharge System
Sites which have been issued waste discharge requirements.

Date of Government Version: 06/19/2007
Date Data Arrived at EDR: 06/20/2007
Date Made Active in Reports: 06/29/2007
Number of Days to Update: 9
Source: State Water Resources Control Board
Telephone: 916-341-5227
Last EDR Contact: 02/19/2016
Next Scheduled EDR Contact: 06/16/2016
Data Release Frequency: Quarterly

WIP: Well Investigation Program Case List
Well Investigation Program case in the San Gabriel and San Fernando Valley area.

Date of Government Version: 07/03/2009
Date Data Arrived at EDR: 07/21/2009
Date Made Active in Reports: 08/03/2009
Number of Days to Update: 13
Source: Los Angeles Water Quality Control Board
Telephone: 213-576-6726
Last EDR Contact: 03/28/2016
Next Scheduled EDR Contact: 07/11/2016
Data Release Frequency: Varies

FUELS PROGRAM: EPA Fuels Program Registered Listing
This listing includes facilities that are registered under the Part 80 (Code of Federal Regulations) EPA Fuels Programs. All companies now are required to submit new and updated registrations.

Date of Government Version: 11/23/2015
Date Data Arrived at EDR: 11/24/2015
Date Made Active in Reports: 02/18/2016
Number of Days to Update: 86

Source: EPA
Telephone: 800-385-6164
Last EDR Contact: 02/24/2016
Next Scheduled EDR Contact: 06/06/2016
Data Release Frequency: Quarterly

ECHO: Enforcement & Compliance History Information

ECHO provides integrated compliance and enforcement information for about 800,000 regulated facilities nationwide.

Date of Government Version: 09/20/2015
Date Data Arrived at EDR: 09/23/2015
Date Made Active in Reports: 01/04/2016
Number of Days to Update: 103

Source: Environmental Protection Agency
Telephone: 202-564-2280
Last EDR Contact: 03/23/2016
Next Scheduled EDR Contact: 07/04/2016
Data Release Frequency: Quarterly

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP: EDR Proprietary Manufactured Gas Plants

The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

EDR Hist Auto: EDR Exclusive Historic Gas Stations

EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR Hist Cleaner: EDR Exclusive Historic Dry Cleaners

EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA LF: Recovered Government Archive Solid Waste Facilities List

The EDR Recovered Government Archive Landfill database provides a list of landfills derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Resources Recycling and Recovery in California.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 01/13/2014
Number of Days to Update: 196

Source: Department of Resources Recycling and Recovery
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

RGA LUST: Recovered Government Archive Leaking Underground Storage Tank

The EDR Recovered Government Archive Leaking Underground Storage Tank database provides a list of LUST incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the State Water Resources Control Board in California.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 12/30/2013
Number of Days to Update: 182

Source: State Water Resources Control Board
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

COUNTY RECORDS

ALAMEDA COUNTY:

Contaminated Sites

A listing of contaminated sites overseen by the Toxic Release Program (oil and groundwater contamination from chemical releases and spills) and the Leaking Underground Storage Tank Program (soil and ground water contamination from leaking petroleum USTs).

Date of Government Version: 01/11/2016
Date Data Arrived at EDR: 01/12/2016
Date Made Active in Reports: 02/22/2016
Number of Days to Update: 41

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 04/11/2016
Next Scheduled EDR Contact: 07/25/2016
Data Release Frequency: Semi-Annually

Underground Tanks

Underground storage tank sites located in Alameda county.

Date of Government Version: 01/11/2016
Date Data Arrived at EDR: 01/14/2016
Date Made Active in Reports: 03/01/2016
Number of Days to Update: 47

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 04/11/2016
Next Scheduled EDR Contact: 07/25/2016
Data Release Frequency: Semi-Annually

AMADOR COUNTY:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

CUPA Facility List
Cupa Facility List

Date of Government Version: 11/16/2015
Date Data Arrived at EDR: 12/10/2015
Date Made Active in Reports: 01/21/2016
Number of Days to Update: 42

Source: Amador County Environmental Health
Telephone: 209-223-6439
Last EDR Contact: 03/21/2016
Next Scheduled EDR Contact: 06/20/2016
Data Release Frequency: Varies

BUTTE COUNTY:

CUPA Facility Listing
Cupa facility list.

Date of Government Version: 02/19/2016
Date Data Arrived at EDR: 02/23/2016
Date Made Active in Reports: 04/01/2016
Number of Days to Update: 38

Source: Public Health Department
Telephone: 530-538-7149
Last EDR Contact: 04/21/2016
Next Scheduled EDR Contact: 07/25/2016
Data Release Frequency: No Update Planned

CALVERAS COUNTY:

CUPA Facility Listing
Cupa Facility Listing

Date of Government Version: 02/02/2016
Date Data Arrived at EDR: 02/04/2016
Date Made Active in Reports: 02/22/2016
Number of Days to Update: 18

Source: Calveras County Environmental Health
Telephone: 209-754-6399
Last EDR Contact: 03/28/2016
Next Scheduled EDR Contact: 07/11/2016
Data Release Frequency: Quarterly

COLUSA COUNTY:

CUPA Facility List
Cupa facility list.

Date of Government Version: 02/22/2016
Date Data Arrived at EDR: 02/24/2016
Date Made Active in Reports: 04/01/2016
Number of Days to Update: 37

Source: Health & Human Services
Telephone: 530-458-0396
Last EDR Contact: 02/22/2016
Next Scheduled EDR Contact: 05/23/2016
Data Release Frequency: Varies

CONTRA COSTA COUNTY:

Site List
List includes sites from the underground tank, hazardous waste generator and business plan/2185 programs.

Date of Government Version: 02/24/2016
Date Data Arrived at EDR: 02/26/2016
Date Made Active in Reports: 04/01/2016
Number of Days to Update: 35

Source: Contra Costa Health Services Department
Telephone: 925-646-2286
Last EDR Contact: 05/02/2016
Next Scheduled EDR Contact: 08/15/2016
Data Release Frequency: Semi-Annually

DEL NORTE COUNTY:

CUPA Facility List
Cupa Facility list

Date of Government Version: 01/22/2016
Date Data Arrived at EDR: 02/05/2016
Date Made Active in Reports: 03/07/2016
Number of Days to Update: 31

Source: Del Norte County Environmental Health Division
Telephone: 707-465-0426
Last EDR Contact: 04/29/2016
Next Scheduled EDR Contact: 08/15/2016
Data Release Frequency: Varies

EL DORADO COUNTY:

CUPA Facility List
CUPA facility list.

Date of Government Version: 02/22/2016
Date Data Arrived at EDR: 02/24/2016
Date Made Active in Reports: 04/01/2016
Number of Days to Update: 37

Source: El Dorado County Environmental Management Department
Telephone: 530-621-6623
Last EDR Contact: 05/02/2016
Next Scheduled EDR Contact: 08/15/2016
Data Release Frequency: Varies

FRESNO COUNTY:

CUPA Resources List
Certified Unified Program Agency. CUPA's are responsible for implementing a unified hazardous materials and hazardous waste management regulatory program. The agency provides oversight of businesses that deal with hazardous materials, operate underground storage tanks or aboveground storage tanks.

Date of Government Version: 01/05/2016
Date Data Arrived at EDR: 01/08/2016
Date Made Active in Reports: 02/22/2016
Number of Days to Update: 45

Source: Dept. of Community Health
Telephone: 559-445-3271
Last EDR Contact: 04/04/2016
Next Scheduled EDR Contact: 07/18/2016
Data Release Frequency: Semi-Annually

HUMBOLDT COUNTY:

CUPA Facility List
CUPA facility list.

Date of Government Version: 12/02/2015
Date Data Arrived at EDR: 12/04/2015
Date Made Active in Reports: 01/21/2016
Number of Days to Update: 48

Source: Humboldt County Environmental Health
Telephone: N/A
Last EDR Contact: 02/22/2016
Next Scheduled EDR Contact: 06/06/2016
Data Release Frequency: Varies

IMPERIAL COUNTY:

CUPA Facility List
Cupa facility list.

Date of Government Version: 01/25/2016
Date Data Arrived at EDR: 01/27/2016
Date Made Active in Reports: 02/22/2016
Number of Days to Update: 26

Source: San Diego Border Field Office
Telephone: 760-339-2777
Last EDR Contact: 04/21/2016
Next Scheduled EDR Contact: 08/08/2016
Data Release Frequency: Varies

INYO COUNTY:

CUPA Facility List
Cupa facility list.

Date of Government Version: 09/10/2013
Date Data Arrived at EDR: 09/11/2013
Date Made Active in Reports: 10/14/2013
Number of Days to Update: 33

Source: Inyo County Environmental Health Services
Telephone: 760-878-0238
Last EDR Contact: 02/22/2016
Next Scheduled EDR Contact: 06/06/2016
Data Release Frequency: Varies

KERN COUNTY:

Underground Storage Tank Sites & Tank Listing
Kern County Sites and Tanks Listing.

Date of Government Version: 05/19/2015
Date Data Arrived at EDR: 06/18/2015
Date Made Active in Reports: 07/22/2015
Number of Days to Update: 34

Source: Kern County Environment Health Services Department
Telephone: 661-862-8700
Last EDR Contact: 02/22/2016
Next Scheduled EDR Contact: 05/23/2016
Data Release Frequency: Quarterly

KINGS COUNTY:

CUPA Facility List
A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Date of Government Version: 02/23/2016
Date Data Arrived at EDR: 02/25/2016
Date Made Active in Reports: 04/01/2016
Number of Days to Update: 36

Source: Kings County Department of Public Health
Telephone: 559-584-1411
Last EDR Contact: 02/22/2016
Next Scheduled EDR Contact: 06/06/2016
Data Release Frequency: Varies

LAKE COUNTY:

CUPA Facility List
Cupa facility list

Date of Government Version: 02/09/2016
Date Data Arrived at EDR: 02/12/2016
Date Made Active in Reports: 04/01/2016
Number of Days to Update: 49

Source: Lake County Environmental Health
Telephone: 707-263-1164
Last EDR Contact: 04/18/2016
Next Scheduled EDR Contact: 08/01/2016
Data Release Frequency: Varies

LOS ANGELES COUNTY:

San Gabriel Valley Areas of Concern
San Gabriel Valley areas where VOC contamination is at or above the MCL as designated by region 9 EPA office.

Date of Government Version: 03/30/2009
Date Data Arrived at EDR: 03/31/2009
Date Made Active in Reports: 10/23/2009
Number of Days to Update: 206

Source: EPA Region 9
Telephone: 415-972-3178
Last EDR Contact: 03/21/2016
Next Scheduled EDR Contact: 07/04/2016
Data Release Frequency: No Update Planned

HMS: Street Number List
Industrial Waste and Underground Storage Tank Sites.

Date of Government Version: 11/24/2014
Date Data Arrived at EDR: 01/30/2015
Date Made Active in Reports: 03/04/2015
Number of Days to Update: 33
Source: Department of Public Works
Telephone: 626-458-3517
Last EDR Contact: 04/01/2016
Next Scheduled EDR Contact: 07/25/2016
Data Release Frequency: Semi-Annually

List of Solid Waste Facilities
Solid Waste Facilities in Los Angeles County.

Date of Government Version: 01/19/2016
Date Data Arrived at EDR: 01/20/2016
Date Made Active in Reports: 03/22/2016
Number of Days to Update: 62
Source: La County Department of Public Works
Telephone: 818-458-5185
Last EDR Contact: 04/20/2016
Next Scheduled EDR Contact: 08/01/2016
Data Release Frequency: Varies

City of Los Angeles Landfills
Landfills owned and maintained by the City of Los Angeles.

Date of Government Version: 01/01/2016
Date Data Arrived at EDR: 01/26/2016
Date Made Active in Reports: 03/22/2016
Number of Days to Update: 56
Source: Engineering & Construction Division
Telephone: 213-473-7869
Last EDR Contact: 04/18/2016
Next Scheduled EDR Contact: 08/01/2016
Data Release Frequency: Varies

Site Mitigation List
Industrial sites that have had some sort of spill or complaint.

Date of Government Version: 01/15/2015
Date Data Arrived at EDR: 01/29/2015
Date Made Active in Reports: 03/10/2015
Number of Days to Update: 40
Source: Community Health Services
Telephone: 323-890-7806
Last EDR Contact: 03/28/2016
Next Scheduled EDR Contact: 08/01/2016
Data Release Frequency: Annually

City of El Segundo Underground Storage Tank
Underground storage tank sites located in El Segundo city.

Date of Government Version: 03/30/2015
Date Data Arrived at EDR: 04/02/2015
Date Made Active in Reports: 04/13/2015
Number of Days to Update: 11
Source: City of El Segundo Fire Department
Telephone: 310-524-2236
Last EDR Contact: 04/18/2016
Next Scheduled EDR Contact: 08/01/2016
Data Release Frequency: Semi-Annually

City of Long Beach Underground Storage Tank
Underground storage tank sites located in the city of Long Beach.

Date of Government Version: 11/04/2015
Date Data Arrived at EDR: 11/13/2015
Date Made Active in Reports: 12/17/2015
Number of Days to Update: 34
Source: City of Long Beach Fire Department
Telephone: 562-570-2563
Last EDR Contact: 01/25/2016
Next Scheduled EDR Contact: 05/09/2016
Data Release Frequency: Annually

City of Torrance Underground Storage Tank
Underground storage tank sites located in the city of Torrance.

Date of Government Version: 01/12/2016
Date Data Arrived at EDR: 01/15/2016
Date Made Active in Reports: 02/08/2016
Number of Days to Update: 24
Source: City of Torrance Fire Department
Telephone: 310-618-2973
Last EDR Contact: 01/11/2016
Next Scheduled EDR Contact: 04/25/2016
Data Release Frequency: Semi-Annually

MADERA COUNTY:

CUPA Facility List

A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Date of Government Version: 12/11/2015
Date Data Arrived at EDR: 12/14/2015
Date Made Active in Reports: 03/07/2016
Number of Days to Update: 84

Source: Madera County Environmental Health
Telephone: 559-675-7823
Last EDR Contact: 02/22/2016
Next Scheduled EDR Contact: 06/06/2016
Data Release Frequency: Varies

MARIN COUNTY:

Underground Storage Tank Sites

Currently permitted USTs in Marin County.

Date of Government Version: 10/05/2015
Date Data Arrived at EDR: 10/08/2015
Date Made Active in Reports: 10/15/2015
Number of Days to Update: 7

Source: Public Works Department Waste Management
Telephone: 415-499-6647
Last EDR Contact: 04/18/2016
Next Scheduled EDR Contact: 07/18/2016
Data Release Frequency: Semi-Annually

MERCED COUNTY:

CUPA Facility List

CUPA facility list.

Date of Government Version: 12/14/2015
Date Data Arrived at EDR: 12/18/2015
Date Made Active in Reports: 01/21/2016
Number of Days to Update: 34

Source: Merced County Environmental Health
Telephone: 209-381-1094
Last EDR Contact: 02/22/2016
Next Scheduled EDR Contact: 06/06/2016
Data Release Frequency: Varies

MONO COUNTY:

CUPA Facility List

CUPA Facility List

Date of Government Version: 11/24/2015
Date Data Arrived at EDR: 12/01/2015
Date Made Active in Reports: 01/21/2016
Number of Days to Update: 51

Source: Mono County Health Department
Telephone: 760-932-5580
Last EDR Contact: 02/29/2016
Next Scheduled EDR Contact: 06/13/2016
Data Release Frequency: Varies

MONTEREY COUNTY:

CUPA Facility Listing

CUPA Program listing from the Environmental Health Division.

Date of Government Version: 12/10/2015
Date Data Arrived at EDR: 12/14/2015
Date Made Active in Reports: 02/12/2016
Number of Days to Update: 60

Source: Monterey County Health Department
Telephone: 831-796-1297
Last EDR Contact: 02/22/2016
Next Scheduled EDR Contact: 06/06/2016
Data Release Frequency: Varies

NAPA COUNTY:

Sites With Reported Contamination
A listing of leaking underground storage tank sites located in Napa county.

Date of Government Version: 12/05/2011
Date Data Arrived at EDR: 12/06/2011
Date Made Active in Reports: 02/07/2012
Number of Days to Update: 63
Source: Napa County Department of Environmental Management
Telephone: 707-253-4269
Last EDR Contact: 02/29/2016
Next Scheduled EDR Contact: 06/13/2016
Data Release Frequency: No Update Planned

Closed and Operating Underground Storage Tank Sites
Underground storage tank sites located in Napa county.

Date of Government Version: 01/15/2008
Date Data Arrived at EDR: 01/16/2008
Date Made Active in Reports: 02/08/2008
Number of Days to Update: 23
Source: Napa County Department of Environmental Management
Telephone: 707-253-4269
Last EDR Contact: 02/29/2016
Next Scheduled EDR Contact: 06/13/2016
Data Release Frequency: No Update Planned

NEVADA COUNTY:

CUPA Facility List
CUPA facility list.

Date of Government Version: 01/27/2016
Date Data Arrived at EDR: 02/04/2016
Date Made Active in Reports: 02/22/2016
Number of Days to Update: 18
Source: Community Development Agency
Telephone: 530-265-1467
Last EDR Contact: 04/29/2016
Next Scheduled EDR Contact: 08/15/2016
Data Release Frequency: Varies

ORANGE COUNTY:

List of Industrial Site Cleanups
Petroleum and non-petroleum spills.

Date of Government Version: 02/01/2016
Date Data Arrived at EDR: 02/12/2016
Date Made Active in Reports: 04/01/2016
Number of Days to Update: 49
Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 02/09/2016
Next Scheduled EDR Contact: 05/23/2016
Data Release Frequency: Annually

List of Underground Storage Tank Cleanups
Orange County Underground Storage Tank Cleanups (LUST).

Date of Government Version: 02/01/2016
Date Data Arrived at EDR: 02/12/2016
Date Made Active in Reports: 04/01/2016
Number of Days to Update: 49
Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 02/09/2016
Next Scheduled EDR Contact: 05/23/2016
Data Release Frequency: Quarterly

List of Underground Storage Tank Facilities
Orange County Underground Storage Tank Facilities (UST).

Date of Government Version: 02/01/2016
Date Data Arrived at EDR: 02/10/2016
Date Made Active in Reports: 04/01/2016
Number of Days to Update: 51
Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 02/10/2016
Next Scheduled EDR Contact: 05/23/2016
Data Release Frequency: Quarterly

PLACER COUNTY:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Master List of Facilities
List includes aboveground tanks, underground tanks and cleanup sites.

Date of Government Version: 12/09/2015
Date Data Arrived at EDR: 12/11/2015
Date Made Active in Reports: 01/21/2016
Number of Days to Update: 41
Source: Placer County Health and Human Services
Telephone: 530-745-2363
Last EDR Contact: 03/07/2016
Next Scheduled EDR Contact: 06/20/2016
Data Release Frequency: Semi-Annually

RIVERSIDE COUNTY:

Listing of Underground Tank Cleanup Sites
Riverside County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 01/20/2016
Date Data Arrived at EDR: 01/22/2016
Date Made Active in Reports: 03/22/2016
Number of Days to Update: 60
Source: Department of Environmental Health
Telephone: 951-358-5055
Last EDR Contact: 03/21/2016
Next Scheduled EDR Contact: 07/04/2016
Data Release Frequency: Quarterly

Underground Storage Tank Tank List
Underground storage tank sites located in Riverside county.

Date of Government Version: 01/20/2016
Date Data Arrived at EDR: 01/22/2016
Date Made Active in Reports: 03/22/2016
Number of Days to Update: 60
Source: Department of Environmental Health
Telephone: 951-358-5055
Last EDR Contact: 03/21/2016
Next Scheduled EDR Contact: 07/04/2016
Data Release Frequency: Quarterly

SACRAMENTO COUNTY:

Toxic Site Clean-Up List
List of sites where unauthorized releases of potentially hazardous materials have occurred.

Date of Government Version: 11/02/2015
Date Data Arrived at EDR: 01/05/2016
Date Made Active in Reports: 02/12/2016
Number of Days to Update: 38
Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 04/06/2016
Next Scheduled EDR Contact: 07/18/2016
Data Release Frequency: Quarterly

Master Hazardous Materials Facility List
Any business that has hazardous materials on site - hazardous material storage sites, underground storage tanks, waste generators.

Date of Government Version: 11/02/2015
Date Data Arrived at EDR: 01/05/2016
Date Made Active in Reports: 02/12/2016
Number of Days to Update: 38
Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 04/06/2016
Next Scheduled EDR Contact: 07/18/2016
Data Release Frequency: Quarterly

SAN BERNARDINO COUNTY:

Hazardous Material Permits
This listing includes underground storage tanks, medical waste handlers/generators, hazardous materials handlers, hazardous waste generators, and waste oil generators/handlers.

Date of Government Version: 12/14/2015
Date Data Arrived at EDR: 12/18/2015
Date Made Active in Reports: 02/08/2016
Number of Days to Update: 52

Source: San Bernardino County Fire Department Hazardous Materials Division
Telephone: 909-387-3041
Last EDR Contact: 02/08/2016
Next Scheduled EDR Contact: 05/23/2016
Data Release Frequency: Quarterly

SAN DIEGO COUNTY:

Hazardous Materials Management Division Database

The database includes: HE58 - This report contains the business name, site address, business phone number, establishment 'H' permit number, type of permit, and the business status. HE17 - In addition to providing the same information provided in the HE58 listing, HE17 provides inspection dates, violations received by the establishment, hazardous waste generated, the quantity, method of storage, treatment/disposal of waste and the hauler, and information on underground storage tanks. Unauthorized Release List - Includes a summary of environmental contamination cases in San Diego County (underground tank cases, non-tank cases, groundwater contamination, and soil contamination are included.)

Date of Government Version: 09/23/2013
Date Data Arrived at EDR: 09/24/2013
Date Made Active in Reports: 10/17/2013
Number of Days to Update: 23

Source: Hazardous Materials Management Division
Telephone: 619-338-2268
Last EDR Contact: 03/07/2016
Next Scheduled EDR Contact: 06/20/2016
Data Release Frequency: Quarterly

Solid Waste Facilities

San Diego County Solid Waste Facilities.

Date of Government Version: 10/31/2015
Date Data Arrived at EDR: 11/07/2015
Date Made Active in Reports: 01/04/2016
Number of Days to Update: 58

Source: Department of Health Services
Telephone: 619-338-2209
Last EDR Contact: 04/21/2016
Next Scheduled EDR Contact: 08/08/2016
Data Release Frequency: Varies

Environmental Case Listing

The listing contains all underground tank release cases and projects pertaining to properties contaminated with hazardous substances that are actively under review by the Site Assessment and Mitigation Program.

Date of Government Version: 03/23/2010
Date Data Arrived at EDR: 06/15/2010
Date Made Active in Reports: 07/09/2010
Number of Days to Update: 24

Source: San Diego County Department of Environmental Health
Telephone: 619-338-2371
Last EDR Contact: 03/03/2016
Next Scheduled EDR Contact: 06/20/2016
Data Release Frequency: No Update Planned

SAN FRANCISCO COUNTY:

Local Oversite Facilities

A listing of leaking underground storage tank sites located in San Francisco county.

Date of Government Version: 09/19/2008
Date Data Arrived at EDR: 09/19/2008
Date Made Active in Reports: 09/29/2008
Number of Days to Update: 10

Source: Department Of Public Health San Francisco County
Telephone: 415-252-3920
Last EDR Contact: 02/08/2016
Next Scheduled EDR Contact: 05/23/2016
Data Release Frequency: Quarterly

Underground Storage Tank Information

Underground storage tank sites located in San Francisco county.

Date of Government Version: 11/29/2010
Date Data Arrived at EDR: 03/10/2011
Date Made Active in Reports: 03/15/2011
Number of Days to Update: 5

Source: Department of Public Health
Telephone: 415-252-3920
Last EDR Contact: 02/08/2016
Next Scheduled EDR Contact: 05/23/2016
Data Release Frequency: Quarterly

SAN JOAQUIN COUNTY:

San Joaquin Co. UST
A listing of underground storage tank locations in San Joaquin county.

Date of Government Version: 12/18/2015
Date Data Arrived at EDR: 12/22/2015
Date Made Active in Reports: 02/08/2016
Number of Days to Update: 48
Source: Environmental Health Department
Telephone: N/A
Last EDR Contact: 04/04/2016
Next Scheduled EDR Contact: 07/04/2016
Data Release Frequency: Semi-Annually

SAN LUIS OBISPO COUNTY:

CUPA Facility List
Cupa Facility List.

Date of Government Version: 02/22/2016
Date Data Arrived at EDR: 02/24/2016
Date Made Active in Reports: 04/01/2016
Number of Days to Update: 37
Source: San Luis Obispo County Public Health Department
Telephone: 805-781-5596
Last EDR Contact: 02/22/2016
Next Scheduled EDR Contact: 06/21/2016
Data Release Frequency: Varies

SAN MATEO COUNTY:

Business Inventory
List includes Hazardous Materials Business Plan, hazardous waste generators, and underground storage tanks.

Date of Government Version: 10/14/2015
Date Data Arrived at EDR: 10/15/2015
Date Made Active in Reports: 11/16/2015
Number of Days to Update: 32
Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 03/28/2016
Next Scheduled EDR Contact: 06/27/2016
Data Release Frequency: Annually

Fuel Leak List
A listing of leaking underground storage tank sites located in San Mateo county.

Date of Government Version: 12/14/2015
Date Data Arrived at EDR: 12/17/2015
Date Made Active in Reports: 02/08/2016
Number of Days to Update: 53
Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 03/14/2016
Next Scheduled EDR Contact: 06/27/2016
Data Release Frequency: Semi-Annually

SANTA BARBARA COUNTY:

CUPA Facility Listing
CUPA Program Listing from the Environmental Health Services division.

Date of Government Version: 09/08/2011
Date Data Arrived at EDR: 09/09/2011
Date Made Active in Reports: 10/07/2011
Number of Days to Update: 28
Source: Santa Barbara County Public Health Department
Telephone: 805-686-8167
Last EDR Contact: 02/22/2016
Next Scheduled EDR Contact: 06/06/2016
Data Release Frequency: Varies

SANTA CLARA COUNTY:

Cupa Facility List
Cupa facility list

Date of Government Version: 11/18/2015
Date Data Arrived at EDR: 11/24/2015
Date Made Active in Reports: 12/11/2015
Number of Days to Update: 17

Source: Department of Environmental Health
Telephone: 408-918-1973
Last EDR Contact: 02/22/2016
Next Scheduled EDR Contact: 06/06/2016
Data Release Frequency: Varies

HIST LUST - Fuel Leak Site Activity Report

A listing of open and closed leaking underground storage tanks. This listing is no longer updated by the county. Leaking underground storage tanks are now handled by the Department of Environmental Health.

Date of Government Version: 03/29/2005
Date Data Arrived at EDR: 03/30/2005
Date Made Active in Reports: 04/21/2005
Number of Days to Update: 22

Source: Santa Clara Valley Water District
Telephone: 408-265-2600
Last EDR Contact: 03/23/2009
Next Scheduled EDR Contact: 06/22/2009
Data Release Frequency: No Update Planned

LOP Listing

A listing of leaking underground storage tanks located in Santa Clara county.

Date of Government Version: 03/03/2014
Date Data Arrived at EDR: 03/05/2014
Date Made Active in Reports: 03/18/2014
Number of Days to Update: 13

Source: Department of Environmental Health
Telephone: 408-918-3417
Last EDR Contact: 02/29/2016
Next Scheduled EDR Contact: 06/13/2016
Data Release Frequency: Annually

Hazardous Material Facilities

Hazardous material facilities, including underground storage tank sites.

Date of Government Version: 02/05/2016
Date Data Arrived at EDR: 02/10/2016
Date Made Active in Reports: 04/01/2016
Number of Days to Update: 51

Source: City of San Jose Fire Department
Telephone: 408-535-7694
Last EDR Contact: 02/08/2016
Next Scheduled EDR Contact: 05/23/2016
Data Release Frequency: Annually

SANTA CRUZ COUNTY:

CUPA Facility List

CUPA facility listing.

Date of Government Version: 11/18/2015
Date Data Arrived at EDR: 11/23/2015
Date Made Active in Reports: 12/11/2015
Number of Days to Update: 18

Source: Santa Cruz County Environmental Health
Telephone: 831-464-2761
Last EDR Contact: 02/22/2016
Next Scheduled EDR Contact: 06/06/2016
Data Release Frequency: Varies

SHASTA COUNTY:

CUPA Facility List

Cupa Facility List.

Date of Government Version: 12/09/2015
Date Data Arrived at EDR: 12/10/2015
Date Made Active in Reports: 01/21/2016
Number of Days to Update: 42

Source: Shasta County Department of Resource Management
Telephone: 530-225-5789
Last EDR Contact: 02/22/2016
Next Scheduled EDR Contact: 06/06/2016
Data Release Frequency: Varies

SOLANO COUNTY:

Leaking Underground Storage Tanks
A listing of leaking underground storage tank sites located in Solano county.

Date of Government Version: 10/30/2015
Date Data Arrived at EDR: 12/14/2015
Date Made Active in Reports: 02/08/2016
Number of Days to Update: 56

Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 03/14/2016
Next Scheduled EDR Contact: 06/27/2016
Data Release Frequency: Quarterly

Underground Storage Tanks
Underground storage tank sites located in Solano county.

Date of Government Version: 10/30/2015
Date Data Arrived at EDR: 12/14/2015
Date Made Active in Reports: 02/08/2016
Number of Days to Update: 56

Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 03/14/2016
Next Scheduled EDR Contact: 06/27/2016
Data Release Frequency: Quarterly

SONOMA COUNTY:

Cupa Facility List
Cupa Facility list

Date of Government Version: 01/11/2016
Date Data Arrived at EDR: 01/14/2016
Date Made Active in Reports: 02/22/2016
Number of Days to Update: 39

Source: County of Sonoma Fire & Emergency Services Department
Telephone: 707-565-1174
Last EDR Contact: 03/28/2016
Next Scheduled EDR Contact: 07/11/2016
Data Release Frequency: Varies

Leaking Underground Storage Tank Sites
A listing of leaking underground storage tank sites located in Sonoma county.

Date of Government Version: 01/05/2016
Date Data Arrived at EDR: 01/07/2016
Date Made Active in Reports: 02/08/2016
Number of Days to Update: 32

Source: Department of Health Services
Telephone: 707-565-6565
Last EDR Contact: 03/28/2016
Next Scheduled EDR Contact: 07/11/2016
Data Release Frequency: Quarterly

SUTTER COUNTY:

Underground Storage Tanks
Underground storage tank sites located in Sutter county.

Date of Government Version: 12/07/2015
Date Data Arrived at EDR: 12/08/2015
Date Made Active in Reports: 12/17/2015
Number of Days to Update: 9

Source: Sutter County Department of Agriculture
Telephone: 530-822-7500
Last EDR Contact: 03/07/2016
Next Scheduled EDR Contact: 06/20/2016
Data Release Frequency: Semi-Annually

TUOLUMNE COUNTY:

CUPA Facility List
Cupa facility list

Date of Government Version: 10/29/2015
Date Data Arrived at EDR: 10/30/2015
Date Made Active in Reports: 12/11/2015
Number of Days to Update: 42

Source: Divison of Environmental Health
Telephone: 209-533-5633
Last EDR Contact: 04/21/2016
Next Scheduled EDR Contact: 08/08/2016
Data Release Frequency: Varies

VENTURA COUNTY:

Business Plan, Hazardous Waste Producers, and Operating Underground Tanks

The BWT list indicates by site address whether the Environmental Health Division has Business Plan (B), Waste Producer (W), and/or Underground Tank (T) information.

Date of Government Version: 12/28/2015
Date Data Arrived at EDR: 01/29/2016
Date Made Active in Reports: 03/22/2016
Number of Days to Update: 53

Source: Ventura County Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 04/25/2016
Next Scheduled EDR Contact: 08/08/2016
Data Release Frequency: Quarterly

Inventory of Illegal Abandoned and Inactive Sites

Ventura County Inventory of Closed, Illegal Abandoned, and Inactive Sites.

Date of Government Version: 12/01/2011
Date Data Arrived at EDR: 12/01/2011
Date Made Active in Reports: 01/19/2012
Number of Days to Update: 49

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 04/04/2016
Next Scheduled EDR Contact: 07/18/2016
Data Release Frequency: Annually

Listing of Underground Tank Cleanup Sites

Ventura County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 05/29/2008
Date Data Arrived at EDR: 06/24/2008
Date Made Active in Reports: 07/31/2008
Number of Days to Update: 37

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 02/14/2016
Next Scheduled EDR Contact: 05/30/2016
Data Release Frequency: Quarterly

Medical Waste Program List

To protect public health and safety and the environment from potential exposure to disease causing agents, the Environmental Health Division Medical Waste Program regulates the generation, handling, storage, treatment and disposal of medical waste throughout the County.

Date of Government Version: 12/28/2015
Date Data Arrived at EDR: 01/29/2016
Date Made Active in Reports: 03/22/2016
Number of Days to Update: 53

Source: Ventura County Resource Management Agency
Telephone: 805-654-2813
Last EDR Contact: 04/25/2016
Next Scheduled EDR Contact: 08/08/2016
Data Release Frequency: Quarterly

Underground Tank Closed Sites List

Ventura County Operating Underground Storage Tank Sites (UST)/Underground Tank Closed Sites List.

Date of Government Version: 11/30/2015
Date Data Arrived at EDR: 12/17/2015
Date Made Active in Reports: 02/08/2016
Number of Days to Update: 53

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 03/17/2016
Next Scheduled EDR Contact: 06/27/2016
Data Release Frequency: Quarterly

YOLO COUNTY:

Underground Storage Tank Comprehensive Facility Report

Underground storage tank sites located in Yolo county.

Date of Government Version: 02/01/2016
Date Data Arrived at EDR: 02/05/2016
Date Made Active in Reports: 03/22/2016
Number of Days to Update: 46

Source: Yolo County Department of Health
Telephone: 530-666-8646
Last EDR Contact: 04/04/2016
Next Scheduled EDR Contact: 07/18/2016
Data Release Frequency: Annually

YUBA COUNTY:

CUPA Facility List
CUPA facility listing for Yuba County.

Date of Government Version: 02/01/2016
Date Data Arrived at EDR: 02/05/2016
Date Made Active in Reports: 02/22/2016
Number of Days to Update: 17

Source: Yuba County Environmental Health Department
Telephone: 530-749-7523
Last EDR Contact: 04/29/2016
Next Scheduled EDR Contact: 08/15/2016
Data Release Frequency: Varies

OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

CT MANIFEST: Hazardous Waste Manifest Data
Facility and manifest data. Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a tsd facility.

Date of Government Version: 07/30/2013
Date Data Arrived at EDR: 08/19/2013
Date Made Active in Reports: 10/03/2013
Number of Days to Update: 45

Source: Department of Energy & Environmental Protection
Telephone: 860-424-3375
Last EDR Contact: 02/18/2016
Next Scheduled EDR Contact: 05/30/2016
Data Release Frequency: No Update Planned

NJ MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2013
Date Data Arrived at EDR: 07/17/2015
Date Made Active in Reports: 08/12/2015
Number of Days to Update: 26

Source: Department of Environmental Protection
Telephone: N/A
Last EDR Contact: 04/12/2016
Next Scheduled EDR Contact: 07/25/2016
Data Release Frequency: Annually

NY MANIFEST: Facility and Manifest Data
Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

Date of Government Version: 02/01/2016
Date Data Arrived at EDR: 02/03/2016
Date Made Active in Reports: 03/22/2016
Number of Days to Update: 48

Source: Department of Environmental Conservation
Telephone: 518-402-8651
Last EDR Contact: 02/03/2016
Next Scheduled EDR Contact: 05/16/2016
Data Release Frequency: Annually

PA MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 07/24/2015
Date Made Active in Reports: 08/18/2015
Number of Days to Update: 25

Source: Department of Environmental Protection
Telephone: 717-783-8990
Last EDR Contact: 04/18/2016
Next Scheduled EDR Contact: 08/01/2016
Data Release Frequency: Annually

RI MANIFEST: Manifest information
Hazardous waste manifest information

Date of Government Version: 12/31/2013
Date Data Arrived at EDR: 06/19/2015
Date Made Active in Reports: 07/15/2015
Number of Days to Update: 26

Source: Department of Environmental Management
Telephone: 401-222-2797
Last EDR Contact: 03/21/2016
Next Scheduled EDR Contact: 06/06/2016
Data Release Frequency: Annually

WI MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 03/19/2015
Date Made Active in Reports: 04/07/2015
Number of Days to Update: 19

Source: Department of Natural Resources
Telephone: N/A
Last EDR Contact: 03/14/2016
Next Scheduled EDR Contact: 06/27/2016
Data Release Frequency: Annually

Oil/Gas Pipelines
Source: PennWell Corporation
Petroleum Bundle (Crude Oil, Refined Products, Petrochemicals, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)) N = Natural Gas Bundle (Natural Gas, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)). This map includes information copyrighted by PennWell Corporation. This information is provided on a best effort basis and PennWell Corporation does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of PennWell.

Electric Power Transmission Line Data
Source: PennWell Corporation
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Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

AHA Hospitals:
Source: American Hospital Association, Inc.
Telephone: 312-280-5991
The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

Medical Centers: Provider of Services Listing
Source: Centers for Medicare & Medicaid Services
Telephone: 410-786-3000
A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

Nursing Homes
Source: National Institutes of Health
Telephone: 301-594-6248
Information on Medicare and Medicaid certified nursing homes in the United States.

Public Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

Private Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on private school locations in the United States.

Daycare Centers: Licensed Facilities
Source: Department of Social Services
Telephone: 916-657-4041

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 2003 & 2011 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetland Inventory
Source: Department of Fish & Game
Telephone: 916-445-0411

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Current USGS 7.5 Minute Topographic Map
Source: U.S. Geological Survey

STREET AND ADDRESS INFORMATION

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GEOCHECK ®- PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

ROOSEVELT HIGH SCHOOL
456 SOUTH MATHEWS STREET
LOS ANGELES, CA 90033

TARGET PROPERTY COORDINATES

Latitude (North):	34.038357 - 34° 2' 18.09''
Longitude (West):	118.210404 - 118° 12' 37.45''
Universal Tranverse Mercator:	Zone 11
UTM X (Meters):	388266.4
UTM Y (Meters):	3766875.0
Elevation:	313 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map:	5630795 LOS ANGELES, CA
Version Date:	2012

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principal investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

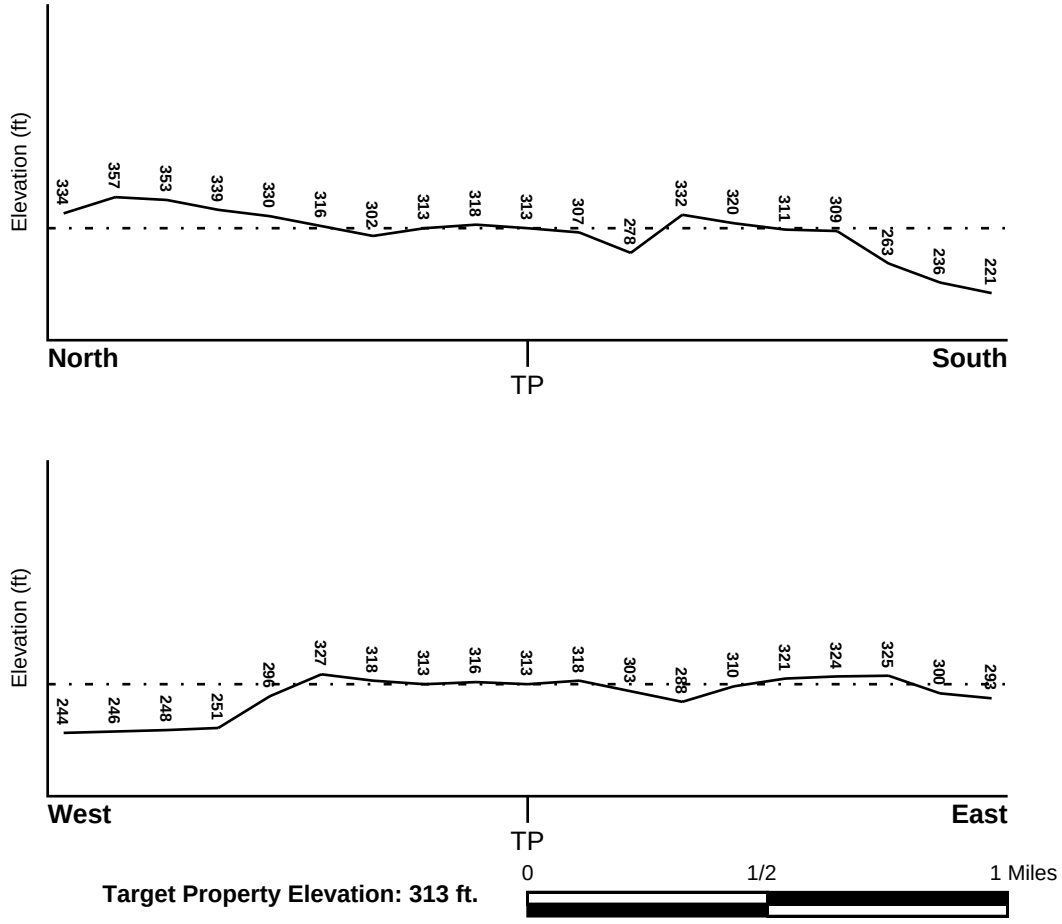
TOPOGRAPHIC INFORMATION

Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General SSE

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES



Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

Target Property County	FEMA Flood Electronic Data
LOS ANGELES, CA	YES - refer to the Overview Map and Detail Map

Flood Plain Panel at Target Property: 06037C - FEMA DFIRM Flood data

Additional Panels in search area: Not Reported

NATIONAL WETLAND INVENTORY

NWI Quad at Target Property	NWI Electronic Data Coverage
LOS ANGELES	YES - refer to the Overview Map and Detail Map

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Site-Specific Hydrogeological Data*:

Search Radius: 1.25 miles
Status: Not found

AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

MAP ID	LOCATION FROM TP	GENERAL DIRECTION GROUNDWATER FLOW
1	1/2 - 1 Mile West	SW
2	1/2 - 1 Mile NNW	SW

For additional site information, refer to Physical Setting Source Map Findings.

* ©1996 Site−specific hydrogeological data gathered by CERCLIS Alerts, Inc., Bainbridge Island, WA. All rights reserved. All of the information and opinions presented are those of the cited EPA report(s), which were completed under a Comprehensive Environmental Response Compensation and Liability Information System (CERCLIS) investigation.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT **GEOLOGIC AGE IDENTIFICATION**

Era:	Cenozoic	Category:	Stratifed Sequence
System:	Quaternary		
Series:	Quaternary		
Code:	Q *(decoded above as Era, System & Series)*		

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps. The following information is based on Soil Conservation Service STATSGO data.

Soil Component Name: URBAN LAND

Soil Surface Texture: variable

Hydrologic Group: Not reported

Soil Drainage Class: Not reported

Hydric Status: Soil does not meet the requirements for a hydric soil.

Corrosion Potential - Uncoated Steel: Not Reported

Depth to Bedrock Min: > 10 inches

Depth to Bedrock Max: > 10 inches

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
	Boundary			Classification			
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil	Permeability Rate (in/hr)	Soil Reaction (pH)
1	0 inches	6 inches	variable	Not reported	Not reported	Max: 0.00 Min: 0.00	Max: 0.00 Min: 0.00

OTHER SOIL TYPES IN AREA

Based on Soil Conservation Service STATSGO data, the following additional subordinant soil types may appear within the general area of target property.

Soil Surface Textures:
sandy loam
gravelly - sandy loam
silt loam
clay
fine sand
gravelly - sand
sand
fine sandy loam

Surficial Soil Types:
sandy loam
gravelly - sandy loam
silt loam
clay
fine sand
gravelly - sand
sand
fine sandy loam

Shallow Soil Types:
fine sandy loam
gravelly - loam
sandy clay
sandy clay loam
clay
silty clay
sand

Deeper Soil Types:
gravelly - sandy loam
sandy loam
very gravelly - sandy loam
stratified
very fine sandy loam
weathered bedrock
sand
gravelly - fine sandy loam
silty clay loam
clay loam

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

WELL SEARCH DISTANCE INFORMATION

DATABASE	SEARCH DISTANCE (miles)
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 1 mile
State Database	1.000

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
No Wells Found		

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
No PWS System Found		

Note: PWS System location is not always the same as well location.

STATE DATABASE WELL INFORMATION

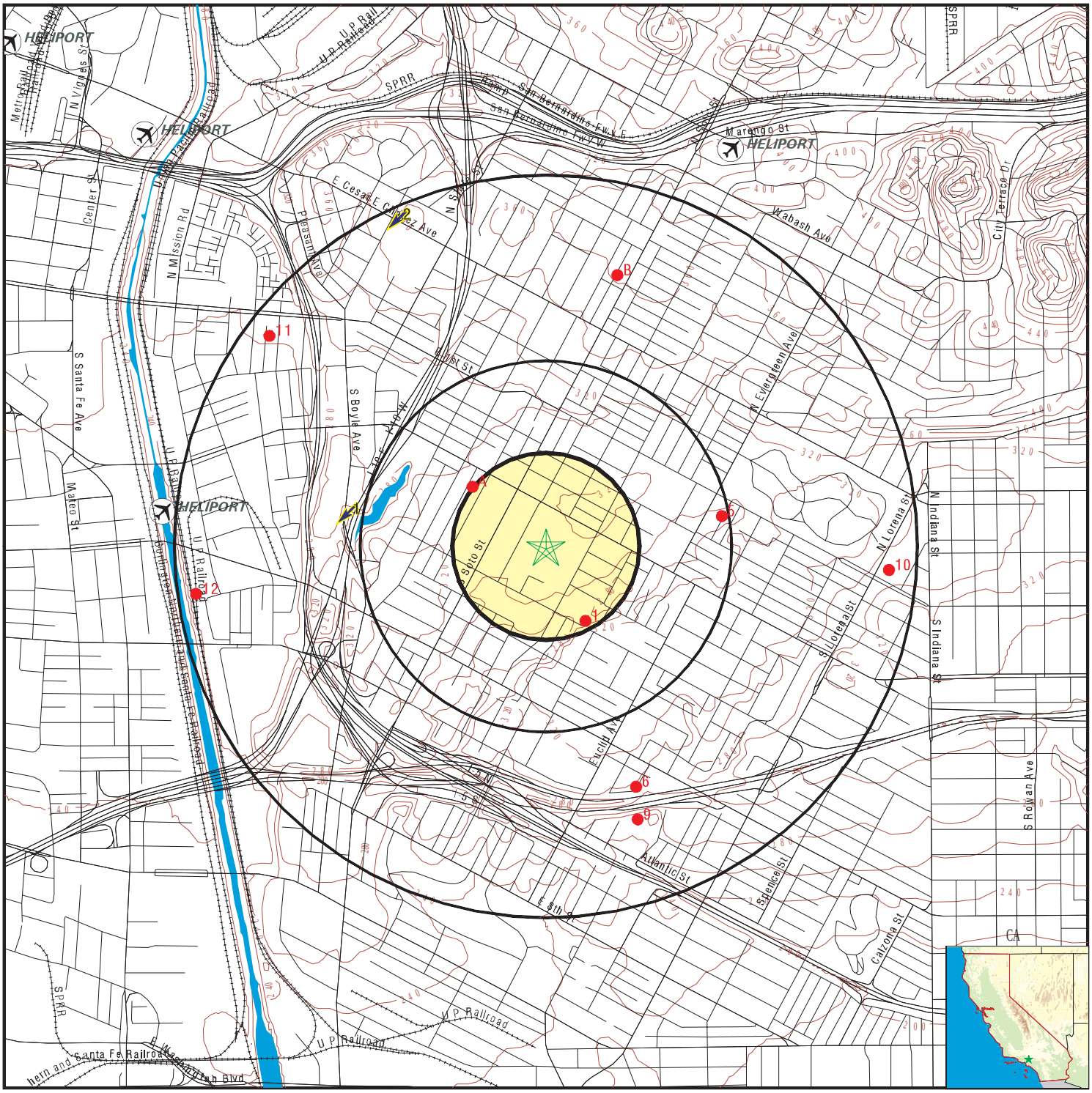
MAP ID	WELL ID	LOCATION FROM TP
No Wells Found		

OTHER STATE DATABASE INFORMATION

STATE OIL/GAS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
1	CAOG11000204482	1/8 - 1/4 Mile SSE
A2	CAOG11000201102	1/8 - 1/4 Mile NW
A3	CAOG11000201101	1/4 - 1/2 Mile NW
A4	CAOG11000201099	1/4 - 1/2 Mile NW
5	CAOG11000201098	1/4 - 1/2 Mile East
6	CAOG11000200867	1/2 - 1 Mile SSE
B7	CAOG11000214589	1/2 - 1 Mile NNE
B8	CAOG11000214607	1/2 - 1 Mile NNE
9	CAOG11000214489	1/2 - 1 Mile SSE
10	CAOG11000204525	1/2 - 1 Mile East
11	CAOG11000200864	1/2 - 1 Mile NW
12	CAOG11000204489	1/2 - 1 Mile West

PHYSICAL SETTING SOURCE MAP - 4609254.2s



- County Boundary
- Major Roads
- Contour Lines
- Earthquake Fault Lines
- Airports
- Earthquake epicenter, Richter 5 or greater
- Water Wells
- Public Water Supply Wells
- Cluster of Multiple Icons
- Groundwater Flow Direction
- GI Indeterminate Groundwater Flow at Location
- GV Groundwater Flow Varies at Location
- HD Closest Hydrogeological Data
- Oil, gas or related wells

SITE NAME:	Roosevelt High School	CLIENT:	Converse Consult Inland Empire
ADDRESS:	456 South Mathews Street Los Angeles CA 90033	CONTACT:	Sue Krobthong
LAT/LONG:	34.038357 / 118.210404	INQUIRY #:	4609254.2s
		DATE:	May 03, 2016 7:42 pm

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GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation			Database	EDR ID Number
1 **West** **1/2 - 1 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	900330161 SW 25 25 Not Reported 09/19/1996	**AQUIFLOW**	**38082**
2 **NNW** **1/2 - 1 Mile** **Higher**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	900330189 SW 25.59 30.09 Not Reported 05/26/1993	**AQUIFLOW**	**38076**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance

Database EDR ID Number

1
SSE **OIL_GAS** **CAOG11000204482**
1/8 - 1/4 Mile

District nun:	1	Api number:	03705151
Blm well:	N	Redrill can:	Not Reported
Dryhole:	Y	Well status:	P
Operator name:	Atlantic Richfield Company		
County name:	Los Angeles	Fieldname:	Any Field
Area name:	Any Area	Section:	35
Township:	01S	Range:	15W
Base meridian:	SB	Elevation:	Not Reported
Locationde:	Not Reported		
Gissourcec:	hud		
Comments:	Not Reported		
Leasename:	Boyle Community	Wellnumber:	17-1
Epawell:	N	Hydraulica:	N
Confidenti:	N	Spuddate:	Not Reported
Welldeptha:	0		
Redrillfoo:	0		
Abandonedd:	Not Reported	Completion:	Not Reported
Directiona:	Directionally drilled	Gissymbol:	PDH
Site id:	CAOG11000204482		

A2
NW **OIL_GAS** **CAOG11000201102**
1/8 - 1/4 Mile

District nun:	1	Api number:	03701153
Blm well:	N	Redrill can:	Not Reported
Dryhole:	N	Well status:	P
Operator name:	Atlantic Richfield Company		
County name:	Los Angeles	Fieldname:	Boyle Heights (ABD)
Area name:	Any Area	Section:	36
Township:	01S	Range:	13W
Base meridian:	SB	Elevation:	Not Reported
Locationde:	Not Reported		
Gissourcec:	hud		
Comments:	Not Reported		
Leasename:	Industrial Community	Wellnumber:	1A-5
Epawell:	N	Hydraulica:	N
Confidenti:	N	Spuddate:	Not Reported
Welldeptha:	0		
Redrillfoo:	0		
Abandonedd:	Not Reported	Completion:	Not Reported
Directiona:	Directionally drilled	Gissymbol:	POG
Site id:	CAOG11000201102		

A3
NW **OIL_GAS** **CAOG11000201101**
1/4 - 1/2 Mile

District nun:	1	Api number:	03701152
Blm well:	N	Redrill can:	Not Reported
Dryhole:	N	Well status:	P
Operator name:	Atlantic Richfield Company		
County name:	Los Angeles	Fieldname:	Boyle Heights (ABD)
Area name:	Any Area	Section:	35
Township:	01S	Range:	13W
Base meridian:	SB	Elevation:	Not Reported
Locationde:	Not Reported		
Gissourcec:	hud		
Comments:	Not Reported		
Leasename:	Industrial Community	Wellnumber:	1-4
Epawell:	N	Hydraulica:	N
Confidenti:	N	Spuddate:	Not Reported
Welldeptha:	0		
Redrillfoo:	0		
Abandonedd:	Not Reported	Completion:	Not Reported
Directiona:	Directionally drilled	Gissymbol:	POG
Site id:	CAOG11000201101		

A4
NW
1/4 - 1/2 Mile

OIL_GAS **CAOG11000201099**

District nun:	1	Api number:	03701125
Blm well:	N	Redrill can:	Not Reported
Dryhole:	N	Well status:	P
Operator name:	Atlantic Richfield Company		
County name:	Los Angeles	Fieldname:	Boyle Heights (ABD)
Area name:	Any Area	Section:	35
Township:	01S	Range:	13W
Base meridian:	SB	Elevation:	Not Reported
Locationde:	Not Reported		
Gissourcec:	hud		
Comments:	Not Reported		
Leasename:	Industrial Community	Wellnumber:	1-1
Epawell:	N	Hydraulica:	N
Confidenti:	N	Spuddate:	Not Reported
Welldeptha:	0		
Redrillfoo:	0		
Abandonedd:	Not Reported	Completion:	Not Reported
Directiona:	Directionally drilled	Gissymbol:	POG
Site id:	CAOG11000201099		

5
East
1/4 - 1/2 Mile

OIL_GAS **CAOG11000201098**

District nun:	1	Api number:	03701124
Blm well:	N	Redrill can:	Not Reported
Dryhole:	N	Well status:	P
Operator name:	Atlantic Richfield Company		
County name:	Los Angeles	Fieldname:	Boyle Heights (ABD)
Area name:	Any Area	Section:	36
Township:	01S	Range:	13W
Base meridian:	SB	Elevation:	Not Reported
Locationde:	Not Reported		
Gissourcec:	hud		

Comments:	Not Reported		
Leasename:	Evergreen	Wellnumber:	1
Epawell:	N	Hydraulica:	N
Confidenti:	N	Spuddate:	Not Reported
Welldeptha:	0		
Redrillfoo:	0		
Abandonedd:	Not Reported	Completion:	Not Reported
Directiona:	Directionally drilled	Gissymbol:	PDH
Site id:	CAOG11000201098		

6
SSE **OIL_GAS** **CAOG11000200867**
1/2 - 1 Mile

District nun:	1	Api number:	03700512
Blm well:	N	Redrill can:	Not Reported
Dryhole:	Y	Well status:	P
Operator name:	Union Oil Company of California		
County name:	Los Angeles	Fieldname:	Any Field
Area name:	Any Area	Section:	2
Township:	02S	Range:	13W
Base meridian:	SB	Elevation:	Not Reported
Locationde:	Not Reported		
Gissourcec:	hud		
Comments:	Not Reported		
Leasename:	San Antonio E.H.	Wellnumber:	1
Epawell:	N	Hydraulica:	N
Confidenti:	N	Spuddate:	Not Reported
Welldeptha:	0		
Redrillfoo:	0		
Abandonedd:	Not Reported	Completion:	Not Reported
Directiona:	Unknown	Gissymbol:	PDH
Site id:	CAOG11000200867		

B7
NNE **OIL_GAS** **CAOG11000214589**
1/2 - 1 Mile

District nun:	1	Api number:	03721137
Blm well:	N	Redrill can:	Not Reported
Dryhole:	Y	Well status:	P
Operator name:	Chevron U.S.A. Inc.		
County name:	Los Angeles	Fieldname:	Any Field
Area name:	Any Area	Section:	26
Township:	01S	Range:	13W
Base meridian:	SB	Elevation:	Not Reported
Locationde:	Not Reported		
Gissourcec:	hud		
Comments:	Not Reported		
Leasename:	Not Reported	Wellnumber:	BEW-1
Epawell:	N	Hydraulica:	N
Confidenti:	N	Spuddate:	Not Reported
Welldeptha:	0		
Redrillfoo:	0		
Abandonedd:	Not Reported	Completion:	Not Reported
Directiona:	Unknown	Gissymbol:	PDH
Site id:	CAOG11000214589		

Map ID
Direction
Distance

Database EDR ID Number

B8
NNE **OIL_GAS** **CAOG11000214607**
1/2 - 1 Mile

District nun:	1	Api number:	03721163
Blm well:	N	Redrill can:	Not Reported
Dryhole:	Y	Well status:	P
Operator name:	Chevron U.S.A. Inc.		
County name:	Los Angeles	Fieldname:	Any Field
Area name:	Any Area	Section:	26
Township:	01S	Range:	13W
Base meridian:	SB	Elevation:	Not Reported
Locationde:	Not Reported		
Gissourcec:	hud		
Comments:	Not Reported		
Leasename:	Not Reported	Wellnumber:	BEW-2
Epawell:	N	Hydraulica:	N
Confidenti:	N	Spuddate:	Not Reported
Welldeptha:	0		
Redrillfoo:	0		
Abandonedd:	Not Reported	Completion:	Not Reported
Directiona:	Unknown	Gissymbol:	PDH
Site id:	CAOG11000214607		

9
SSE **OIL_GAS** **CAOG11000214489**
1/2 - 1 Mile

District nun:	1	Api number:	03720944
Blm well:	N	Redrill can:	Not Reported
Dryhole:	Y	Well status:	P
Operator name:	Chevron U.S.A. Inc.		
County name:	Los Angeles	Fieldname:	Any Field
Area name:	Any Area	Section:	2
Township:	02S	Range:	13W
Base meridian:	SB	Elevation:	Not Reported
Locationde:	Not Reported		
Gissourcec:	hud		
Comments:	Not Reported		
Leasename:	Fresno Recreation Center C.H.	Wellnumber:	1
Epawell:	N	Hydraulica:	N
Confidenti:	N	Spuddate:	Not Reported
Welldeptha:	0		
Redrillfoo:	0		
Abandonedd:	Not Reported	Completion:	Not Reported
Directiona:	Directionally drilled	Gissymbol:	PDH
Site id:	CAOG11000214489		

10
East **OIL_GAS** **CAOG11000204525**
1/2 - 1 Mile

District nun:	1	Api number:	03705210
Blm well:	N	Redrill can:	Not Reported
Dryhole:	Y	Well status:	P
Operator name:	Boyle Royalties Co.		
County name:	Los Angeles	Fieldname:	Any Field
Area name:	Any Area	Section:	36
Township:	01S	Range:	13W
Base meridian:	SB	Elevation:	Not Reported
Locationde:	Not Reported		
Gissourcec:	hud		
Comments:	Not Reported		
Leasename:	Taylor	Wellnumber:	1
Epawell:	N	Hydraulica:	N
Confidenti:	N	Spuddate:	Not Reported
Welldeptha:	0		
Redrillfoo:	0		
Abandonedd:	Not Reported	Completion:	Not Reported
Directiona:	Directionally drilled	Gissymbol:	PDH
Site id:	CAOG11000204525		

11
NW **OIL_GAS** **CAOG11000200864**
1/2 - 1 Mile

District nun:	1	Api number:	03700508
Blm well:	N	Redrill can:	Not Reported
Dryhole:	Y	Well status:	P
Operator name:	Chevron U.S.A. Inc.		
County name:	Los Angeles	Fieldname:	Any Field
Area name:	Any Area	Section:	34
Township:	01S	Range:	13W
Base meridian:	SB	Elevation:	Not Reported
Locationde:	Not Reported		
Gissourcec:	hud		
Comments:	Not Reported		
Leasename:	Dept. Of Recreation/Parks Core	Wellnumber:	2
Epawell:	N	Hydraulica:	N
Confidenti:	N	Spuddate:	Not Reported
Welldeptha:	0		
Redrillfoo:	0		
Abandonedd:	Not Reported	Completion:	Not Reported
Directiona:	Unknown	Gissymbol:	PDH
Site id:	CAOG11000200864		

12
West **OIL_GAS** **CAOG11000204489**
1/2 - 1 Mile

District nun:	1	Api number:	03705160
Blm well:	N	Redrill can:	Not Reported
Dryhole:	Y	Well status:	P
Operator name:	Atlantic Richfield Company		
County name:	Los Angeles	Fieldname:	Any Field
Area name:	Any Area	Section:	34
Township:	01S	Range:	13W
Base meridian:	SB	Elevation:	Not Reported
Locationde:	Not Reported		
Gissourcec:	hud		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Comments:	Not Reported		
Leasename:	L.A. River Community	Wellnumber:	1-1
Epawell:	N	Hydraulica:	N
Confidenti:	N	Spuddate:	Not Reported
Welldeptha:	0		
Redrillfoo:	0		
Abandonedd:	Not Reported	Completion:	Not Reported
Directiona:	Directionally drilled	Gissymbol:	PDH
Site id:	CAOG11000204489		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS
RADON

AREA RADON INFORMATION

State Database: CA Radon

Radon Test Results

Zipcode	Num Tests	> 4 pCi/L
90033	4	0

Federal EPA Radon Zone for LOS ANGELES County: 2

Note: Zone 1 indoor average level > 4 pCi/L.
: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
: Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for LOS ANGELES COUNTY, CA

Number of sites tested: 63

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	0.711 pCi/L	98%	2%	0%
Living Area - 2nd Floor	Not Reported	Not Reported	Not Reported	Not Reported
Basement	0.933 pCi/L	100%	0%	0%

PHYSICAL SETTING SOURCE RECORDS SEARCHED

TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)
Source: United States Geologic Survey
EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

Current USGS 7.5 Minute Topographic Map
Source: U.S. Geological Survey

HYDROLOGIC INFORMATION

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 2003 & 2011 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetland Inventory
Source: Department of Fish & Game
Telephone: 916-445-0411

HYDROGEOLOGIC INFORMATION

AQUIFLOW^{R} Information System
Source: EDR proprietary database of groundwater flow information
EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit
Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)
The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)
Telephone: 800-672-5559
SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Service, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

LOCAL / REGIONAL WATER AGENCY RECORDS

FEDERAL WATER WELLS

PWS: Public Water Systems
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)
This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

STATE RECORDS

Water Well Database
Source: Department of Water Resources
Telephone: 916-651-9648

California Drinking Water Quality Database
Source: Department of Public Health
Telephone: 916-324-2319
The database includes all drinking water compliance and special studies monitoring for the state of California since 1984. It consists of over 3,200,000 individual analyses along with well and water system information.

OTHER STATE DATABASE INFORMATION

California Oil and Gas Well Locations
Source: Department of Conservation
Telephone: 916-323-1779
Oil and Gas well locations in the state.

RADON

State Database: CA Radon
Source: Department of Health Services
Telephone: 916-324-2208
Radon Database for California

Area Radon Information
Source: USGS
Telephone: 703-356-4020
The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

EPA Radon Zones
Source: EPA
Telephone: 703-356-4020
Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

OTHER

Airport Landing Facilities: Private and public use landing facilities
Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater
Source: Department of Commerce, National Oceanic and Atmospheric Administration

California Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary fault lines, prepared in 1975 by the United State Geological Survey. Additional information (also from 1975) regarding activity at specific fault lines comes from California's Preliminary Fault Activity Map prepared by the California Division of Mines and Geology.

STREET AND ADDRESS INFORMATION

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CDE Checklist

Appendix F

Converse Project No. 15-41-126-01
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Preliminary Environmental Screening of Proposed Project at Existing School Site

Project: 15-41-126-01.

Selection Criteria	Yes	No	Comments
Powerlines/Electromagnetic Fields [CCR, Title 5, 14010(c)]			
Will the project create any new significant safety hazards or exacerbate any existing safety hazards to students from 50-133 kV powerlines/electromagnetic fields within 100 feet of the site?		X	
Will the project create any new significant safety hazards or exacerbate any existing safety hazards to students from 220-230 kV powerlines/electromagnetic fields within 150 feet of the site?		X	
Will the project create any new significant safety hazards or exacerbate any existing safety hazards to students from 500-550 kV powerlines/electromagnetic fields within 350 feet of the site?		X	
Railroads [CCR, Title 5, 14010(d)]			
Will the project create any new significant safety hazards or exacerbate any existing safety hazards to students from railroads within 1,500 feet of the site?		X	
Traffic Noise [CCR, Title 5, 14010(e)]			
Will the project create any new significant safety hazards or exacerbate any existing safety hazards to students from adjacent roads or freeways that will adversely affect the educational program?		X	
Faults [CCR, Title 5, 14010(f)]			
Will the project create any new significant safety hazards or exacerbate any existing safety hazards to students from an active earthquake fault or fault trace which may be onsite?		X	
Flood or Inundation Area [CCR, Title 5, 14010(g)]			
Will the project create any new significant safety hazards or exacerbate any existing safety hazards to students from flooding or dam inundation?		X	
Pipelines and Above Ground Tanks [CCR, Title 5, 14010(h)]			
Will the project create any new significant safety hazards or exacerbate any existing safety hazards to students from nearby above-ground water or fuel storage tanks?		X	
Will the project create any new significant safety hazards or exacerbate any existing safety hazards to students from above-ground or underground pipelines located within 1,500 feet of the site?		X	
Liquefaction and Landslides [CCR, Title 5, 14010(i)]			
Will the project create any new significant safety hazards or exacerbate any existing safety hazards to students from liquefaction or landslides?		X	
Traffic and Pedestrian Safety [CCR, Title 5, 14010(l)]			
Will the project create any new significant safety hazards or exacerbate any existing safety hazards to students from an adjacent major arterial street?		X	

Preliminary Environmental Screening of Proposed Project at Existing School Site

Project: 15-41-126-01.

Selection Criteria	Yes	No	Comments
Compatible Zoning [CCR, Title 5, 14010(m)]			
Will the project create any new significant safety hazards or exacerbate any existing safety hazards to students from the zoning surrounding the site?		X	
Light, Wind, Air Pollution [CCR, Title 5, 14010(q)]			
Will the project create any new significant safety hazards or exacerbate any existing safety hazards to students from light, wind or air pollution?		X	
Easements [CCR, Title 5, 14010(r)]			
Will the project create any new significant safety hazards or exacerbate any existing safety hazards to students from easements on or adjacent to the site which may restrict access or building placement?		X	
Border Zone Property [CCR, Title 5, 14010(t)]			
Will the project create any new significant safety hazards or exacerbate any existing safety hazards to students from a significant disposal of hazardous waste within 2,000 ft. of the site?		X	
Cellular Phone Towers [LAUSD Board Resolution]			
Will the project create any new significant safety hazards or exacerbate any existing safety hazards to students from a cellular phone tower on or adjacent to the site?		X	
Air Pollution [LAUSD Board Resolution]			
Will the project create any new significant safety hazards or exacerbate any existing safety hazards to students from a major transportation corridor (freeway, major rail line) within 500 feet?		X	
Will the project create any new significant safety hazards or exacerbate any existing safety hazards to students from a major stationary source of emissions within 500 feet?		X	
Is the school on the Priority List of Schools Most at Risk from Air Pollution?		X	
Will the project create any new significant safety hazards or exacerbate any existing safety hazards to students from a high-risk facility previously identified by OEHS?		X	
Methane Zone			
Will the project create any new significant safety hazards or exacerbate any existing safety hazards to students from a known methane zone or oil field?	X		The Property is located within a city of Los Angeles Methane Zone
Oil Wells			
Will the project create any new significant safety hazards or exacerbate any existing safety hazards to students from an onsite oil well?		X	
Airports			
Will the project create any new significant safety hazards or exacerbate any existing safety hazards to students from an airport within two nautical miles of the site?		X	

9685 Research Drive
Irvine, CA 92618

949.727.9336 PHONE
949.727.7311 FAX

www.trcsolutions.com

June 28, 2017

Mr. Dane Robinson
Los Angeles Unified School District
Office of Environmental Health and Safety
333 S. Beaudry Avenue, 21st Floor
Los Angeles, CA 90017

SITE: ROOSEVELT HIGH SCHOOL
456 SOUTH MATHEWS STREET
LOS ANGELES, CALIFORNIA

RE: REVISED SUMMARY OF PROPOSED EXCAVATION AREAS

Dear Mr. Robinson:

In accordance with your request, TRC Solutions, Inc. (TRC) submits this revised letter to summarize the locations and volumes of soil containing lead, arsenic, and/or petroleum hydrocarbon concentrations in excess of acceptable screening levels and that will require excavation at Roosevelt High School (Site), located at 456 South Mathews Street, Los Angeles, California (see Figure 1). Roosevelt High School is scheduled for a comprehensive modernization project involving removal and/or renovation of multiple site structures, and it is anticipated that the soil impacts identified herein will be addressed at that time.

In preparation for the modernization and construction activities, TRC conducted Preliminary Environmental Assessment (PEA) equivalent investigation activities at the Site. The Site was divided into six separate investigation areas (Areas 2, 3, 5, 6, 8, and 9; see Figure 2) based on the planned renovation phases. The PEA field sampling work scope included collection of shallow soil samples at a total of 463 locations throughout the Site, collection of soil samples at two (2) locations to evaluate undocumented fill beneath the Site, collection of soil samples at eight (8) locations near the hydraulic hoists and two (2) locations near the clarifier to evaluate subsurface conditions, and installation of nested, multi-depth soil gas probes at 20 locations to evaluate subsurface methane and hydrogen sulfide concentrations. See Figures 3A, 4A, 5A, 6A, 8A, and 9A for the sampling locations. Soil samples collected during the investigation were analyzed for one or more of the following: lead, arsenic, petroleum hydrocarbons, volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), organochlorine pesticides (OCPs), and polychlorinated biphenyls (PCBs). The results of laboratory analysis of soil samples collected during this investigation are presented in Tables 1 and 2 (includes screening levels).

Based on investigation findings, the volumes of soil exceeding acceptable screening levels that will need to be removed prior to or concurrent with renovation activities were calculated for each area (see Figures 3A, 4A, 5A, 6A, 8A, and 9A). The locations and volumes of soil containing lead and arsenic concentrations in excess of acceptable screening levels in Areas 2 and 9 have been revised based on the results of additional soil sampling activities conducted on June 14, 2017. A summary of each area is presented below with the proposed excavation volume, type of soil impact (i.e., lead, arsenic, and/or petroleum hydrocarbons), and the portion of lead-impacted soil that qualifies as California Hazardous (Cal-Haz) lead-affected soil.

- Area 2 – 541.20 cubic yards (811.81 tons) of lead-affected soil, including 123.89 cubic yards (185.83 tons) of Cal-Haz lead-affected soil.
- Area 3 – 708.33 cubic yards (1,062.50 tons) of lead- and arsenic-affected soil, including 168.98 cubic yards (253.47 tons) of Cal-Haz lead-affected soil.
- Area 5 – 1,640.19 cubic yards (2,460.28 tons) of lead-affected soil, including 1,444.44 cubic yards (2,166.67 tons) of Cal-Haz lead-affected soil.
- Area 6 – 2,945.00 cubic yards (4,417.50 tons) of lead- and arsenic-affected soil, including 1,176.57 cubic yards (1764.86 tons) of Cal-Haz lead-affected soil.
- Area 9 – 1,137.19 cubic yards (1,705.78 tons) of lead- and arsenic-affected soil, including 138.89 cubic yards (208.33 tons) of Cal-Haz lead-affected soil.
- Hydraulic Hoists and Clarifier – 46.67 cubic yards (70 tons) of hydrocarbon-affected soil.

Complete details regarding the proposed excavations are included in Tables 3 and 3A.

Please call us at (949) 727-9336 if you have any questions or need additional information.

Sincerely,
TRC Solutions, Inc.

John Nordenstam, PG
Senior Project Manager
LAUSD Lead Project Manager

Jeffrey R. Maxwell, PG
Principal Geologist
LAUSD Program Manager

Attachments:

Table 1 – General Site Screening Results – Lead-Based Paint and Termiticide Sampling
Table 2 – Summary of Hoist and Clarifier Soil Sample Results
Table 3 – Revised Summary of Proposed Excavation Volumes
Table 3A – Summary of California Hazardous Lead Excavation Volumes
Figure 1 – Vicinity Map
Figure 2 – Site Plan
Figure 3A – Area 2 Excavation Locations
Figure 4A – Area 3 Excavation Locations
Figure 5A – Area 5 Excavation Locations
Figure 6A – Area 6 Excavation Locations
Figure 8A – Area 9 Excavation Locations
Figure 9A – Hydraulic Hoist and Clarifier Excavation Locations

Attachments

Table 1
General Site Screening Results - Lead-Based Paint and Termiticide Sampling
Preliminary Environmental Assessment Equivalent Report
LAUSD - Roosevelt High School
456 South Mathews Street
Los Angeles, California

Sample Location	Sample Date	Depth (feet bgs)	Analyses and Analytical Methods													Comments
			Arsenic (As) EPA 6010B		Lead (Pb) EPA 6010B			Organochlorine Pesticides (OCPs) EPA 8081A							PCBs EPA 8082	
			TTLC	STLC	TTLC	STLC	TCLP	4,4'-DDD	4,4'-DDE	4,4'-DDT	alpha-Chlordane	Chlordane	Dieldrin	gamma-Chlordane		
Units:			mg/kg	mg/L	mg/kg	mg/L	mg/L	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	
Screening Level:			12	5.0	80	5.0	5.0		2,000	1,900	NA	430	34	NA		
Area 2 - Physical Education Building and Courts																
PE-1-0.5	10/15/2016	0.5	**5.7**	**---**	**8.4**	---	---	---	---	---	---	---	---	---	---	
PE-1-2.5	10/15/2016	2.5	**4.5**	---	**6.4**	---	---	---	---	---	---	---	---	---	---	
PE-2-0.5	10/15/2016	0.5	**3.2**	---	**13**	---	---	---	---	---	---	---	---	---	---	
PE-2-2.5	10/15/2016	2.5	**2.5**	---	**44**	---	---	---	---	---	---	---	---	---	---	
PE-3-0.5	10/15/2016	0.5	**2.9**	---	**55**	---	---	---	---	---	---	---	---	---	---	
PE-3-0.5 DUP	10/15/2016	0.5	**3.0**	---	**63**	---	---	---	---	---	---	---	---	---	---	
PE-3-2.5	10/15/2016	2.5	**1.8**	---	**92**	**5.5**	ND<0.25	---	---	---	---	---	---	---	---	
PE-3-3.5	3/25/2017	3.5	---	---	**110**	**7.4**	**0.044 J**	---	---	---	---	---	---	---	---	
PE-3b-0.5	11/23/2016	0.5	---	---	**22**	---	---	---	---	---	---	---	---	---	---	
PE-3b-2.5	11/23/2016	2.5	---	---	**86**	**5.8**	ND<0.25	---	---	---	---	---	---	---	---	
PE-3b-3.5	11/23/2016	3.5	---	---	**32**	---	---	---	---	---	---	---	---	---	---	
PE-3b1-0.5	3/25/2017	0.5	---	---	**6.0**	---	---	---	---	---	---	---	---	---	---	
PE-3b1-2.5	3/25/2017	2.5	---	---	**87**	**3.4**	---	---	---	---	---	---	---	---	---	
PE-3b1-3.5	3/25/2017	3.5	---	---	**40**	---	---	---	---	---	---	---	---	---	---	
PE-3c-0.5	11/23/2016	0.5	---	---	**3.2**	---	---	---	---	---	---	---	---	---	---	
PE-3c-2.5	11/23/2016	2.5	---	---	**2.5**	---	---	---	---	---	---	---	---	---	---	
PE-3c-3.5	11/23/2016	3.5	---	---	**2.7**	---	---	---	---	---	---	---	---	---	---	
PE-3c1-0.5	3/25/2017	0.5	---	---	**9.0**	---	---	---	---	---	---	---	---	---	---	
PE-3c1-2.5	3/25/2017	2.5	---	---	**21**	---	---	---	---	---	---	---	---	---	---	
PE-3c1-3.5	3/25/2017	3.5	---	---	**7.6**	---	---	---	---	---	---	---	---	---	---	
PE-3d-0.5	11/23/2016	0.5	---	---	**16**	---	---	---	---	---	---	---	---	---	---	
PE-3d-0.5 DUP	11/23/2016	0.5	---	---	**19**	---	---	---	---	---	---	---	---	---	---	
PE-3d-2.5	11/23/2016	2.5	---	---	**62**	---	---	---	---	---	---	---	---	---	---	
PE-3d-3.5	11/23/2016	3.5	---	---	**64**	---	---	---	---	---	---	---	---	---	---	
PE-4-0.5	10/15/2016	0.5	**2.2**	---	**17**	---	---	---	---	---	---	---	---	---	---	
PE-4-2.5	10/15/2016	2.5	**3.0**	---	**24**	---	---	---	---	---	---	---	---	---	---	
PE-5	N/A	0.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Removed from program
B-6-0.5	10/23/2016	0.5	**2.2**	---	**22**	---	---	---	---	---	---	---	---	---	---	
B-6-2.5	10/23/2016	2.5	**1.9**	---	**110**	**4.7**	---	---	---	---	---	---	---	---	---	
B-6-3.5	6/14/2017	3.5	---	---	**36**	---	---	---	---	---	---	---	---	---	---	
B-6-3.5 DUP	6/14/2017	3.5	---	---	**20**	---	---	---	---	---	---	---	---	---	---	
B-6-4.5	6/14/2017	4.5	---	---	**3.7**	---	---	---	---	---	---	---	---	---	---	
B-6b-0.5	11/23/2016	0.5	---	---	**15**	---	---	---	---	---	---	---	---	---	---	
B-6b-2.5	11/23/2016	2.5	---	---	**280**	**16**	**0.15 J**	---	---	---	---	---	---	---	---	
B-6b-3.5	11/23/2016	3.5	---	---	**5.3**	---	---	---	---	---	---	---	---	---	---	
B-6c-0.5	11/23/2016	0.5	---	---	**85**	**2.6**	---	---	---	---	---	---	---	---	---	
B-6c-2.5	11/23/2016	2.5	---	---	**35**	---	---	---	---	---	---	---	---	---	---	
B-6c-2.5 DUP	11/23/2016	2.5	---	---	**26**	---	---	---	---	---	---	---	---	---	---	
B-6c-3.5	11/23/2016	3.5	---	---	**190**	**3.9**	---	---	---	---	---	---	---	---	---	
B-6c-4.5	6/14/2017	4.5	---	---	**25**	---	---	---	---	---	---	---	---	---	---	
B-6d-0.5	11/23/2016	0.5	---	---	**14**	---	---	---	---	---	---	---	---	---	---	
B-6d-2.5	11/23/2016	2.5	---	---	**18**	---	---	---	---	---	---	---	---	---	---	
B-6d-3.5	11/23/2016	3.5	---	---	**58**	---	---	---	---	---	---	---	---	---	---	

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		Units:	mg/kg	mg/L	mg/kg	mg/L	mg/L	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	
B-7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Removed from program
B-7-0.5	3/25/2017	0.5	---	---	**15**	---	---	---	---	---	---	---	---	---	---	
B-7-2.5	3/25/2017	2.5	---	---	**5.3**	---	---	---	---	---	---	---	---	---	---	
B-7-3.5	3/25/2017	3.5	---	---	**9.3**	---	---	---	---	---	---	---	---	---	---	
B-7-4.5	3/25/2017	4.5	---	---	**4.0**	---	---	---	---	---	---	---	---	---	---	
B-8-0.5	10/23/2016	0.5	**1.6**	---	**10**	---	---	---	---	---	---	---	---	---	---	
B-8-2.5	10/23/2016	2.5	**1.7**	---	**5.5**	---	---	---	---	---	---	---	---	---	---	
Composite A11	N/A	0.5	**---**	---	**---**	---	---	ND<2.0	**0.34J**	**0.48J**	ND<1.0	**1.2J**	**0.46J**	ND<1.0	---	Composite of B-6-0.5 and B-8-0.5
B-9-0.5	10/8/2016	0.5	**3.7**	---	**20**	---	---	---	---	---	---	---	---	---	---	
B-9-2.5	10/8/2016	2.5	**1.5**	**---**	**30**	---	---	---	---	---	---	---	---	---	---	
B-10-0.5	10/8/2016	0.5	**3.4**	**---**	**43**	---	---	---	---	---	---	---	---	---	---	
B-10-0.5 DUP	10/8/2016	0.5	**5.0**	---	**55**	---	---	---	---	---	---	---	---	---	---	
B-10-2.5	10/8/2016	2.5	**3.1**	---	**65**	---	---	---	---	---	---	---	---	---	---	
B-11-0.5	10/8/2016	0.5	**3.1**	---	**39**	---	---	---	---	---	---	---	---	---	---	
B-11-2.5	10/8/2016	2.5	**1.9**	---	**5.4**	---	---	---	---	---	---	---	---	---	---	
B-12-0.5	10/15/2016	0.5	**1.8**	---	**3.6**	---	---	---	---	---	---	---	---	---	---	
B-12-2.5	10/15/2016	2.5	**1.7**	---	**5.1**	---	---	---	---	---	---	---	---	---	---	
Composite A1	N/A	0.5	**---**	---	**---**	---	---	ND<2.0	**3.2**	**0.88J**	ND<1.0	**1.5J**	ND<2.0	ND<1.0	ND<16	Composite of B-9-0.5, B-10-0.5, B-11-0.5, and B-12-0.5
C-6-0.5	10/23/2016	0.5	**1.6**	---	**11**	---	---	---	---	---	---	---	---	---	---	
C-6-2.5	10/23/2016	2.5	**2.2**	---	**8.6**	---	---	---	---	---	---	---	---	---	---	
C-6-3.5	6/14/2017	3.5	---	---	**16**	---	---	---	---	---	---	---	---	---	---	
C-6-4.5	3/25/2017	4.5	---	---	**57**	---	---	---	---	---	---	---	---	---	---	
C-7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Removed from program
C-7-0.5	3/25/2017	0.5	---	---	**23**	---	---	---	---	---	---	---	---	---	---	
C-7-2.5	3/25/2017	2.5	---	---	**13**	---	---	---	---	---	---	---	---	---	---	
C-7-3.5	3/25/2017	3.5	---	---	**16**	---	---	---	---	---	---	---	---	---	---	
C-7-4.5	3/25/2017	4.5	---	---	**12**	---	---	---	---	---	---	---	---	---	---	
C-8-0.5	10/23/2016	0.5	**3.1**	---	**22**	---	---	---	---	---	---	---	---	---	---	
C-8-2.5	10/23/2016	2.5	**2.0**	---	**31**	---	---	---	---	---	---	---	---	---	---	
C-8-2.5 DUP	10/23/2016	2.5	**2.5**	---	**34**	---	---	---	---	---	---	---	---	---	---	
Composite A12	N/A	0.5	**---**	---	**---**	---	---	**0.36J**	**1.1J**	ND<2.0	ND<1.0	**1.9J**	ND<2.0	**0.23J**	---	Composite of C-6-0.5 and C-8-0.5
C-9-0.5	10/8/2016	0.5	**3.4**	---	**12**	---	---	---	---	---	---	---	---	---	---	
C-9-2.5	10/8/2016	2.5	**1.4**	---	**8.6**	---	---	---	---	---	---	---	---	---	---	
C-10-0.5	10/8/2016	0.5	**1.7**	---	**23**	---	---	---	---	---	---	---	---	---	---	
C-10-2.5	10/8/2016	2.5	**1.2**	---	**9.7**	---	---	---	---	---	---	---	---	---	---	
C-11-0.5	10/8/2016	0.5	**3.0**	---	**18**	---	---	---	---	---	---	---	---	---	---	
C-11-2.5	10/8/2016	2.5	**1.4**	---	**14**	---	---	---	---	---	---	---	---	---	---	
C-12-0.5	10/15/2016	0.5	ND<2.0	---	**120**	**3.3**	---	---	---	---	---	---	---	---	---	
C-12-2.5	10/15/2016	2.5	**1.5**	---	**7.2**	---	---	---	---	---	---	---	---	---	---	
C-12a-0.5	11/23/2016	0.5	---	---	**21**	---	---	---	---	---	---	---	---	---	---	
C-12c-0.5	11/23/2016	0.5	---	---	**16**	---	---	---	---	---	---	---	---	---	---	
C-12d-0.5	11/23/2016	0.5	---	---	**9.2**	---	---	---	---	---	---	---	---	---	---	
Composite A2	N/A	0.5	**---**	---	**---**	---	---	ND<2.0	**1.1J**	ND<2.0	ND<1.0	ND<8.5	ND<2.0	ND<1.0	---	Composite of C-9-0.5, C-10-0.5, C-11-0.5, and C-12-0.5
D-6-0.5	10/23/2016	0.5	**2.9**	---	**18**	---	---	---	---	---	---	---	---	---	---	

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		Units:	mg/kg	mg/L	mg/kg	mg/L	mg/L	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	
D-6-2.5	10/23/2016	2.5	**2.6**	---	**20**	---	---	---	---	---	---	---	---	---	---	
D-7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Removed from program
D-8-0.5	10/23/2016	0.5	**2.7**	---	**15**	---	---	---	---	---	---	---	---	---	---	
D-8-0.5 DUP	10/23/2016	0.5	**2.9**	---	**18**	---	---	---	---	---	---	---	---	---	---	
D-8-2.5	10/23/2016	2.5	**2.3**	---	**12**	---	---	---	---	---	---	---	---	---	---	
Composite A13	N/A	0.5	**---**	---	**---**	---	---	ND<2.0	ND<2.0	ND<2.0	ND<1.0	ND<8.5	ND<2.0	ND<1.0	---	Composite of D-6-0.5 and D-8-0.5
D-9-0.5	10/8/2016	0.5	**3.4**	---	**28**	---	---	---	---	---	---	---	---	---	---	
D-9-2.5	10/8/2016	2.5	**2.6**	---	**28**	---	---	---	---	---	---	---	---	---	---	
D-9-2.5 DUP	10/8/2016	2.5	**4.3**	---	**34**	---	---	---	---	---	---	---	---	---	---	
D-10-0.5	10/8/2016	0.5	**2.9**	---	**25**	---	---	---	---	---	---	---	---	---	---	
D-10-2.5	10/8/2016	2.5	**3.3**	---	**56**	---	---	---	---	---	---	---	---	---	---	
D-11-0.5	10/8/2016	0.5	**4.1**	**---**	**18**	---	---	---	---	---	---	---	---	---	---	
D-11-2.5	10/8/2016	2.5	**1.6**	**---**	**41**	---	---	---	---	---	---	---	---	---	---	
D-12-0.5	10/15/2016	0.5	**3.8**	---	**21**	---	---	---	---	---	---	---	---	---	---	
D-12-2.5	10/15/2016	2.5	**2.8**	---	**38**	---	---	---	---	---	---	---	---	---	---	
D-12-2.5 DUP	10/15/2016	2.5	**1.8**	---	**16**	---	---	---	---	---	---	---	---	---	---	
Composite A3	N/A	0.5	**---**	---	**---**	---	---	**1.2J**	**18**	**3.4**	ND<1.0	**3.0J**	**0.44J**	**0.31J**	---	Composite of D-9-0.5, D-10-0.5, D-11-0.5, and D-12-0.5
E-6-0.5	10/23/2016	0.5	**2.6**	---	**28**	---	---	---	---	---	---	---	---	---	---	
E-6-2.5	10/23/2016	2.5	**4.2**	---	**26**	---	---	---	---	---	---	---	---	---	---	
E-7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Removed from program
E-8-0.5	10/23/2016	0.5	**3.1**	---	**20**	---	---	---	---	---	---	---	---	---	---	
E-8-2.5	10/23/2016	2.5	**1.8**	---	**7.9**	---	---	---	---	---	---	---	---	---	---	
Composite A14	N/A	0.5	**---**	---	**---**	---	---	ND<2.0	**0.20J**	ND<2.0	ND<1.0	**1.5J**	ND<2.0	ND<1.0	---	Composite of E-6-0.5 and E-8-0.5
E-9-0.5	10/8/2016	0.5	**2.9**	---	**24**	---	---	---	---	---	---	---	---	---	---	
E-9-2.5	10/8/2016	2.5	**3.5**	---	**16**	---	---	---	---	---	---	---	---	---	---	
E-10-0.5	10/8/2016	0.5	**3.5**	---	**18**	---	---	---	---	---	---	---	---	---	---	
E-10-2.5	10/8/2016	2.5	**3.1**	---	**16**	---	---	---	---	---	---	---	---	---	---	
E-11-0.5	10/8/2016	0.5	**2.6**	---	**26**	---	---	---	---	---	---	---	---	---	---	
E-11-2.5	10/8/2016	2.5	**3.6**	---	**24**	---	---	---	---	---	---	---	---	---	---	
E-12-0.5	10/15/2016	0.5	ND<2.0	---	**5.7**	---	---	---	---	---	---	---	---	---	---	
E-12-0.5 DUP	10/15/2016	0.5	**1.6**	---	**37**	---	---	---	---	---	---	---	---	---	---	
E-12-2.5	10/15/2016	2.5	**0.94J**	---	**22**	---	---	---	---	---	---	---	---	---	---	
Composite A4	N/A	0.5	**---**	---	**---**	---	---	**0.53J**	**14**	**1.5J**	**0.45J**	**4.6J**	**0.91J**	**0.41J**	---	Composite of E-9-0.5, E-10-0.5, E-11-0.5, and E-12-0.5
F-6-0.5	10/23/2016	0.5	**2.0**	---	**19**	---	---	---	---	---	---	---	---	---	---	
F-6-2.5	10/23/2016	2.5	**2.7**	---	**21**	---	---	---	---	---	---	---	---	---	---	
F-7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Removed from program
F-8-0.5	10/23/2016	0.5	**4.5**	---	**9.2**	---	---	---	---	---	---	---	---	---	---	
F-8-2.5	10/23/2016	2.5	**1.9**	---	**15**	---	---	---	---	---	---	---	---	---	---	
Composite A15	N/A	0.5	**---**	---	**---**	---	---	ND<2.0	ND<2.0	ND<2.0	ND<1.0	ND<8.5	ND<2.0	ND<1.0	---	Composite of F-6-0.5 and F-8-0.5
Composite A15 DUP	N/A	0.5	**---**	---	**---**	---	---	ND<2.0	**0.21J**	ND<2.0	ND<1.0	ND<8.5	ND<2.0	ND<1.0	---	Composite of F-6-0.5 and F-8-0.5
F-9-0.5	10/8/2016	0.5	**3.5**	---	**24**	---	---	---	---	---	---	---	---	---	---	
F-9-0.5 DUP	10/8/2016	0.5	**3.7**	---	**23**	---	---	---	---	---	---	---	---	---	---	
F-9-2.5	10/8/2016	2.5	**3.2**	---	**34**	---	---	---	---	---	---	---	---	---	---	
F-10-0.5	10/8/2016	0.5	**3.0**	---	**34**	---	---	---	---	---	---	---	---	---	---	

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		Units:	mg/kg	mg/L	mg/kg	mg/L	mg/L	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	
F-10-2.5	10/8/2016	2.5	**1.4**	---	**43**	---	---	---	---	---	---	---	---	---	---	
F-11-0.5	10/8/2016	0.5	**2.8**	---	**23**	---	---	---	---	---	---	---	---	---	---	
F-11-2.5	10/8/2016	2.5	**0.97J**	---	**7.2**	---	---	---	---	---	---	---	---	---	---	
F-12-0.5	10/15/2016	0.5	ND<2.0	---	**15**	---	---	---	---	---	---	---	---	---	---	
F-12-2.5	10/15/2016	2.5	**1.8**	---	**5.5**	---	---	---	---	---	---	---	---	---	---	
Composite A5	N/A	0.5	**---**	---	**---**	---	---	**0.32J**	**9.3**	**0.70J**	**0.33J**	**4.2J**	**7.8**	**0.46J**	---	Composite of F-9-0.5, F-10-0.5, F-11-0.5, and F-12-0.5
G-11-0.5	10/15/2016	0.5	**2.9**	**---**	**13**	---	---	---	---	---	---	---	---	---	---	
G-11-2.5	10/15/2016	2.5	**4.7**	---	**5.7**	---	---	---	---	---	---	---	---	---	---	
G-12-0.5	10/15/2016	0.5	ND<5.0	---	**23**	---	---	---	---	---	---	---	---	---	---	
G-12-2.5	10/15/2016	2.5	**1.1**	---	**4.3**	---	---	---	---	---	---	---	---	---	---	
Composite A6	N/A	0.5	**---**	---	**---**	---	---	ND<2.0	ND<2.0	ND<2.0	ND<1.0	ND<8.5	ND<2.0	ND<1.0	---	Composite of G-11-0.5 and G-12-0.5
H-1-0.5	10/15/2016	0.5	**4.3**	---	**8.4**	---	---	---	---	---	---	---	---	---	---	
H-1-2.5	10/15/2016	2.5	**5.0**	---	**6.7**	---	---	---	---	---	---	---	---	---	---	
H-1c-0.5	6/14/2017	0.5	---	---	**13**	---	---	---	---	---	---	---	---	---	---	
H-1c-2.5	6/14/2017	2.5	---	---	**13**	---	---	---	---	---	---	---	---	---	---	
H-1c-3.5	6/14/2017	3.5	---	---	**7.6**	---	---	---	---	---	---	---	---	---	---	
H-1c1-0.5	6/14/2017	0.5	---	---	**15**	---	---	---	---	---	---	---	---	---	---	
H-1c1-2.5	6/14/2017	2.5	---	---	**7.6**	---	---	---	---	---	---	---	---	---	---	
H-1c1-3.5	6/14/2017	3.5	---	---	**3.7**	---	---	---	---	---	---	---	---	---	---	
H-2-0.5	10/15/2016	0.5	**5.3**	---	**8.9**	---	---	---	---	---	---	---	---	---	---	
H-2-2.5	10/15/2016	2.5	**5.6**	---	**230**	**3.3**	---	---	---	---	---	---	---	---	---	
H-2-3.5	3/25/2017	3.5	---	---	**3.8**	---	---	---	---	---	---	---	---	---	---	
H-2a-0.5	11/21/2016	0.5	---	---	**5.2**	---	---	---	---	---	---	---	---	---	---	
H-2a-2.5	11/21/2016	2.5	---	---	**20**	---	---	---	---	---	---	---	---	---	---	
H-2a-3.5	11/21/2016	3.5	---	---	**6.9**	---	---	---	---	---	---	---	---	---	---	
H-2b-0.5	11/21/2016	0.5	---	---	**37**	---	---	---	---	---	---	---	---	---	---	
H-2b-2.5	11/21/2016	2.5	---	---	**9.0**	---	---	---	---	---	---	---	---	---	---	
H-2b-3.5	11/21/2016	3.5	---	---	**7.2**	---	---	---	---	---	---	---	---	---	---	
H-2b1-0.5	3/25/2017	0.5	---	---	**4.2**	---	---	---	---	---	---	---	---	---	---	
H-2b1-2.5	3/25/2017	2.5	---	---	**4.8**	---	---	---	---	---	---	---	---	---	---	
H-2b1-3.5	3/25/2017	3.5	---	---	**5.2**	---	---	---	---	---	---	---	---	---	---	
H-2c-0.5	11/21/2016	0.5	---	---	**81**	**4.1**	---	---	---	---	---	---	---	---	---	
H-2c-2.5	11/21/2016	2.5	---	---	**7.8**	---	---	---	---	---	---	---	---	---	---	
H-2c-2.5 DUP	11/21/2016	2.5	---	---	**8.9**	---	---	---	---	---	---	---	---	---	---	
H-2c-3.5	11/21/2016	3.5	---	---	**5.7**	---	---	---	---	---	---	---	---	---	---	
H-2c1-0.5	3/25/2017	0.5	---	---	**71**	---	---	---	---	---	---	---	---	---	---	
H-2c1-2.5	3/25/2017	2.5	---	---	**3.4**	---	---	---	---	---	---	---	---	---	---	
H-2c1-3.5	3/25/2017	3.5	---	---	**4.0**	---	---	---	---	---	---	---	---	---	---	
H-2d-0.5	11/21/2016	0.5	---	---	**5.9**	---	---	---	---	---	---	---	---	---	---	
H-2d-2.5	11/21/2016	2.5	---	---	**29**	---	---	---	---	---	---	---	---	---	---	
H-2d-3.5	11/21/2016	3.5	---	---	**8.6**	---	---	---	---	---	---	---	---	---	---	
H-2d-3.5 DUP	11/21/2016	3.5	---	---	**9.9**	---	---	---	---	---	---	---	---	---	---	
H-2d1-0.5	3/25/2017	0.5	---	---	**92**	**2.5**	---	---	---	---	---	---	---	---	---	
H-2d1-2.5	3/25/2017	2.5	---	---	**4.0**	---	---	---	---	---	---	---	---	---	---	

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			TTLC	STLC	TTLC	STLC	TCLP	4,4'-DDD	4,4'-DDE	4,4'-DDT	alpha-Chlordane	Chlordane	Dieldrin	gamma-Chlordane		
		Units:	mg/kg	mg/L	mg/kg	mg/L	mg/L	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	
H-2d1-3.5	3/25/2017	3.5	---	---	**4.1**	---	---	---	---	---	---	---	---	---	---	
H-2d1-3.5 DUP	3/25/2017	3.5	---	---	**5.4**	---	---	---	---	---	---	---	---	---	---	
H-3-0.5	10/15/2016	0.5	**5.5**	---	**17**	---	---	---	---	---	---	---	---	---	---	
H-3-0.5 DUP	10/15/2016	0.5	**4.6**	---	**14**	---	---	---	---	---	---	---	---	---	---	
H-3-2.5	10/15/2016	2.5	**4.9**	---	**4.7**	---	---	---	---	---	---	---	---	---	---	
Composite A9	N/A	0.5	**---**	---	**---**	---	---	ND<2.0	ND<2.0	ND<2.0	ND<1.0	**0.96J**	ND<2.0	ND<1.0	---	Composite of H-1-0.5, H-2-0.5, and H-3-0.5
H-4-0.5	10/15/2016	0.5	**3.3**	---	**8.5**	---	---	---	---	---	---	---	---	---	---	
H-4-2.5	10/15/2016	2.5	**2.1**	---	**7.3**	---	---	---	---	---	---	---	---	---	---	
H-5-0.5	10/15/2016	0.5	**2.4**	---	**3.9**	---	---	---	---	---	---	---	---	---	---	
H-5-2.5	10/15/2016	2.5	**2.4**	---	**1.7**	---	---	---	---	---	---	---	---	---	---	
H-5-2.5 DUP	10/15/2016	2.5	**3.4**	---	**18**	---	---	---	---	---	---	---	---	---	---	
Composite A10	N/A	0.5	**---**	---	**---**	---	---	ND<2.0	ND<2.0	ND<2.0	**0.29J**	**2.7J**	ND<2.0	**0.28J**	---	Composite of H-4-0.5 and H-5-0.5
Composite A10 DUP	N/A	0.5	**---**	---	**---**	---	---	ND<2.0	ND<2.0	ND<2.0	**0.26J**	**3.4J**	ND<2.0	**0.34J**	---	Composite of H-4-0.5 and H-5-0.5
H-11-0.5	10/15/2016	0.5	**2.6**	---	**14**	---	---	---	---	---	---	---	---	---	---	
H-11-2.5	10/15/2016	2.5	**4.4**	---	**5.6**	---	---	---	---	---	---	---	---	---	---	
H-12-0.5	10/15/2016	0.5	ND<2.0	---	**4.7**	---	---	---	---	---	---	---	---	---	---	
H-12-2.5	10/15/2016	2.5	**1.0J**	---	**3.4**	---	---	---	---	---	---	---	---	---	---	
Composite A7	N/A	0.5	**---**	---	**---**	---	---	ND<2.0	ND<2.0	ND<2.0	**0.24J**	**2.9J**	ND<2.0	**0.29J**	---	Composite of H-11-0.5 and H-12-0.5
I-11-0.5	10/15/2016	0.5	**4.6**	**---**	**15**	---	---	---	---	---	---	---	---	---	---	
I-11-2.5	10/15/2016	2.5	**5.3**	---	**5.1**	---	---	---	---	---	---	---	---	---	---	
I-12-0.5	10/15/2016	0.5	**1.0J**	---	**2.6**	---	---	---	---	---	---	---	---	---	---	
I-12-2.5	10/15/2016	2.5	**0.77J**	---	**2.7**	---	---	---	---	---	---	---	---	---	---	
Composite A8	N/A	0.5	**---**	---	**---**	---	---	ND<2.0	ND<2.0	ND<2.0	ND<1.0	ND<8.5	ND<2.0	ND<1.0	ND<16	Composite of I-11-0.5 and I-12-0.5
Area 3 - Athletic Field and Bleachers																
B-13-0.5	10/9/2016	0.5	**41**	---	**96**	**6.1**	**0.029 J**	---	---	---	---	---	---	---	---	
B-13-2.5	10/9/2016	2.5	**2.4**	---	**16**	---	---	---	---	---	---	---	---	---	---	
B-13-2.5 DUP	10/9/2016	2.5	**4.9**	---	**19**	---	---	---	---	---	---	---	---	---	---	
B-13a-0.5	11/22/2016	0.5	**17**	---	**96**	**6.3**	**0.11 J**	---	---	---	---	---	---	---	---	
B-13a-2.5	11/22/2016	2.5	**12**	---	**95**	**6.8**	**0.050**	---	---	---	---	---	---	---	---	
B-13a-3.5	3/25/2017	3.5	---	---	**82**	**2.6**	---	---	---	---	---	---	---	---	---	
B-13b-0.5	11/22/2016	0.5	**14**	---	**27**	---	---	---	---	---	---	---	---	---	---	
B-13b-2.5	11/22/2016	2.5	**7.5**	---	---	---	---	---	---	---	---	---	---	---	---	
B-13c-0.5	11/22/2016	0.5	**7.8**	---	**99**	**3.6**	---	---	---	---	---	---	---	---	---	
B-13c-2.5	11/22/2016	2.5	---	---	**8.8**	---	---	---	---	---	---	---	---	---	---	
B-13d-0.5	11/22/2016	0.5	**1.9**	---	**17**	---	---	---	---	---	---	---	---	---	---	
B-13d-2.5	11/22/2016	2.5	**1.2**	---	---	---	---	---	---	---	---	---	---	---	---	
B-14-0.5	10/9/2016	0.5	**19**	---	**62**	---	---	---	---	---	---	---	---	---	---	
B-14-2.5	10/9/2016	2.5	**2.9**	---	**58**	---	---	---	---	---	---	---	---	---	---	
B-14a-0.5	11/22/2016	0.5	**12**	---	---	---	---	---	---	---	---	---	---	---	---	
B-14a-0.5 DUP	11/22/2016	0.5	**15**	---	---	---	---	---	---	---	---	---	---	---	---	
B-14a-2.5	11/22/2016	2.5	**6.1**	---	---	---	---	---	---	---	---	---	---	---	---	
B-14b-0.5	11/22/2016	0.5	**19**	---	---	---	---	---	---	---	---	---	---	---	---	
B-14b-2.5	11/22/2016	2.5	**4.5**	---	---	---	---	---	---	---	---	---	---	---	---	

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		Units:	mg/kg	mg/L	mg/kg	mg/L	mg/L	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	
B-14c-0.5	11/22/2016	0.5	**3.5**	---	---	---	---	---	---	---	---	---	---	---	---	
B-15-0.5	10/9/2016	0.5	**16**	---	**69**	---	---	---	---	---	---	---	---	---	---	
B-15-2.5	10/9/2016	2.5	**4.0**	---	**33**	---	---	---	---	---	---	---	---	---	---	
B-15a-0.5	11/22/2016	0.5	**17**	---	---	---	---	---	---	---	---	---	---	---	---	
B-15a-2.5	11/22/2016	2.5	**5.6**	---	---	---	---	---	---	---	---	---	---	---	---	
B-15b-0.5	11/22/2016	0.5	**5.2**	---	**180**	**2.8**	---	---	---	---	---	---	---	---	---	
B-15b-2.5	11/22/2016	2.5	**---**	---	**32**	---	---	---	---	---	---	---	---	---	---	
B-15c-0.5	11/22/2016	0.5	**3.1**	---	---	---	---	---	---	---	---	---	---	---	---	
Composite B1	N/A	0.5	**---**	---	**---**	---	---	**0.70J**	ND<2.0	**0.16J**	ND<1.0	ND<8.5	ND<2.0	ND<1.0	**---**	Composite of B-13-0.5, B-14-0.5, and B-15-0.5
B-16-0.5	10/9/2016	0.5	**13**	---	**81**	**3.7**	---	---	---	---	---	---	---	---	---	
B-16-0.5 DUP	10/9/2016	0.5	**15**	---	**70**	---	---	---	---	---	---	---	---	---	---	
B-16-2.5	10/9/2016	2.5	**2.7**	---	**76**	---	---	---	---	---	---	---	---	---	---	
B-16a-0.5	11/22/2016	0.5	**15**	---	**49**	---	---	---	---	---	---	---	---	---	---	
B-16a-0.5 DUP	11/22/2016	0.5	**27**	---	**72**	---	---	---	---	---	---	---	---	---	---	
B-16a-2.5	11/22/2016	2.5	**22**	---	---	---	---	---	---	---	---	---	---	---	---	
B-16a-3.5	3/25/2017	3.5	**4.4**	---	---	---	---	---	---	---	---	---	---	---	---	
B-16a-3.5 DUP	3/25/2017	3.5	**4.2**	---	---	---	---	---	---	---	---	---	---	---	---	
B-16b-0.5	11/22/2016	0.5	**3.1**	---	**69**	---	---	---	---	---	---	---	---	---	---	
B-16c-0.5	11/22/2016	0.5	**4.7**	---	**13**	---	---	---	---	---	---	---	---	---	---	
B-16c-0.5 DUP	11/22/2016	0.5	**6.4**	---	**22**	---	---	---	---	---	---	---	---	---	---	
B-17-0.5	10/9/2016	0.5	**2.9**	---	**5.2**	---	---	---	---	---	---	---	---	---	---	
B-17-2.5	10/9/2016	2.5	**12**	---	**53**	---	---	---	---	---	---	---	---	---	---	
Composite B2	N/A	0.5	**---**	---	**---**	---	---	**0.23J**	ND<2.0	ND<2.0	ND<1.0	ND<8.5	ND<2.0	ND<1.0	**---**	Composite of B-16-0.5 and B-17-0.5
C-13-0.5	10/9/2016	0.5	**2.8**	**---**	**150**	**11**	**0.095 J**	---	---	---	---	---	---	---	---	
C-13-2.5	10/9/2016	2.5	**1.6**	---	**15**	---	---	---	---	---	---	---	---	---	---	
C-13b-0.5	11/22/2016	0.5	---	---	**37**	---	---	---	---	---	---	---	---	---	---	
C-13c-0.5	11/22/2016	0.5	---	---	**110**	**3.0**	---	---	---	---	---	---	---	---	---	
C-13c-2.5	11/22/2016	2.5	---	---	**26**	---	---	---	---	---	---	---	---	---	---	
C-13d-0.5	11/22/2016	0.5	---	---	**48**	---	---	---	---	---	---	---	---	---	---	
C-14-0.5	10/9/2016	0.5	**6.5**	---	**44**	---	---	---	---	---	---	---	---	---	---	
C-14-2.5	10/9/2016	2.5	**1.6**	---	**14**	---	---	---	---	---	---	---	---	---	---	
C-15-0.5	10/9/2016	0.5	**5.8**	---	**71**	---	---	---	---	---	---	---	---	---	---	
C-15-2.5	10/9/2016	2.5	**3.0**	---	**28**	---	---	---	---	---	---	---	---	---	---	
Composite B3	N/A	0.5	**---**	---	**---**	---	---	**0.42J**	**0.66J**	**0.63J**	ND<1.0	ND<8.5	ND<2.0	ND<1.0	**---**	Composite of C-13-0.5, C-14-0.5, and C-15-0.5
C-16-0.5	10/9/2016	0.5	**4.7**	---	**70**	---	---	---	---	---	---	---	---	---	---	
C-16-0.5 DUP	10/9/2016	0.5	**2.4**	---	**43**	---	---	---	---	---	---	---	---	---	---	
C-16-2.5	10/9/2016	2.5	**2.7**	---	**29**	---	---	---	---	---	---	---	---	---	---	
C-17-0.5	10/9/2016	0.5	**3.0**	---	**85**	**4.7**	---	---	---	---	---	---	---	---	---	
C-17-2.5	10/9/2016	2.5	**2.8**	---	**22**	---	---	---	---	---	---	---	---	---	---	
C-17a-0.5	11/22/2016	0.5	**---**	---	**55**	---	---	---	---	---	---	---	---	---	---	
C-17b-0.5	11/22/2016	0.5	**---**	---	**99**	**6.6**	**0.036 J**	---	---	---	---	---	---	---	---	
C-17b-2.5	11/22/2016	2.5	**---**	---	**65**	---	---	---	---	---	---	---	---	---	---	
C-17c-0.5	11/22/2016	0.5	**---**	---	**42**	---	---	---	---	---	---	---	---	---	---	
C-17d-0.5	11/22/2016	0.5	**---**	---	**51**	---	---	---	---	---	---	---	---	---	---	
C-18-0.5	3/25/2017	0.5	**---**	---	**53**	---	---	---	---	---	---	---	---	---	---	

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C-18-2.5	3/25/2017	2.5	---	---	6.9	---	---	---	---	---	---	---	---	---	---	
C-18a-0.5	3/25/2017	0.5	---	---	47	---	---	---	---	---	---	---	---	---	---	
C-18a-0.5 DUP	3/25/2017	0.5	---	---	42	---	---	---	---	---	---	---	---	---	---	
C-18a-2.5	3/25/2017	2.5	---	---	5.3	---	---	---	---	---	---	---	---	---	---	
C-18c-0.5	3/25/2017	0.5	---	---	17	---	---	---	---	---	---	---	---	---	---	
C-18c-2.5	3/25/2017	2.5	---	---	4.5	---	---	---	---	---	---	---	---	---	---	
Composite B4	N/A	0.5	---	---	---	---	---	0.34J	0.27J	0.33J	ND<1.0	ND<8.5	ND<2.0	ND<1.0	---	Composite of C-16-0.5 and C-17-0.5
D-13-0.5	10/8/2016	0.5	2.6	---	43	---	---	---	---	---	---	---	---	---	---	
D-13-2.5	10/8/2016	2.5	1.8	---	18	---	---	---	---	---	---	---	---	---	---	
D-14-0.5	10/9/2016	0.5	3.8	---	50	---	---	---	---	---	---	---	---	---	---	
D-14-2.5	10/9/2016	2.5	3.7	---	16	---	---	---	---	---	---	---	---	---	---	
D-14-2.5 DUP	10/9/2016	2.5	2.7	---	1.9	---	---	---	---	---	---	---	---	---	---	
D-15-0.5	10/9/2016	0.5	2.7	---	14	---	---	---	---	---	---	---	---	---	---	
D-15-2.5	10/9/2016	2.5	2.1	---	29	---	---	---	---	---	---	---	---	---	---	
Composite B5	N/A	0.5	---	---	---	---	---	0.34J	0.79J	0.45J	ND<1.0	ND<8.5	ND<2.0	ND<1.0	---	Composite of D-13-0.5, D-14-0.5, and D-15-0.5
D-16-0.5	10/9/2016	0.5	4.8	---	34	---	---	---	---	---	---	---	---	---	---	
D-16-2.5	10/9/2016	2.5	1.9	---	33	---	---	---	---	---	---	---	---	---	---	
D-17-0.5	10/9/2016	0.5	3.9	---	76	---	---	---	---	---	---	---	---	---	---	
D-17-2.5	10/9/2016	2.5	2.8	---	45	---	---	---	---	---	---	---	---	---	---	
Composite B6	N/A	0.5	---	---	---	---	---	0.35J	0.88J	0.51J	ND<1.0	3.5J	ND<2.0	ND<1.0	---	Composite of D-16-0.5 and D-17-0.5
E-13-0.5	10/8/2016	0.5	1.7	---	40	---	---	---	---	---	---	---	---	---	---	
E-13-2.5	10/8/2016	2.5	0.88J	---	3.4	---	---	---	---	---	---	---	---	---	---	
E-14-0.5	10/9/2016	0.5	3.5	---	27	---	---	---	---	---	---	---	---	---	---	
E-14-2.5	10/9/2016	2.5	3.0	---	14	---	---	---	---	---	---	---	---	---	---	
E-14-2.5 DUP	10/9/2016	2.5	3.5	---	15	---	---	---	---	---	---	---	---	---	---	
E-15-0.5	10/9/2016	0.5	3.1	---	20	---	---	---	---	---	---	---	---	---	---	
E-15-2.5	10/9/2016	2.5	2.2	---	8.6	---	---	---	---	---	---	---	---	---	---	
Composite B7	N/A	0.5	---	---	---	---	---	ND<2.0	0.91J	ND<2.0	ND<1.0	ND<8.5	ND<2.0	ND<1.0	---	Composite of E-13-0.5, E-14-0.5, and E-15-0.5
E-16-0.5	10/9/2016	0.5	4.3	---	37	---	---	---	---	---	---	---	---	---	---	
E-16-2.5	10/9/2016	2.5	0.93J	---	49	---	---	---	---	---	---	---	---	---	---	
E-17-0.5	10/9/2016	0.5	4.7	---	68	---	---	---	---	---	---	---	---	---	---	
E-17-2.5	10/9/2016	2.5	1.3	---	11	---	---	---	---	---	---	---	---	---	---	
Composite B8	N/A	0.5	---	---	---	---	---	ND<2.0	0.83J	0.28J	ND<1.0	3.1J	ND<2.0	ND<1.0	---	Composite of E-16-0.5 and E-17-0.5
F-13-0.5	10/8/2016	0.5	1.3	---	12	---	---	---	---	---	---	---	---	---	---	
F-13-2.5	10/8/2016	2.5	2.2	---	30	---	---	---	---	---	---	---	---	---	---	
F-14-0.5	10/9/2016	0.5	4.2	---	48	---	---	---	---	---	---	---	---	---	---	
F-14-0.5 DUP	10/9/2016	0.5	2.6	---	42	---	---	---	---	---	---	---	---	---	---	
F-14-2.5	10/9/2016	2.5	2.0	---	8.8	---	---	---	---	---	---	---	---	---	---	
F-15-0.5	10/9/2016	0.5	4.5	---	28	---	---	---	---	---	---	---	---	---	---	
F-15-2.5	10/9/2016	2.5	1.5	---	16	---	---	---	---	---	---	---	---	---	---	
Composite B9	N/A	0.5	---	---	---	---	---	ND<2.0	1.2J	0.25J	ND<1.0	3.1J	ND<2.0	ND<1.0	---	Composite of F-13-0.5, F-14-0.5, and F-15-0.5
F-16-0.5	10/9/2016	0.5	2.9	---	16	---	---	---	---	---	---	---	---	---	---	
F-16-2.5	10/9/2016	2.5	1.7	---	42	---	---	---	---	---	---	---	---	---	---	

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			TTLC	STLC	TTLC	STLC	TCLP	4,4'-DDD	4,4'-DDE	4,4'-DDT	alpha-Chlordane	Chlordane	Dieldrin	gamma-Chlordane		
		Units:	mg/kg	mg/L	mg/kg	mg/L	mg/L	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	
F-17-0.5	10/9/2016	0.5	**3.0**	---	**29**	---	---	---	---	---	---	---	---	---	---	
F-17-2.5	10/9/2016	2.5	**2.1**	---	**55**	---	---	---	---	---	---	---	---	---	---	
Composite B10	N/A	0.5	**---**	---	**---**	---	---	ND<2.0	**2.0**	**0.60J**	**0.53J**	**5.1J**	ND<2.0	**0.23J**	---	Composite of F-16-0.5 and F-17-0.5
Composite B10 DUP	N/A	0.5	**---**	---	**---**	---	---	ND<2.0	**1.1J**	**0.34J**	ND<1.0	**1.6J**	ND<2.0	ND<1.0	---	Composite of F-16-0.5 and F-17-0.5
G-13-0.5	10/8/2016	0.5	**1.6**	---	**10**	---	---	---	---	---	---	---	---	---	---	
G-13-2.5	10/8/2016	2.5	**1.7**	---	**37**	---	---	---	---	---	---	---	---	---	---	
G-13-2.5 DUP	10/8/2016	2.5	**1.6**	---	**4.0**	---	---	---	---	---	---	---	---	---	---	
G-14-0.5	10/9/2016	0.5	**3.4**	---	**29**	---	---	---	---	---	---	---	---	---	---	
G-14-2.5	10/9/2016	2.5	ND<1.0	---	**2.2**	---	---	---	---	---	---	---	---	---	---	
G-15-0.5	10/9/2016	0.5	**3.9**	---	**31**	---	---	---	---	---	---	---	---	---	---	
G-15-2.5	10/9/2016	2.5	**1.1**	---	**8.9**	---	---	---	---	---	---	---	---	---	---	
Composite B11	N/A	0.5	**---**	---	**---**	---	---	ND<2.0	**1.3J**	**0.50J**	**0.24J**	**4.2J**	ND<2.0	ND<1.0	**---**	Composite of G-13-0.5, G-14-0.5, and G-15-0.5
G-16-0.5	10/9/2016	0.5	**4.8**	---	**26**	---	---	---	---	---	---	---	---	---	---	
G-16-2.5	10/9/2016	2.5	**1.2**	---	**6.0**	---	---	---	---	---	---	---	---	---	---	
G-17-0.5	10/9/2016	0.5	**3.8**	---	**48**	---	---	---	---	---	---	---	---	---	---	
G-17-2.5	10/9/2016	2.5	**1.6**	---	**3.4**	---	---	---	---	---	---	---	---	---	---	
Composite B12	N/A	0.5	**---**	---	**---**	---	---	ND<2.0	**1.7J**	ND<2.0	**0.64J**	**4.1J**	ND<2.0	ND<1.0	---	Composite of G-16-0.5 and G-17-0.5
H-13-0.5	10/8/2016	0.5	**3.7**	---	**48**	---	---	---	---	---	---	---	---	---	---	
H-13-2.5	10/8/2016	2.5	**1.5**	---	**2.7**	---	---	---	---	---	---	---	---	---	---	
H-14-0.5	10/9/2016	0.5	ND<5.0	---	**28**	---	---	---	---	---	---	---	---	---	---	
H-14-2.5	10/9/2016	2.5	**1.6**	---	**4.3**	---	---	---	---	---	---	---	---	---	---	
H-15-0.5	10/9/2016	0.5	**4.3**	---	**27**	---	---	---	---	---	---	---	---	---	---	
H-15-2.5	10/9/2016	2.5	**1.4**	**---**	**6.0**	---	---	---	---	---	---	---	---	---	---	
Composite B13	N/A	0.5	**---**	**---**	**---**	---	---	ND<2.0	**1.1J**	**0.41J**	**0.32J**	**2.9J**	ND<2.0	ND<1.0	**---**	Composite of H-13-0.5, H-14-0.5, and H-15-0.5
H-16-0.5	10/9/2016	0.5	**4.7**	**---**	**33**	---	---	---	---	---	---	---	---	---	---	
H-16-2.5	10/9/2016	2.5	**2.4**	**---**	**20**	---	---	---	---	---	---	---	---	---	---	
H-17-0.5	10/9/2016	0.5	**7.3**	**---**	**60**	---	---	---	---	---	---	---	---	---	---	
H-17-0.5 DUP	10/9/2016	0.5	**3.9**	**---**	**65**	---	---	---	---	---	---	---	---	---	---	
H-17-2.5	10/9/2016	2.5	**1.9**	**---**	**3.6**	---	---	---	---	---	---	---	---	---	---	
Composite B14	N/A	0.5	**---**	**---**	**---**	---	---	ND<2.0	**0.75J**	**0.28J**	ND<1.0	**2.1J**	ND<2.0	ND<1.0	---	Composite of H-16-0.5 and H-17-0.5
I-13-0.5	10/8/2016	0.5	**2.5**	**---**	**5.9**	---	---	---	---	---	---	---	---	---	---	
I-13-2.5	10/8/2016	2.5	**1.3**	**---**	**1.6**	---	---	---	---	---	---	---	---	---	---	
I-14-0.5	10/9/2016	0.5	**3.5**	**---**	**49**	---	---	---	---	---	---	---	---	---	---	
I-14-2.5	10/9/2016	2.5	**2.3**	**---**	**6.1**	---	---	---	---	---	---	---	---	---	---	
I-15-0.5	10/9/2016	0.5	**4.7**	**---**	**43**	---	---	---	---	---	---	---	---	---	---	
I-15-2.5	10/9/2016	2.5	**3.5**	**---**	**53**	---	---	---	---	---	---	---	---	---	---	
Composite B15	N/A	0.5	**---**	**---**	**---**	---	---	ND<2.0	**0.28J**	**0.28J**	ND<1.0	ND<8.5	ND<2.0	ND<1.0	(1)	Composite of I-13-0.5, I-14-0.5, and I-15-0.5
I-16-0.5	10/9/2016	0.5	**2.9**	**---**	**13**	---	---	---	---	---	---	---	---	---	---	
I-16-2.5	10/9/2016	2.5	**4.6**	**---**	**35**	---	---	---	---	---	---	---	---	---	---	
I-17-0.5	10/9/2016	0.5	**8.7**	**---**	**79**	---	---	---	---	---	---	---	---	---	---	
I-17-2.5	10/9/2016	2.5	**1.8**	**---**	**2.4**	---	---	---	---	---	---	---	---	---	---	
Composite B16	N/A	0.5	**---**	**---**	**---**	---	---	ND<2.0	**0.58J**	**0.21J**	**0.34J**	**2.7J**	ND<2.0	ND<1.0	---	Composite of I-16-0.5 and I-17-0.5

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		Units:	mg/kg	mg/L	mg/kg	mg/L	mg/L	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	
J-14-0.5	10/9/2016	0.5	**4.3**	**---**	**43**	---	---	---	---	---	---	---	---	---	---	
J-14-2.5	10/9/2016	2.5	**1.8**	**---**	**77**	---	---	---	---	---	---	---	---	---	---	
J-15-0.5	10/9/2016	0.5	**4.6**	**---**	**64**	---	---	---	---	---	---	---	---	---	---	
J-15-2.5	10/9/2016	2.5	**1.2**	**---**	**1.7**	---	---	---	---	---	---	---	---	---	---	
J-16-0.5	10/9/2016	0.5	**3.8**	**---**	**68**	---	---	---	---	---	---	---	---	---	---	
J-16-2.5	10/9/2016	2.5	**2.7**	**---**	**20**	---	---	---	---	---	---	---	---	---	---	
J-17-0.5	10/9/2016	0.5	**4.8**	**---**	**59**	---	---	---	---	---	---	---	---	---	---	
J-17-2.5	10/9/2016	2.5	**2.0**	**---**	**3.8**	---	---	---	---	---	---	---	---	---	---	
Composite B17	N/A	0.5	**---**	**---**	**---**	---	---	ND<2.0	ND<2.0	ND<2.0	ND<1.0	ND<8.5	ND<2.0	ND<1.0	---	Composite of J-14-0.5, J-15-0.5, J-16-0.5, and J-17-0.5
K-14-0.5	10/9/2016	0.5	**3.4**	**---**	**55**	---	---	---	---	---	---	---	---	---	---	
K-14-2.5	10/9/2016	2.5	**1.0**	**---**	**5.6**	---	---	---	---	---	---	---	---	---	---	
K-15-0.5	10/9/2016	0.5	**2.3**	**---**	**47**	---	---	---	---	---	---	---	---	---	---	
K-15-2.5	10/9/2016	2.5	**0.84J**	**---**	**2.2**	---	---	---	---	---	---	---	---	---	---	
K-16-0.5	10/9/2016	0.5	**1.6**	**---**	**9.6**	---	---	---	---	---	---	---	---	---	---	
K-16-2.5	10/9/2016	2.5	**1.8**	**---**	**13**	---	---	---	---	---	---	---	---	---	---	
K-16-2.5 DUP	10/9/2016	2.5	**2.5**	**---**	**25**	---	---	---	---	---	---	---	---	---	---	
K-17-0.5	10/15/2016	0.5	**6.3**	**---**	**9.7**	---	---	---	---	---	---	---	---	---	---	
K-17-0.5 DUP	10/15/2016	0.5	**3.4**	**---**	**8.2**	---	---	---	---	---	---	---	---	---	---	
K-17-2.5	10/15/2016	2.5	**1.2**	**---**	**3.4**	---	---	---	---	---	---	---	---	---	---	
Composite B18	N/A	0.5	**---**	**---**	**---**	---	---	ND<2.0	ND<2.0	ND<2.0	ND<1.0	ND<8.5	ND<2.0	ND<1.0	---	Composite of K-14-0.5, K-15-0.5, K-16-0.5, and K-17-0.5
Area 5 - Auditorium and Lunch Pavilion																
						---	---									
MB-1-0.5	10/15/2016	0.5	**6.9**	**---**	**24**	---	---	---	---	---	---	---	---	---	---	
MB-1-2.5	10/15/2016	2.5	**0.96J**	**---**	**3.0**	---	---	---	---	---	---	---	---	---	---	
MB-2-0.5	10/15/2016	0.5	**8.1**	**---**	**8.1**	---	---	---	---	---	---	---	---	---	---	
MB-2-2.5	10/15/2016	2.5	**4.9**	**---**	**4.9**	---	---	---	---	---	---	---	---	---	---	
MB-2-2.5 DUP	10/15/2016	2.5	**7.6**	**---**	**5.0**	---	---	---	---	---	---	---	---	---	---	
MB-3-0.5	10/16/2016	0.5	**4.4**	**---**	**15**	---	---	---	---	---	---	---	---	---	---	
MB-3-2.5	10/16/2016	2.5	**3.1**	**---**	**7.2**	---	---	---	---	---	---	---	---	---	---	
Composite C1	N/A	0.5	**---**	**---**	**---**	---	---	ND<2.0	ND<2.0	ND<2.0	ND<1.0	ND<8.5	ND<2.0	ND<1.0	---	Composite of MB-1-0.5, MB-2-0.5, MB-3-0.5
MB-4-0.5	10/15/2016	0.5	**6.1**	**---**	**18**	---	---	---	---	---	---	---	---	---	---	
MB-4-2.5	10/15/2016	2.5	**4.2**	**---**	**18**	---	---	---	---	---	---	---	---	---	---	
MB-5-0.5	10/15/2016	0.5	**3.9**	**---**	**24**	---	---	---	---	---	---	---	---	---	---	
MB-5-0.5 DUP	10/15/2016	0.5	**4.3**	**---**	**11**	---	---	---	---	---	---	---	---	---	---	
MB-5-2.5	10/15/2016	2.5	**4.6**	**---**	**5.2**	---	---	---	---	---	---	---	---	---	---	
MB-6-0.5	10/16/2016	0.5	**3.5**	**---**	**41**	---	---	---	---	---	---	---	---	---	---	
MB-6-0.5 DUP	10/16/2016	0.5	**3.5**	**---**	**89**	**2.5**	---	---	---	---	---	---	---	---	---	
MB-6-2.5	10/16/2016	2.5	**2.4**	**---**	**27**	---	---	---	---	---	---	---	---	---	---	
MB-6a-0.5	11/21/2016	0.5	**---**	**---**	**7.7**	---	---	---	---	---	---	---	---	---	---	
MB-6c-0.5	11/21/2016	0.5	**---**	**---**	**8.9**	---	---	---	---	---	---	---	---	---	---	
MB-6d-0.5	11/21/2016	0.5	**---**	**---**	**7.8**	---	---	---	---	---	---	---	---	---	---	
Composite C2	N/A	0.5	**---**	**---**	**---**	---	---	ND<2.0	**1.2J**	ND<2.0	**0.48J**	**5.2J**	ND<2.0	ND<1.0	---	Composite of MB-4-0.5, MB-5-0.5, MB-6-0.5
Composite C2 DUP	N/A	0.5	**---**	**---**	**---**	---	---	ND<2.0	**0.43J**	ND<2.0	ND<1.0	**1.1J**	ND<2.0	ND<1.0	---	Composite of MB-4-0.5, MB-5-0.5, MB-6-0.5

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		Units:	mg/kg	mg/L	mg/kg	mg/L	mg/L	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	
AUD-1-0.5	10/16/2016	0.5	**3.9**	**---**	**24**	---	---	---	---	---	---	---	---	---	---	
AUD-1-2.5	10/16/2016	2.5	**0.98J**	**---**	**5.1**	---	---	---	---	---	---	---	---	---	---	
AUD-2-0.5	10/16/2016	0.5	ND<2.0	**---**	**4.4**	---	---	---	---	---	---	---	---	---	---	
AUD-2-0.5 DUP	10/16/2016	0.5	**6.3**	**---**	**29**	---	---	---	---	---	---	---	---	---	---	
AUD-2-2.5	10/16/2016	2.5	**4.1**	**---**	**10**	---	---	---	---	---	---	---	---	---	---	
AUD-3-0.5	10/16/2016	0.5	**3.5**	**---**	**110**	**6.4**	ND<0.25	---	---	---	---	---	---	---	---	
AUD-3-2.5	10/16/2016	2.5	**2.4**	**---**	**8.5**	---	---	---	---	---	---	---	---	---	---	
AUD-3a-0.5	11/21/2016	0.5	**---**	**---**	**4300**	**74**	**1.7**	---	---	---	---	---	---	---	---	
AUD-3a-2.5	11/21/2016	2.5	**---**	**---**	**53**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	---	---	
AUD-3a1-0.5	3/25/2017	0.5	**---**	**---**	**110**	**5.6**	**0.17 J**	**---**	**---**	**---**	**---**	**---**	**---**	---	---	
AUD-3a1-0.5 DUP	3/25/2017	0.5	**---**	**---**	**110**	**5.7**	**0.16 J**	**---**	**---**	**---**	**---**	**---**	**---**	---	---	
AUD-3a1-2.5	3/25/2017	2.5	**---**	**---**	**9.7**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	---	---	
AUD-3b-0.5	11/21/2016	0.5	**---**	**---**	**140**	**10**	ND<0.25	---	---	---	---	---	---	---	---	
AUD-3b-2.5	11/21/2016	2.5	**---**	**---**	**7.7**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	---	---	
AUD-3b1-0.5	3/25/2017	0.5	**---**	**---**	**22**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	---	---	
AUD-3b1-2.5	3/25/2017	2.5	**---**	**---**	**3.2**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	---	---	
AUD-3c-0.25	11/21/2016	0.25	**---**	**---**	**500**	**13**	**0.015 J**	---	---	---	---	---	---	---	---	
AUD-3c-0.5	11/21/2016	0.5	**---**	**---**	**700**	**22**	**0.28**	---	---	---	---	---	---	---	---	
AUD-3c-2.5	11/21/2016	2.5	**---**	**---**	**42**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	---	---	
AUD-3c1-0.5	3/25/2017	0.5	**---**	**---**	**100**	**4.3**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	---	---	
AUD-3c1-2.5	3/25/2017	2.5	**---**	**---**	**43**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	---	---	
AUD-4-0.25	11/21/2016	0.25	**---**	**---**	**29**	---	---	---	---	---	---	---	---	---	---	
AUD-4-0.25 DUP	11/21/2016	0.25	**---**	**---**	**20**	---	---	---	---	---	---	---	---	---	---	
AUD-4-0.5	10/16/2016	0.5	**8.8**	**---**	**390**	**29**	**0.41**	---	---	---	---	---	---	---	---	
AUD-4-2.5	10/16/2016	2.5	**3.0**	**---**	**12**	---	---	---	---	---	---	---	---	---	---	
AUD-4b-0.25	11/21/2016	0.25	**---**	**---**	**21**	---	---	---	---	---	---	---	---	---	---	
AUD-4b-0.5	11/21/2016	0.5	**---**	**---**	**9.8**	---	---	---	---	---	---	---	---	---	---	
AUD-4c-0.25	11/21/2016	0.25	**---**	**---**	**49**	---	---	---	---	---	---	---	---	---	---	
AUD-4c-0.5	11/21/2016	0.5	**---**	**---**	**460**	ND<1.0	---	---	---	---	---	---	---	---	---	
AUD-4c-2.5	11/21/2016	2.5	**---**	**---**	**18**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	---	---	
AUD-4c1-0.5	3/25/2017	0.5	**---**	**---**	**11**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	---	---	
AUD-4c1-2.5	3/25/2017	2.5	**---**	**---**	**7.4**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	---	---	
Composite C3	N/A	0.5	**---**	**---**	**---**	---	--	**0.22J**	**1.1J**	**0.50J**	**1.2**	**6.8J**	**1.7J**	**0.71J**	(2)	Composite of AUD-1-0.5, AUD-2-0.5, AUD-3-0.5, and AUD-4-0.5
AUD-5-0.25	11/21/2016	0.25	**---**	**---**	**130**	**17**	**0.040 J**	---	---	---	---	---	---	---	---	
AUD-5-0.5	10/16/2016	0.5	ND<5.0	**---**	**620**	**24**	**0.59**	---	---	---	---	---	---	---	---	
AUD-5-2.5	10/16/2016	2.5	**3.2**	**---**	**43**	---	---	---	---	---	---	---	---	---	---	
AUD-5b-0.25	11/21/2016	0.5	**---**	**---**	**13**	---	---	---	---	---	---	---	---	---	---	
AUD-5b-0.5	11/21/2016	0.5	**---**	**---**	**240**	**9.7**	ND<0.25	---	---	---	---	---	---	---	---	
AUD-5b-2.5	11/21/2016	2.5	**---**	**---**	**28**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	---	---	
AUD-5c-0.25	11/21/2016	0.25	**---**	**---**	**110**	**6.0**	ND<0.25	---	---	---	---	---	---	---	---	
AUD-5c-0.5	11/21/2016	0.5	**---**	**---**	**13**	---	---	---	---	---	---	---	---	---	---	
AUD-6-0.25	11/21/2016	0.25	**---**	**---**	**160**	**7.8**	**0.11 J**	---	---	---	---	---	---	---	---	
AUD-6-0.5	10/16/2016	0.5	**5.2**	**---**	**670**	**26**	**1.5**	---	---	---	---	---	---	---	---	
AUD-6-2.5	10/16/2016	2.5	**3.4**	**---**	**19**	---	---	---	---	---	---	---	---	---	---	
AUD-6b-0.25	11/21/2016	0.25	**--**	**---**	**41**	---	---	---	---	---	---	---	---	---	---	
AUD-6b-0.5	11/21/2016	0.5	**--**	**---**	**160**	**13**	ND<0.25	---	---	---	---	---	---	---	---	

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			TTLC	STLC	TTLC	STLC	TCLP	4,4'-DDD	4,4'-DDE	4,4'-DDT	alpha-Chlordane	Chlordane	Dieldrin	gamma-Chlordane		
		Units:	mg/kg	mg/L	mg/kg	mg/L	mg/L	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	
AUD-6b-2.5	11/21/2016	2.5	---	---	**2.5**	---	---	---	---	---	---	---	---	---	---	
AUD-6c-0.25	11/21/2016	0.25	--	---	**110**	**3.9**	---	---	---	---	---	---	---	---	---	
AUD-6c-0.25 DUP	11/21/2016	0.25	--	---	**82**	**6.2**	ND<0.25	---	---	---	---	---	---	---	---	
AUD-6c-0.5	11/21/2016	0.5	--	---	**66**	---	---	---	---	---	---	---	---	---	---	
AUD-7-0.5	10/16/2016	0.5	**4.5**	---	**16**	---	---	---	---	---	---	---	---	---	---	
AUD-7-0.5 DUP	10/16/2016	0.5	**4.8**	---	**12**	---	---	---	---	---	---	---	---	---	---	
AUD-7-2.5	10/16/2016	2.5	**4.1**	---	**12**	---	---	---	---	---	---	---	---	---	---	
AUD-8-0.5	10/16/2016	0.5	**1.9**	---	**3.2**	---	---	---	---	---	---	---	---	---	---	
AUD-8-2.5	10/16/2016	2.5	**2.8**	---	**2.3**	---	---	---	---	---	---	---	---	---	---	
AUD-8-2.5 DUP	10/16/2016	2.5	**3.1**	---	**2.4**	---	---	---	---	---	---	---	---	---	---	
Composite C4	N/A	0.5	---	---	---	---	---	ND<2.0	**1.3J**	**1.2J**	**3.0**	**22**	**7.3**	**1.7**	---	Composite of AUD-5-0.5, AUD-6-0.5, AUD-7-0.5, and AUD-8-0.5
AUD-9-0.5	10/16/2016	0.5	**3.8J**	---	**6.0**	---	---	---	---	---	---	---	---	---	---	
AUD-9-0.5 DUP	10/16/2016	0.5	**4.5J**	---	**5.9**	---	---	---	---	---	---	---	---	---	---	
AUD-9-2.5	10/16/2016	2.5	**2.5**	---	**1.3**	---	---	---	---	---	---	---	---	---	---	
AUD-10-0.5	10/16/2016	0.5	**8.4**	---	**19**	---	---	---	---	---	---	---	---	---	---	
AUD-10-2.5	10/16/2016	2.5	**2.2**	---	**9.2**	---	---	---	---	---	---	---	---	---	---	
AUD-11-0.5	10/16/2016	0.5	**3.5**	---	**17**	---	---	---	---	---	---	---	---	---	---	
AUD-11-2.5	10/16/2016	2.5	**1.7**	---	**3.8**	---	---	---	---	---	---	---	---	---	---	
AUD-12-0.5	10/16/2016	0.5	**3.5**	---	**25**	---	---	---	---	---	---	---	---	---	---	
AUD-12-2.5	10/16/2016	2.5	**1.8**	---	**8.1**	---	---	---	---	---	---	---	---	---	---	
Composite C5	N/A	0.5	---	---	---	---	---	**0.25J**	**0.59J**	ND<2.0	ND<1.0	ND<8.5	ND<2.0	ND<1.0	---	Composite of AUD-9-0.5, AUD-10-0.5, AUD-11-0.5, and AUD-12-0.5

UB-1-0.5	10/16/2016	0.5	**4.0J**	---	**6.1**	---	---	---	---	---	---	---	---	---	---	
UB-1-2.5	10/16/2016	2.5	**3.2**	---	**2.8**	---	---	---	---	---	---	---	---	---	---	
UB-2-0.5	10/16/2016	0.5	**5.9**	---	**8.6**	---	---	---	---	---	---	---	---	---	---	
UB-2-2.5	10/16/2016	2.5	**5.3**	---	**4.7**	---	---	---	---	---	---	---	---	---	---	
UB-3-0.5	10/16/2016	0.5	**6.5**	---	**26**	---	---	---	---	---	---	---	---	---	---	
UB-3-2.5	10/16/2016	2.5	**4.7**	---	**5.1**	---	---	---	---	---	---	---	---	---	---	
Composite C6	N/A	0.5	---	---	---	---	---	ND<2.0	ND<2.0	ND<2.0	ND<1.0	ND<8.5	ND<2.0	ND<1.0	ND<16	Composite of UB-1-0.5, UB-2-0.5, and UB-3-0.5
UB-4-0.5	10/16/2016	0.5	**3.1**	---	**6.9**	---	---	---	---	---	---	---	---	---	---	
UB-4-2.5	10/16/2016	2.5	**3.9**	---	**5.0**	---	---	---	---	---	---	---	---	---	---	
UB-5-0.5	10/16/2016	0.5	**6.7**	---	**9.8**	---	---	---	---	---	---	---	---	---	---	
UB-5-2.5	10/16/2016	2.5	**1.9**	---	**2.6**	---	---	---	---	---	---	---	---	---	---	
UB-5-2.5 DUP	10/16/2016	2.5	**2.4**	---	**2.4**	---	---	---	---	---	---	---	---	---	---	
UB-6-0.5	10/16/2016	0.5	**2.3**	---	**6.1**	---	---	---	---	---	---	---	---	---	---	
UB-6-0.5 DUP	10/16/2016	0.5	**2.0**	---	**5.9**	---	---	---	---	---	---	---	---	---	---	
UB-6-2.5	10/16/2016	2.5	**2.0**	---	**3.4**	---	---	---	---	---	---	---	---	---	---	
Composite C7	N/A	0.5	---	---	---	---	---	ND<2.0	ND<2.0	ND<2.0	ND<1.0	ND<8.5	ND<2.0	ND<1.0	---	Composite of UB-4-0.5, UB-5-0.5, and UB-6-0.5
HVAC-1-0.5	10/16/2016	0.5	**3.7**	---	**3.7**	---	---	---	---	---	---	---	---	---	---	
HVAC-1-2.5	10/16/2016	2.5	**2.8**	---	**2.7**	---	---	---	---	---	---	---	---	---	---	
HVAC-2-0.5	10/16/2016	0.5	**3.9**	---	**4.7**	---	---	---	---	---	---	---	---	---	---	
HVAC-2-2.5	10/16/2016	2.5	**3.4**	---	**3.1**	---	---	---	---	---	---	---	---	---	---	
HVAC-3-0.5	10/16/2016	0.5	**2.8**	---	**8.5**	---	---	---	---	---	---	---	---	---	---	
HVAC-3-2.5	10/16/2016	2.5	**2.5**	---	**6.8**	---	---	---	---	---	---	---	---	---	---	
Composite C8	N/A	0.5	---	---	---	---	---	---	---	---	---	---	---	---	ND<16	Composite of HVAC-1-0.5, HVAC-2-0.5, HVAC-3-0.5

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		Units:	mg/kg	mg/L	mg/kg	mg/L	mg/L	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	
Composite C8 DUP	N/A	0.5	---	---	---	---	---	---	---	---	---	---	---	---	ND<16	Composite of HVAC-1-0.5, HVAC-2-0.5, HVAC-3-0.5
AA-653-1-0.5	10/15/2016	0.5	**3.5**	---	**21**	---	---	---	---	---	---	---	---	---	---	
AA-653-1-2.5	10/15/2016	2.5	**9.0**	---	**12**	---	---	---	---	---	---	---	---	---	---	
AA-653-2-0.5	10/16/2016	0.5	**2.1**	---	**23**	---	---	---	---	---	---	---	---	---	---	
AA-653-2-2.5	10/16/2016	2.5	**1.5**	---	**4.7**	---	---	---	---	---	---	---	---	---	---	
AA-653-3-0.5	10/16/2016	0.5	**10**	---	**17**	---	---	---	---	---	---	---	---	---	---	
AA-653-3-2.5	10/16/2016	2.5	**2.0**	---	**13**	---	---	---	---	---	---	---	---	---	---	
AA-653-3-2.5 DUP	10/16/2016	2.5	**2.9**	---	**9.8**	---	---	---	---	---	---	---	---	---	---	
AA-653-4-0.5	10/16/2016	0.5	ND<5.0	---	**26**	---	---	---	---	---	---	---	---	---	---	
AA-653-4-2.5	10/16/2016	2.5	**2.5**	---	**17**	---	---	---	---	---	---	---	---	---	---	
Composite C9	N/A	0.5	---	---	---	---	---	**1.1J**	**1.0J**	**2.3**	ND<1.0	**1.4J**	ND<2.0	ND<1.0	---	Composite of AA653-1-0.5, AA653-2-0.5, AA653-3-0.5, and AA653-4-0.5
AA-652-1-0.5	10/16/2016	0.5	**3.5**	---	**7.4**	---	---	---	---	---	---	---	---	---	---	
AA-652-1-2.5	10/16/2016	2.5	**1.9**	---	**6.2**	---	---	---	---	---	---	---	---	---	---	
AA-652-2-0.5	10/16/2016	0.5	**2.2**	---	**4.8**	---	---	---	---	---	---	---	---	---	---	
AA-652-2-2.5	10/16/2016	2.5	**1.6**	---	**4.9**	---	---	---	---	---	---	---	---	---	---	
AA-652-3-0.5	10/16/2016	0.5	**2.6**	---	**3.4**	---	---	---	---	---	---	---	---	---	---	
AA-652-3-0.5 DUP	10/16/2016	0.5	**2.8**	---	**13**	---	---	---	---	---	---	---	---	---	---	
AA-652-3-2.5	10/16/2016	2.5	**1.6**	---	**8.3**	---	---	---	---	---	---	---	---	---	---	
AA-652-4-0.5	10/16/2016	0.5	**2.2**	---	**3.2**	---	---	---	---	---	---	---	---	---	---	
AA-652-4-2.5	10/16/2016	2.5	**1.3**	---	**4.0**	---	---	---	---	---	---	---	---	---	---	
Composite C10	N/A	0.5	---	---	---	---	---	ND<2.0	ND<2.0	ND<2.0	ND<1.0	ND<8.5	ND<2.0	ND<1.0	---	Composite of AA652-1-0.5, AA652-2-0.5, AA652-3-0.5, and AA652-4-0.5
P-6-0.5	10/16/2016	0.5	**5.2**	---	**7.5**	---	---	---	---	---	---	---	---	---	---	
P-6-2.5	10/16/2016	2.5	**7.5**	---	**4.3**	---	---	---	---	---	---	---	---	---	---	
P-7-0.5	10/16/2016	0.5	ND<10	---	**13**	---	---	---	---	---	---	---	---	---	---	
P-7-2.5	10/16/2016	2.5	**2.9**	---	**7.3**	---	---	---	---	---	---	---	---	---	---	
Q-6-0.5	10/16/2016	0.5	**1.6**	---	**6.3**	---	---	---	---	---	---	---	---	---	---	
Q-6-0.5 DUP	10/16/2016	0.5	ND<20	---	**4.9J**	---	---	---	---	---	---	---	---	---	---	
Q-6-2.5	10/16/2016	2.5	**5.8**	---	**4.4**	---	---	---	---	---	---	---	---	---	---	
Q-7-0.5	10/16/2016	0.5	**4.6**	---	**9.1**	---	---	---	---	---	---	---	---	---	---	
Q-7-2.5	10/16/2016	2.5	**5.5**	---	**5.6**	---	---	---	---	---	---	---	---	---	---	
Composite C11	N/A	0.5	---	---	---	---	---	ND<2.0	ND<2.0	ND<2.0	ND<1.0	ND<8.5	ND<2.0	ND<1.0	---	Composite of P6-0.5, P7-0.5, Q6-0.5, and Q7-0.5
Q-4-0.5	10/16/2016	0.5	**1.8J**	---	**4.9**	---	---	---	---	---	---	---	---	---	---	
Q-4-2.5	10/16/2016	2.5	**7.8**	---	**8.2**	---	---	---	---	---	---	---	---	---	---	
Q4-2.5 DUP	10/16/2016	2.5	**6.5**	---	**11**	---	---	---	---	---	---	---	---	---	---	
R-4-0.5	10/16/2016	0.5	ND<20	---	**4.0J**	---	---	---	---	---	---	---	---	---	---	
R-4-2.5	10/16/2016	2.5	**5.3**	---	**6.3**	---	---	---	---	---	---	---	---	---	---	
S-4-0.5	10/16/2016	0.5	ND<5.0	---	**8.3**	---	---	---	---	---	---	---	---	---	---	
S-4-2.5	10/16/2016	2.5	**5.3**	---	**4.4**	---	---	---	---	---	---	---	---	---	---	
T4-0.5	10/16/2016	0.5	ND<20	---	**5.4J**	---	---	---	---	---	---	---	---	---	---	
T-4-0.5 DUP	10/16/2016	0.5	**1.2**	---	**3.4**	---	---	---	---	---	---	---	---	---	---	

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		Units:	mg/kg	mg/L	mg/kg	mg/L	mg/L	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	
T-4-2.5	10/16/2016	2.5	**4.4**	---	**7.7**	---	---	---	---	---	---	---	---	---	---	
Composite C12	N/A	0.5	---	---	---	---	---	ND<2.0	ND<2.0	ND<2.0	ND<1.0	ND<8.5	ND<2.0	ND<1.0	---	Composite of Q4-0.5, R4-0.5, S4-0.5, and T4-0.5
Composite C12 DUP	N/A	0.5	---	---	---	---	---	ND<2.0	ND<2.0	ND<2.0	ND<1.0	ND<8.5	ND<2.0	ND<1.0	---	Composite of Q4-0.5, R4-0.5, S4-0.5, and T4-0.5
R-7-0.5	10/16/2016	0.5	**2.8**	---	**7.9**	---	---	---	---	---	---	---	---	---	---	
R-7-2.5	10/16/2016	2.5	**5.5**	---	**9.7**	---	---	---	---	---	---	---	---	---	---	
S-7-0.5	10/16/2016	0.5	**9.1**	---	**7.8**	---	---	---	---	---	---	---	---	---	---	
S-7-2.5	10/16/2016	2.5	**4.8**	---	**6.5**	---	---	---	---	---	---	---	---	---	---	
T-7-0.5	10/16/2016	0.5	ND<1.0	---	**4.9**	---	---	---	---	---	---	---	---	---	---	
T-7-2.5	10/16/2016	2.5	**2.9**	---	**17**	---	---	---	---	---	---	---	---	---	---	
Composite C13	N/A	0.5	---	---	---	---	---	ND<2.0	ND<2.0	ND<2.0	ND<1.0	ND<8.5	ND<2.0	ND<1.0	---	Composite of R7-0.5, S7-0.5, and T7-0.5
Area 6																
AA955-1-0.5	10/23/2016	0.5	**7.0**	---	**4.0**	---	---	---	---	---	---	---	---	---	---	
AA955-1-2.5	10/23/2016	2.5	**9.2**	---	**4.1**	---	---	---	---	---	---	---	---	---	---	
AA955-2-0.5	10/23/2016	0.5	**8.2**	---	**5.5**	---	---	---	---	---	---	---	---	---	---	
AA955-2-2.5	10/23/2016	2.5	**9.6**	---	**5.4**	---	---	---	---	---	---	---	---	---	---	
AA955-2-2.5 DUP	10/23/2016	2.5	**11**	---	**5.4**	---	---	---	---	---	---	---	---	---	---	
AA955-3-0.5	10/23/2016	0.5	**1.5**	---	**6.3**	---	---	---	---	---	---	---	---	---	---	
AA955-3-0.5 DUP	10/23/2016	0.5	**2.1**	---	**5.6**	---	---	---	---	---	---	---	---	---	---	
AA955-3-2.5	10/23/2016	2.5	**1.4**	---	**7.4**	---	---	---	---	---	---	---	---	---	---	
Composite F1	N/A	0.5	---	---	---	---	---	ND<20	ND<20	ND<20	ND<10	ND<85	ND<20	ND<10	ND<16	Composite of AA955-1-0.5, AA955-2-0.5, and AA955-3-0.5
AA955-4-0.5	10/23/2016	0.5	**1.2**	---	**3.2**	---	---	---	---	---	---	---	---	---	---	
AA955-4-2.5	10/23/2016	2.5	**1.1**	---	**33**	---	---	---	---	---	---	---	---	---	---	
AA955-5-0.5	10/23/2016	0.5	**2.2**	---	**3.8**	---	---	---	---	---	---	---	---	---	---	
AA955-5-2.5	10/23/2016	2.5	**0.82J**	---	**2.7**	---	---	---	---	---	---	---	---	---	---	
AA955-6-0.5	10/23/2016	0.5	**1.0**	---	**3.4**	---	---	---	---	---	---	---	---	---	---	
AA955-6-2.5	10/23/2016	2.5	ND<1.0	---	**2.1**	---	---	---	---	---	---	---	---	---	---	
Composite F2	N/A	0.5	---	---	---	---	---	ND<20	ND<20	ND<20	ND<10	ND<85	ND<20	ND<10	---	Composite of AA955-4-0.5, AA955-5-0.5, and AA955-6-0.5
AA2573-1-0.5	10/23/2016	0.5	**2.7**	---	**13**	---	---	---	---	---	---	---	---	---	---	
AA2573-1-2.5	10/23/2016	2.5	**2.8**	---	**16**	---	---	---	---	---	---	---	---	---	---	
AA2573-2-0.5	10/29/2016	0.5	**1.9**	---	**3.3**	---	---	---	---	---	---	---	---	---	---	
AA2573-2-0.5 DUP	10/29/2016	0.5	**2.1**	---	**3.5**	---	---	---	---	---	---	---	---	---	---	
AA2573-2-2.5	10/29/2016	2.5	**3.7**	---	**17**	---	---	---	---	---	---	---	---	---	---	
AA2573-3-0.5	10/23/2016	0.5	**1.5**	---	**3.9**	---	---	---	---	---	---	---	---	---	---	
AA2573-3-2.5	10/23/2016	2.5	**2.2**	---	**3.5**	---	---	---	---	---	---	---	---	---	---	
Composite F3	N/A	0.5	---	---	---	---	---	ND<2.0	**1.9J**	**1.9J**	ND<1.0	ND<8.5	**5.6**	ND<1.0	---	Composite of AA2573-1-0.5, AA2573-2-0.5, and AA2573-3-0.5
AA2573-4-0.5	10/23/2016	0.5	**5.2**	---	**6.5**	---	---	---	---	---	---	---	---	---	---	
AA2573-4-2.5	10/23/2016	2.5	**2.4**	---	**4.9**	---	---	---	---	---	---	---	---	---	---	
AA2573-5-0.5	10/23/2016	0.5	**6.2**	---	**13**	---	---	---	---	---	---	---	---	---	---	
AA2573-5-2.5	10/23/2016	2.5	**2.4**	---	**11**	---	---	---	---	---	---	---	---	---	---	
Composite F4	N/A	0.5	---	---	---	---	---	ND<2.0	ND<2.0	ND<2.0	ND<1.0	ND<8.5	**13**	ND<1.0	---	Composite of AA2573-4-0.5 and AA2573-5-0.5
AA1917-1-0.5	10/29/2016	0.5	**1.6**	---	**3.3**	---	---	---	---	---	---	---	---	---	---	

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			TTLC	STLC	TTLC	STLC	TCLP	4,4'-DDD	4,4'-DDE	4,4'-DDT	alpha-Chlordane	Chlordane	Dieldrin	gamma-Chlordane		
		Units:	mg/kg	mg/L	mg/kg	mg/L	mg/L	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	
AA1917-1-2.5	10/29/2016	2.5	**1.5**	**---**	**16**	---	---	---	---	---	---	---	---	---	---	
AA1917-2-0.5	10/29/2016	0.5	**2.1**	**---**	**4.5**	---	---	---	---	---	---	---	---	---	---	
AA1917-2-2.5	10/29/2016	2.5	**1.5**	**---**	**9.1**	---	---	---	---	---	---	---	---	---	---	
AA1917-3-0.5	10/29/2016	0.5	**1.8**	**---**	**4.7**	---	---	---	---	---	---	---	---	---	---	
AA1917-3-2.5	10/29/2016	2.5	**1.8**	**---**	**6.1**	---	---	---	---	---	---	---	---	---	---	
AA1917-4-0.5	10/29/2016	0.5	**1.9**	**---**	**5.5**	---	---	---	---	---	---	---	---	---	---	
AA1917-4-2.5	10/29/2016	2.5	**2.5**	**---**	**220**	**0.52 J**	---	---	---	---	---	---	---	---	---	
AA1917-4-3.5	3/25/2017	3.5	---	---	**120**	**0.43 J**	---	---	---	---	---	---	---	---	---	
AA1917-4-3.5 DUP	3/25/2017	3.5	---	---	**12**	---	---	---	---	---	---	---	---	---	---	
AA1917-4b-0.5	11/22/2016	0.5	---	**---**	**3.8**	---	---	---	---	---	---	---	---	---	---	
AA1917-4b-2.5	11/22/2016	2.5	---	**---**	**6.5**	---	---	---	---	---	---	---	---	---	---	
AA1917-4b-3.5	11/22/2016	3.5	---	---	**18**	---	---	---	---	---	---	---	---	---	---	
AA1917-4c-2.5	11/22/2016	2.5	---	---	**3.0**	---	---	---	---	---	---	---	---	---	---	
AA1917-4c-2.5 DUP	11/22/2016	2.5	---	---	**2.3**	---	---	---	---	---	---	---	---	---	---	
AA1917-4c-3.5	11/22/2016	3.5	---	**---**	**3.9**	---	---	---	---	---	---	---	---	---	---	
AA1917-4d-0.5	11/22/2016	0.5	---	---	**5.4**	---	---	---	---	---	---	---	---	---	---	
AA1917-4d-2.5	11/22/2016	2.5	---	**---**	**8.7**	---	---	---	---	---	---	---	---	---	---	
AA1917-4d-2.5 DUP	11/22/2016	2.5	---	---	**7.5**	---	---	---	---	---	---	---	---	---	---	
AA1917-4d-3.5	11/22/2016	3.5	---	**---**	**6.9**	---	---	---	---	---	---	---	---	---	---	
Composite F5	N/A	0.5	**---**	---	**---**	---	---	ND<2.0	ND<2.0	ND<2.0	ND<1.0	ND<8.5	**2.8**	ND<1.0	**---**	Composite of AA1917-1-0.5, AA1917-2-0.5, AA1917-3-0.5, and AA1917-4-0.5
AA2685-1-0.5	10/29/2016	0.5	**5.5**	---	**27**	---	---	---	---	---	---	---	---	---	---	
AA2685-1-2.5	10/29/2016	2.5	**5.2**	**---**	**10**	---	---	---	---	---	---	---	---	---	---	
AA2685-2-0.5	10/29/2016	0.5	**9.5**	---	**9.2**	---	---	---	---	---	---	---	---	---	---	
AA2685-2-2.5	10/29/2016	2.5	**4.9**	**---**	**19**	---	---	---	---	---	---	---	---	---	---	
AA2685-3-0.5	10/29/2016	0.5	**2.2**	---	**14**	---	---	---	---	---	---	---	---	---	---	
AA2685-3-2.5	10/29/2016	2.5	**2.6**	**---**	**19**	---	---	---	---	---	---	---	---	---	---	
AA2685-4-0.5	10/29/2016	0.5	**4.2**	---	**7.7**	---	---	---	---	---	---	---	---	---	---	
AA2685-4-2.5	10/29/2016	2.5	**5.9**	---	**9.5**	---	---	---	---	---	---	---	---	---	---	
AA2685-4-2.5 DUP	10/29/2016	2.5	**6.0**	**---**	**10**	---	---	---	---	---	---	---	---	---	---	
Composite F6	N/A	0.5	**---**	---	**---**	---	---	ND<10	ND<10	**15**	**1.3J**	**18J**	**2.0J**	**2.0J**	**---**	Composite of AA2685-1-0.5, AA2685-2-0.5, AA2685-3-0.5, and AA2685-4-0.5
AA2684-1-0.5	10/29/2016	0.5	**2.0**	---	**11**	---	---	---	---	---	---	---	---	---	---	
AA2684-1-2.5	10/29/2016	2.5	**2.0**	**---**	**16**	---	---	---	---	---	---	---	---	---	---	
AA2684-2-0.5	10/29/2016	0.5	**18**	---	**19**	---	---	---	---	---	---	---	---	---	---	
AA2684-2-2.5	10/29/2016	2.5	**20**	**---**	**16**	---	---	---	---	---	---	---	---	---	---	
AA2684-2-3.5	3/25/2017	3.5	**19**	**---**	**---**	---	---	---	---	---	---	---	---	---	---	
AA2684-2-3.5 DUP	3/25/2017	3.5	**20**	**---**	**---**	---	---	---	---	---	---	---	---	---	---	
AA2684-3-0.5	10/29/2016	0.5	**6.7**	---	**20**	---	---	---	---	---	---	---	---	---	---	
AA2684-3-2.5	10/29/2016	2.5	**33**	**---**	**25**	---	---	---	---	---	---	---	---	---	---	
AA2684-3-3.5	3/25/2017	3.5	**15**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	
AA2684-4-0.5	10/29/2016	0.5	**6.8**	---	**16**	---	---	---	---	---	---	---	---	---	---	
AA2684-4-2.5	10/29/2016	2.5	**8.5**	---	**7.3**	---	---	---	---	---	---	---	---	---	---	
AA2684-5-0.5	12/21/2016	0.5	**2.7**	**---**	---	---	---	---	---	---	---	---	---	---	---	

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		Units:	mg/kg	mg/L	mg/kg	mg/L	mg/L	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	
AA2684-5-2.5	12/21/2016	2.5	**1.9**	---	---	---	---	---	---	---	---	---	---	---	---	
AA2684-5-3.5	12/21/2016	3.5	**1.6**	---	---	---	---	---	---	---	---	---	---	---	---	
AA2684-6-0.5	12/21/2016	0.5	**27**	**---**	---	---	---	---	---	---	---	---	---	---	---	
AA2684-6-0.5 DUP	12/21/2016	0.5	**28**	---	---	---	---	---	---	---	---	---	---	---	---	
AA2684-6-2.5	12/21/2016	2.5	**28**	**---**	---	---	---	---	---	---	---	---	---	---	---	
AA2684-6-3.5	12/21/2016	3.5	**23**	---	---	---	---	---	---	---	---	---	---	---	---	
AA2684-6-4.5	3/25/2017	4.5	**4.7**	---	---	---	---	---	---	---	---	---	---	---	---	
AA2684-7-0.5	12/21/2016	0.5	**2.3**	**---**	---	---	---	---	---	---	---	---	---	---	---	
AA2684-7-2.5	12/21/2016	2.5	**1.4**	---	---	---	---	---	---	---	---	---	---	---	---	
AA2684-7-3.5	12/21/2016	3.5	**1.2**	---	---	---	---	---	---	---	---	---	---	---	---	
Composite F7	N/A	0.5	**---**	**---**	**---**	---	---	ND<10	ND<10	ND<10	ND<5.0	**5.1J**	ND<10	ND<5.0	**---**	Composite of AA2684-1-0.5, AA2684-2-0.5, AA2684-3-0.5, and AA2684-4-0.5
AA2543-1-0.5	10/29/2016	0.5	**3.9**	**---**	**7.4**	---	---	---	---	---	---	---	---	---	---	
AA2543-1-2.5	10/29/2016	2.5	**34**	---	**26**	---	---	---	---	---	---	---	---	---	---	
AA2543-1-3.5	3/25/2017	3.5	**23**	---	---	---	---	---	---	---	---	---	---	---	---	
AA2543-2-0.5	10/29/2016	0.5	**23**	**---**	**17**	---	---	---	---	---	---	---	---	---	---	
AA2543-2-2.5	10/29/2016	2.5	**25**	---	**17**	---	---	---	---	---	---	---	---	---	---	
AA2543-2-2.5 DUP	10/29/2016	2.5	**24**	**---**	**17**	---	---	---	---	---	---	---	---	---	---	
AA2543-2-3.5	3/25/2017	3.5	**7.2**	**---**	**---**	---	---	---	---	---	---	---	---	---	---	
AA2543-3-0.5	10/29/2016	0.5	**2.0**	---	**7.2**	---	---	---	---	---	---	---	---	---	---	
AA2543-3-2.5	10/29/2016	2.5	**4.2**	**---**	**18**	---	---	---	---	---	---	---	---	---	---	
Composite F8	N/A	0.5	**---**	---	**---**	---	---	ND<10	ND<10	ND<10	ND<5.0	**6.5J**	ND<10	ND<5.0	**---**	Composite of AA2543-1-0.5, AA2543-2-0.5, and AA2543-3-0.5
AA2543-4-0.5	10/29/2016	0.5	**6.2**	**---**	**12**	---	---	---	---	---	---	---	---	---	---	
AA2543-4-2.5	10/29/2016	2.5	**11**	---	**38**	---	---	---	---	---	---	---	---	---	---	
AA2543-5-0.5	10/29/2016	0.5	**25**	**---**	**16**	---	---	---	---	---	---	---	---	---	---	
AA2543-5-2.5	10/29/2016	2.5	**34**	---	**26**	---	---	---	---	---	---	---	---	---	---	
AA2543-5-3.5	3/26/2017	3.5	**27**	---	---	---	---	---	---	---	---	---	---	---	---	
AA2543-5-3.5 DUP	3/26/2017	3.5	**30**	---	---	---	---	---	---	---	---	---	---	---	---	
AA2543-6-0.5	10/29/2016	0.5	**39**	**---**	**34**	---	---	---	---	---	---	---	---	---	---	
AA2543-6-2.5	10/29/2016	2.5	**19**	---	**35**	---	---	---	---	---	---	---	---	---	---	
AA2543-6-3.5	3/26/2017	3.5	**1.2**	---	---	---	---	---	---	---	---	---	---	---	---	
AA2543-7-0.5	12/21/2016	0.5	**2.7**	**---**	**29**	---	---	---	---	---	---	---	---	---	---	
AA2543-7-2.5	12/21/2016	2.5	**1.5**	---	**4.0**	---	---	---	---	---	---	---	---	---	---	
AA2543-7-2.5 DUP	12/21/2016	2.5	**1.6**	**---**	---	---	---	---	---	---	---	---	---	---	---	
AA2543-7-3.5	12/21/2016	3.5	**2.9**	---	---	---	---	---	---	---	---	---	---	---	---	
AA2543-8-0.5	12/21/2016	0.5	**2.8**	**---**	**39**	---	---	---	---	---	---	---	---	---	---	
AA2543-8-2.5	12/21/2016	2.5	**2.0**	---	**8.4**	---	---	---	---	---	---	---	---	---	---	
AA2543-8-3.5	12/21/2016	3.5	**1.5**	**---**	---	---	---	---	---	---	---	---	---	---	---	
Composite F9	N/A	0.5	**---**	---	**---**	---	---	ND<10	ND<10	ND<10	ND<5.0	ND<42	ND<10	ND<5.0	**---**	Composite of AA2543-4-0.5, AA2543-5-0.5, and AA2543-6-0.5
AA2038-1-0.5	10/30/2016	0.5	**23**	**---**	**11**	---	---	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	
AA2038-1-2.5	10/30/2016	2.5	**23**	---	**7.9**	---	---	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	
AA2038-1-3.5	3/26/2017	3.5	**19**	---	---	---	---	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	
AA2038-2-0.5	10/30/2016	0.5	**14**	**---**	**13**	---	---	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	
AA2038-2-2.5	10/30/2016	2.5	**31**	---	**15**	---	---	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	

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			TTLC	STLC	TTLC	STLC	TCLP	4,4'-DDD	4,4'-DDE	4,4'-DDT	alpha-Chlordane	Chlordane	Dieldrin	gamma-Chlordane		
		Units:	mg/kg	mg/L	mg/kg	mg/L	mg/L	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	
AA2038-2-3.5	3/26/2017	3.5	**24**	---	---	---	---	---	---	---	---	---	---	---	---	
AA2038-3-0.5	10/30/2016	0.5	**13**	---	**8.0**	---	---	---	---	---	---	---	---	---	---	
AA2038-3-2.5	10/30/2016	2.5	**27**	---	**10**	---	---	---	---	---	---	---	---	---	---	
AA2038-3-3.5	3/26/2017	3.5	**12**	---	---	---	---	---	---	---	---	---	---	---	---	
AA2038-4-0.5	10/30/2016	0.5	**16**	---	**13**	---	---	---	---	---	---	---	---	---	---	
AA2038-4-2.5	10/30/2016	2.5	**20**	---	**9.8**	---	---	---	---	---	---	---	---	---	---	
AA2038-4-2.5 DUP	10/30/2016	2.5	**21**	---	**12**	---	---	---	---	---	---	---	---	---	---	
AA2038-4-3.5	3/26/2017	3.5	**20**	---	---	---	---	---	---	---	---	---	---	---	---	
AA2038-5-0.5	12/21/2016	0.5	**4.1**	---	---	---	---	---	---	---	---	---	---	---	---	
AA2038-5-2.5	12/21/2016	2.5	**3.4**	---	---	---	---	---	---	---	---	---	---	---	---	
AA2038-5-3.5	12/21/2016	3.5	**2.8**	---	---	---	---	---	---	---	---	---	---	---	---	
AA2038-6-0.5	12/21/2016	0.5	**6.1**	---	---	---	---	---	---	---	---	---	---	---	---	
AA2038-6-2.5	12/21/2016	2.5	**3.3**	---	---	---	---	---	---	---	---	---	---	---	---	
AA2038-6-3.5	12/21/2016	3.5	**3.9**	---	---	---	---	---	---	---	---	---	---	---	---	
AA2038-7-0.5	12/21/2016	0.5	**12**	---	**40**	---	---	---	---	---	---	---	---	---	---	
AA2038-7-2.5	12/21/2016	2.5	**11**	---	**37**	---	---	---	---	---	---	---	---	---	---	
AA2038-7-3.5	12/21/2016	3.5	**8.8**	---	---	---	---	---	---	---	---	---	---	---	---	
AA2038-7-3.5 DUP	12/21/2016	3.5	**10**	---	---	---	---	---	---	---	---	---	---	---	---	
AA2038-8-0.5	12/21/2016	0.5	**5.5**	---	**59**	---	---	---	---	---	---	---	---	---	---	
AA2038-8-2.5	12/21/2016	2.5	**4.2**	---	**21**	---	---	---	---	---	---	---	---	---	---	
AA2038-8-3.5	12/21/2016	3.5	**4.0**	---	---	---	---	---	---	---	---	---	---	---	---	
AA2038-9-0.5	12/21/2016	0.5	**6.4**	---	**150**	**8.1**	0.040	---	---	---	---	---	---	---	---	
AA2038-9-2.5	12/21/2016	2.5	**4.2**	---	**14**	---	---	---	---	---	---	---	---	---	---	
AA2038-9-3.5	12/21/2016	3.5	**4.1**	---	---	---	---	---	---	---	---	---	---	---	---	
Composite F10	N/A	0.5	---	---	---	---	---	ND<20	ND<20	ND<20	ND<10	ND<85	ND<20	ND<10	---	Composite of AA2038-1-0.5, AA2038-2-0.5, AA2038-3-0.5, and AA2038-4-0.5
Composite F10 DUP	N/A	0.5	---	---	---	---	---	ND<20	ND<20	ND<20	ND<10	ND<85	ND<20	ND<10	---	Composite of AA2038-1-0.5, AA2038-2-0.5, AA2038-3-0.5, and AA2038-4-0.5
AA2249-1-0.5	10/30/2016	0.5	**24**	---	**14**	---	---	---	---	---	---	---	---	---	---	
AA2249-1-2.5	10/30/2016	2.5	**33**	---	**12**	---	---	---	---	---	---	---	---	---	---	
AA2249-1-3.5	3/26/2017	3.5	**19**	---	---	---	---	---	---	---	---	---	---	---	---	
AA2249-2-0.5	10/30/2016	0.5	**22**	---	**19**	---	---	---	---	---	---	---	---	---	---	
AA2249-2-2.5	10/30/2016	2.5	**35**	---	**13**	---	---	---	---	---	---	---	---	---	---	
AA2249-2-2.5 DUP	10/30/2016	2.5	**31**	---	**14**	---	---	---	---	---	---	---	---	---	---	
AA2249-2-3.5	3/26/2017	3.5	**26**	---	---	---	---	---	---	---	---	---	---	---	---	
AA2249-3-0.5	10/30/2016	0.5	**6.4**	---	**8.5**	---	---	---	---	---	---	---	---	---	---	
AA2249-3-2.5	10/30/2016	2.5	**5.9**	---	**9.2**	---	---	---	---	---	---	---	---	---	---	
AA2249-4-0.5	10/30/2016	0.5	**2.3**	---	**4.2**	---	---	---	---	---	---	---	---	---	---	
AA2249-4-2.5	10/30/2016	2.5	**1.7**	---	**1.9**	---	---	---	---	---	---	---	---	---	---	
AA2249-5-0.5	12/21/2016	0.5	**6.1**	---	---	---	---	---	---	---	---	---	---	---	---	
AA2249-5-0.5 DUP	12/21/2016	0.5	**5.4**	---	---	---	---	---	---	---	---	---	---	---	---	
AA2249-5-2.5	12/21/2016	2.5	**6.1**	---	---	---	---	---	---	---	---	---	---	---	---	
AA2249-5-3.5	12/21/2016	3.5	**10**	---	---	---	---	---	---	---	---	---	---	---	---	
AA2249-6-0.5	12/21/2016	0.5	**1.6**	---	---	---	---	---	---	---	---	---	---	---	---	
AA2249-6-2.5	12/21/2016	2.5	**2.9**	---	---	---	---	---	---	---	---	---	---	---	---	

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		Units:	mg/kg	mg/L	mg/kg	mg/L	mg/L	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	
AA2249-6-3.5	12/21/2016	3.5	**3.0**	---	---	---	---	---	---	---	---	---	---	---	---	
Composite F11	N/A	0.5	---	---	---	---	---	ND<20	ND<20	ND<20	ND<10	ND<85	ND<20	ND<10	---	Composite of AA2249-1-0.5, AA2249-2-0.5, AA2249-3-0.5, and AA2249-4-0.5
FS-1-0.5	10/23/2016	0.5	**3.0**	---	**19**	---	---	---	---	---	---	---	---	---	---	
FS-1-2.5	10/23/2016	2.5	ND<1.0	---	**3.9**	---	---	---	---	---	---	---	---	---	---	
FS-2-0.5	10/23/2016	0.5	**20**	---	**6.7**	---	---	---	---	---	---	---	---	---	---	
FS-2-2.5	10/23/2016	2.5	**4.9**	---	**3.1**	---	---	---	---	---	---	---	---	---	---	
FS-2b-0.5	11/22/2016	0.5	**10**	---	---	---	---	---	---	---	---	---	---	---	---	
FS-2c-0.5	11/22/2016	0.5	**3.4**	---	---	---	---	---	---	---	---	---	---	---	---	
FS-3-0.5	10/23/2016	0.5	**2.4**	---	**4.5**	---	---	---	---	---	---	---	---	---	---	
FS-3-2.5	10/23/2016	2.5	**3.7**	---	**3.3**	---	---	---	---	---	---	---	---	---	---	
FS-4-0.5	10/23/2016	0.5	**3.9**	---	**29**	---	---	---	---	---	---	---	---	---	---	
FS-4-2.5	10/23/2016	2.5	**1.4**	---	**2.7**	---	---	---	---	---	---	---	---	---	---	
Composite F12	N/A	0.5	---	---	---	---	---	ND<2.0	**0.80J**	ND<2.0	ND<1.0	ND<8.5	**1.0J**	ND<1.0	---	Composite of FS-1-0.5, FS-2-0.5, FS-3-0.5, and FS-4-0.5
IA-1-0.5	10/30/2016	0.5	**0.88J**	---	**3.2**	---	---	---	---	---	---	---	---	---	---	
IA-1-2.5	10/30/2016	2.5	**3.6**	---	**20**	---	---	---	---	---	---	---	---	---	---	
IA-2-0.5	10/30/2016	0.5	**0.80J**	---	**4.0**	---	---	---	---	---	---	---	---	---	---	
IA-2-2.5	10/30/2016	2.5	**0.90J**	---	**3.6**	---	---	---	---	---	---	---	---	---	---	
IA-3-0.5	10/30/2016	0.5	**2.2**	---	**2.6**	---	---	---	---	---	---	---	---	---	---	
IA-3-0.5 DUP	10/30/2016	0.5	**2.0**	---	**3.7**	---	---	---	---	---	---	---	---	---	---	
IA-3-2.5	10/30/2016	2.5	**0.96J**	---	**2.6**	---	---	---	---	---	---	---	---	---	---	
IA-4-0.5	10/30/2016	0.5	**1.8**	---	**13**	---	---	---	---	---	---	---	---	---	---	
IA-4-2.5	10/30/2016	2.5	**2.2**	---	**8.7**	---	---	---	---	---	---	---	---	---	---	
IA-5-0.5	10/30/2016	0.5	**1.7**	---	**29**	---	---	---	---	---	---	---	---	---	---	
IA-5-2.5	10/30/2016	2.5	**2.4**	---	**12**	---	---	---	---	---	---	---	---	---	---	
IA-6-0.5	10/30/2016	0.5	**1.4**	---	**24**	---	---	---	---	---	---	---	---	---	---	
IA-6-2.5	10/30/2016	2.5	**3.4**	---	**35**	---	---	---	---	---	---	---	---	---	---	
IA-7-0.5	3/26/2017	0.5	---	---	**12**	---	---	---	---	---	---	---	---	---	---	
IA-7-2.5	3/26/2017	2.5	---	---	**7.9**	---	---	---	---	---	---	---	---	---	---	
IA-7-3.5	3/26/2017	3.5	---	---	**2.8**	---	---	---	---	---	---	---	---	---	---	
IA-7-4.5	3/26/2017	4.5	---	---	**13**	---	---	---	---	---	---	---	---	---	---	
IA-8-0.5	3/26/2017	0.5	---	---	**21**	---	---	---	---	---	---	---	---	---	---	
IA-8-2.5	3/26/2017	2.5	---	---	**11**	---	---	---	---	---	---	---	---	---	---	
IA-8-3.5	3/26/2017	3.5	---	---	**11**	---	---	---	---	---	---	---	---	---	---	
IA-8-4.5	3/26/2017	4.5	---	---	**9.6**	---	---	---	---	---	---	---	---	---	---	
AS-1-0.5	10/30/2016	0.5	**1.6**	---	**3.9**	---	---	---	---	---	---	---	---	---	---	
AS-1-2.5	10/30/2016	2.5	**1.6**	---	**4.0**	---	---	---	---	---	---	---	---	---	---	
AS-2-0.5	10/30/2016	0.5	**2.0**	---	**65**	---	---	---	---	---	---	---	---	---	---	
AS-2-2.5	10/30/2016	2.5	**1.6**	---	**10**	---	---	---	---	---	---	---	---	---	---	
AS-2-2.5 DUP	10/30/2016	2.5	**2.5**	---	**7.3**	---	---	---	---	---	---	---	---	---	---	
AS-3-0.5	10/30/2016	0.5	**1.7**	---	**5.5**	---	---	---	---	---	---	---	---	---	---	
AS-3-2.5	10/30/2016	2.5	**1.7**	---	**14**	---	---	---	---	---	---	---	---	---	---	
AS-4-0.5	10/30/2016	0.5	**2.0**	---	**4.4**	---	---	---	---	---	---	---	---	---	---	

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		Units:	mg/kg	mg/L	mg/kg	mg/L	mg/L	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	
AS-4-2.5	10/30/2016	2.5	**1.5**	**---**	**3.2**	---	---	---	---	---	---	---	---	---	---	
Composite F13	N/A	0.5	**---**	**---**	**---**	---	---	ND<2.0	ND<2.0	ND<2.0	ND<1.0	ND<8.5	ND<2.0	ND<1.0	ND<16	Composite of AS-1-0.5, AS-2-0.5, AS-3-0.5, and AS-4-0.5
IM-1-0.5	10/30/2016	0.5	**8.3**	---	**42**	---	---	---	---	---	---	---	---	---	---	
IM-1-2.5	10/30/2016	2.5	**20**	---	**35**	---	---	---	---	---	---	---	---	---	---	
IM-1-3.5	3/26/2017	3.5	**4.4**	---	---	---	---	---	---	---	---	---	---	---	---	
IM-1a-0.5	12/21/2016	0.5	**1.1**	---	---	---	---	---	---	---	---	---	---	---	---	
IM-1a-2.5	12/21/2016	2.5	**1.5**	---	---	---	---	---	---	---	---	---	---	---	---	
IM-1a-3.5	12/21/2016	3.5	**1.6**	---	---	---	---	---	---	---	---	---	---	---	---	
IM-1b-0.5	11/23/2016	0.5	**7.2**	---	**44**	---	---	---	---	---	---	---	---	---	---	
IM-1b-2.5	11/23/2016	2.5	**2.0**	---	**10**	---	---	---	---	---	---	---	---	---	---	
IM-1b-3.5	11/23/2016	3.5	**2.9**	---	**8.5**	---	---	---	---	---	---	---	---	---	---	
IM-1d-0.5	11/23/2016	0.5	**5.0**	---	---	---	---	---	---	---	---	---	---	---	---	
IM-1d-2.5	11/23/2016	2.5	**3.7**	---	---	---	---	---	---	---	---	---	---	---	---	
IM-2-0.5	10/30/2016	0.5	**4.2**	---	**42**	---	---	---	---	---	---	---	---	---	---	
IM-2-2.5	10/30/2016	2.5	**4.6**	---	**160**	**13**	**0.020 J**	---	---	---	---	---	---	---	---	
IM-2-3.5	3/26/2017	3.5	---	---	**63**	---	---	---	---	---	---	---	---	---	---	
IM-2a-0.5	12/21/2016	0.5	---	---	**2.5**	---	---	---	---	---	---	---	---	---	---	
IM-2a-2.5	12/21/2016	2.5	---	---	**2.3**	---	---	---	---	---	---	---	---	---	---	
IM-2a-3.5	12/21/2016	3.5	---	---	**2.2**	---	---	---	---	---	---	---	---	---	---	
IM-2b-0.5	11/23/2016	0.5	**17**	---	**100**	**6.8**	**0.028 J**	---	---	---	---	---	---	---	---	
IM-2b-0.5 DUP	11/23/2016	0.5	**17**	---	**150**	**6.3**	**0.038 J**	---	---	---	---	---	---	---	---	
IM-2b-2.5	11/23/2016	2.5	---	---	**4.1**	---	---	---	---	---	---	---	---	---	---	
IM-2b-3.5	11/23/2016	3.5	---	---	**3.3**	---	---	---	---	---	---	---	---	---	---	
IM-3-0.5	10/30/2016	0.5	**25**	---	**74**	---	---	---	---	---	---	---	---	---	---	
IM-3-0.5 DUP	10/30/2016	0.5	**22**	---	**61**	---	---	---	---	---	---	---	---	---	---	
IM-3-2.5	10/30/2016	2.5	**6.9**		**11**	---	---	---	---	---	---	---	---	---	---	
IM-3c-0.5	11/23/2016	0.5	**66**	**4.1**	---	---	---	---	---	---	---	---	---	---	---	
IM-3c-2.5	11/23/2016	2.5	**22**	---	---	---	---	---	---	---	---	---	---	---	---	
IM-3c-3.5	11/23/2016	3.5	**16**	---	---	---	---	---	---	---	---	---	---	---	---	
IM-3c-4.5	3/26/2017	4.5	**2.2**	---	---	---	---	---	---	---	---	---	---	---	---	
Composite F14	N/A	0.5	**---**	---	**---**	---	---	**5.0**	**400**	**18**	**30**	**270**	**6.7**	**30**	**---**	Composite of IM-1-0.5, IM-2-0.5, and IM-3-0.5
IM-4-0.5	10/30/2016	0.5	**16**	---	**66**	---	---	---	---	---	---	---	---	---	---	
IM-4-2.5	10/30/2016	2.5	**20**	---	**22**	---	---	---	---	---	---	---	---	---	---	
IM-4-3.5	3/26/2017	3.5	ND<1.0	---	---	---	---	---	---	---	---	---	---	---	---	
IM-4d-0.5	11/23/2016	0.5	**9.3**	---	---	---	---	---	---	---	---	---	---	---	---	
IM-4d-2.5	11/23/2016	2.5	**4.7**	---	---	---	---	---	---	---	---	---	---	---	---	
IM-4d-3.5	11/23/2016	3.5	**5.7**	---	---	---	---	---	---	---	---	---	---	---	---	
IM-5-0.5	10/30/2016	0.5	**29**	---	**54**	---	---	---	---	---	---	---	---	---	---	
IM-5-2.5	10/30/2016	2.5	**22**	---	**40**	---	---	---	---	---	---	---	---	---	---	
IM-5-3.5	3/26/2017	3.5	**2.1**	---	---	---	---	---	---	---	---	---	---	---	---	
IM-5d-0.5	11/23/2016	0.5	**24**	---	---	---	---	---	---	---	---	---	---	---	---	
IM-5d-2.5	11/23/2016	2.5	**5.5**	---	---	---	---	---	---	---	---	---	---	---	---	
IM-5d-2.5 DUP	11/23/2016	2.5	**7.3**	---	---	---	---	---	---	---	---	---	---	---	---	
IM-5d-3.5	11/23/2016	3.5	**14**	---	---	---	---	---	---	---	---	---	---	---	---	
IM-5d-4.5	3/26/2017	4.5	**11**	---	---	---	---	---	---	---	---	---	---	---	---	

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IM-5d-4.5 DUP	3/26/2017	4.5	**10**	---	---	---	---	---	---	---	---	---	---	---	---	
IM-6-0.5	10/30/2016	0.5	**12**	---	**36**	---	---	---	---	---	---	---	---	---	---	
IM-6-2.5	10/30/2016	2.5	**2.9**	---	**25**	---	---	---	---	---	---	---	---	---	---	
IM-6-2.5 DUP	10/30/2016	2.5	**2.6**	---	**29**	---	---	---	---	---	---	---	---	---	---	
Composite F15	N/A	0.5	**---**	---	**---**	---	---	ND<2.0	**1.1J**	ND<2.0	**1.2**	**13**	**1.3J**	**1.2**	**---**	Composite of IM-4-0.5, IM-5-0.5, and IM-6-0.5
CRA-1-0.5	10/30/2016	0.5	**1.8**	---	**26**	---	---	---	---	---	---	---	---	---	---	
CRA-1-0.5 DUP	10/30/2016	0.5	**2.3**	---	**24**	---	---	---	---	---	---	---	---	---	---	
CRA-1-2.5	10/30/2016	2.5	**2.5**	---	**51**	---	---	---	---	---	---	---	---	---	---	
CRA-2-0.5	10/30/2016	0.5	**3.6**	---	**110**	**10**	ND<0.25	---	---	---	---	---	---	---	---	
CRA-2-2.5	10/30/2016	2.5	**3.5**	---	**140**	**5.4**	**0.033 J**	---	---	---	---	---	---	---	---	
CRA-2-3.5	3/26/2017	3.5	---	---	**23**	---	---	---	---	---	---	---	---	---	---	
CRA-2b-0.5	11/22/2016	0.5	---	---	**89**	**4.5**	---	---	---	---	---	---	---	---	---	
CRA-2b-2.5	11/22/2016	2.5	---	---	**720**	**140**	**0.82**	---	---	---	---	---	---	---	---	
CRA-2b-3.5	11/22/2016	3.5	---	---	**67**	---	---	---	---	---	---	---	---	---	---	
CRA-2c-0.5	11/22/2016	0.5	---	---	**54**	---	---	---	---	---	---	---	---	---	---	
CRA-2c-2.5	11/22/2016	2.5	---	---	**39**	---	---	---	---	---	---	---	---	---	---	
CRA-2c-3.5	11/22/2016	3.5	---	---	**120**	**5.6**	**0.017 J**	---	---	---	---	---	---	---	---	
CRA-2c-4.5	3/26/2017	4.5	---	---	**11**	---	---	---	---	---	---	---	---	---	---	
CRA-2c-4.5 DUP	3/26/2017	4.5	---	---	**5.9**	---	---	---	---	---	---	---	---	---	---	
CRA-2d-0.5	11/22/2016	0.5	**1.9**	---	**31**	---	---	---	---	---	---	---	---	---	---	
CRA-2d-0.5 DUP	11/22/2016	0.5	**2.8**	---	**73**	---	---	---	---	---	---	---	---	---	---	
CRA-2d-2.5	11/22/2016	2.5	---	---	**44**	---	---	---	---	---	---	---	---	---	---	
CRA-2d-2.5 DUP	11/22/2016	2.5	---	---	**51**	---	---	---	---	---	---	---	---	---	---	
CRA-2d-3.5	11/22/2016	3.5	---	---	**13**	---	---	---	---	---	---	---	---	---	---	
CRA-3-0.5	10/30/2016	0.5	**16**	---	**55**	---	---	---	---	---	---	---	---	---	---	
CRA-3-2.5	10/30/2016	2.5	**5.4**	---	**6.0**	---	---	---	---	---	---	---	---	---	---	
CRA-3c-0.5	11/22/2016	0.5	**3.4**	---	---	---	---	---	---	---	---	---	---	---	---	
CRA-3d-0.5	11/22/2016	0.5	**1.7**	---	---	---	---	---	---	---	---	---	---	---	---	
CRA-4-0.5	10/30/2016	0.5	**1.9**	---	**41**	---	---	---	---	---	---	---	---	---	---	
CRA-4-2.5	10/30/2016	2.5	**1.1**	---	**11**	---	---	---	---	---	---	---	---	---	---	
Composite F16	N/A	0.5	**---**	**---**	**---**	---	---	ND<2.0	**0.73J**	**3.8**	ND<1.0	ND<8.5	**2.6**	ND<1.0	**---**	Composite of CRA-1-0.5, CRA-2-0.5, CRA-3-0.5, and CRA-4-0.5
CRB-1-0.5	10/30/2016	0.5	**1.9**	---	**33**	---	---	---	---	---	---	---	---	---	---	
CRB-1-2.5	10/30/2016	2.5	**2.4**	---	**4.8**	---	---	---	---	---	---	---	---	---	---	
CRB-2-0.5	10/30/2016	0.5	**2.1**	---	**3.4**	---	---	---	---	---	---	---	---	---	---	
CRB-2-2.5	10/30/2016	2.5	**1.9**	---	**2.4**	---	---	---	---	---	---	---	---	---	---	
CRB-3-0.5	10/30/2016	0.5	**1.7**	---	**14**	---	---	---	---	---	---	---	---	---	---	
CRB-3-2.5	10/30/2016	2.5	**1.3**	---	**24**	---	---	---	---	---	---	---	---	---	---	
CRB-4-0.5	10/30/2016	0.5	**2.1**	---	**3.5**	---	---	---	---	---	---	---	---	---	---	
CRB-4-2.5	10/30/2016	2.5	**1.7**	---	**4.6**	---	---	---	---	---	---	---	---	---	---	
CRB-4-2.5 DUP	10/30/2016	2.5	**1.6**	---	**3.0**	---	---	---	---	---	---	---	---	---	---	
Composite F17	N/A	0.5	**---**	---	**---**	---	---	ND<2.0	ND<2.0	ND<2.0	ND<1.0	ND<8.5	ND<2.0	ND<1.0	**---**	Composite of CRB-1-0.5, CRB-2-0.5, CRB-3-0.5, and CRB-4-0.5
CR1-1-0.5	10/30/2016	0.5	**3.8**	---	**35**	---	---	---	---	---	---	---	---	---	---	
CR1-1-0.5 DUP	10/30/2016	0.5	**3.5**	---	**44**	---	---	---	---	---	---	---	---	---	---	

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			Arsenic (As) EPA 6010B		Lead (Pb) EPA 6010B			Organochlorine Pesticides (OCPs) EPA 8081A							PCBs EPA 8082	
			TTLC	STLC	TTLC	STLC	TCLP	4,4'-DDD	4,4'-DDE	4,4'-DDT	alpha-Chlordane	Chlordane	Dieldrin	gamma-Chlordane		
		Units:	mg/kg	mg/L	mg/kg	mg/L	mg/L	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	
CR1-1-2.5	10/30/2016	2.5	**3.5**	---	**14**	---	---	---	---	---	---	---	---	---	---	
CR1-2-0.5	10/30/2016	0.5	**4.1**	---	**100**	**6.3**	**0.017 J**	---	---	---	---	---	---	---	---	
CR1-2-2.5	10/30/2016	2.5	**3.7**	---	**37**	---	---	---	---	---	---	---	---	---	---	
CR1-2a-0.5	11/23/2016	0.5	---	---	**75**	---	---	---	---	---	---	---	---	---	---	
CR1-2b-0.5	11/23/2016	0.5	---	---	**74**	---	---	---	---	---	---	---	---	---	---	
CR1-2d-0.5	11/23/2016	0.5	---	---	**120**	**26**	**0.25**	---	---	---	---	---	---	---	---	
CR1-2d-2.5	11/23/2016	2.5	---	---	**6.5**	---	---	---	---	---	---	---	---	---	---	
CR1-2d1-0.5	3/26/2017	0.5	---	---	**160**	**11**	**0.10 J**	---	---	---	---	---	---	---	---	
CR1-2d1-2.5	3/26/2017	2.5	---	---	**3.3**	---	---	---	---	---	---	---	---	---	---	
CR1-3-0.5	10/30/2016	0.5	**1.6**	---	**9.0**	---	---	---	---	---	---	---	---	---	---	
CR1-3-2.5	10/30/2016	2.5	**1.8**	---	**5.5**	---	---	---	---	---	---	---	---	---	---	
Composite F18	N/A	0.5	---	---	---	---	---	ND<2.0	**0.77J**	ND<2.0	**1.8**	**21**	**7.3**	**1.4**	ND<16	Composite of CR1-1-0.5, CR1-2-0.5, and CR1-3-0.5
Composite F18 DUP	N/A	0.5	---	---	---	---	---	ND<2.0	**0.65J**	ND<2.0	**1.8**	**22**	**6.5**	**1.5**	ND<16	Composite of CR1-1-0.5, CR1-2-0.5, and CR1-3-0.5
CR1-4-0.5	10/30/2016	0.5	**4.9**	---	**130**	**32**	**0.12 J**	---	---	---	---	---	---	---	---	
CR1-4-2.5	10/30/2016	2.5	**3.1**	---	**14**	---	---	---	---	---	---	---	---	---	---	
CR1-4b-0.5	11/23/2016	0.5	---	---	**350**	**22**	**0.12 J**	---	---	---	---	---	---	---	---	
CR1-4b-2.5	11/23/2016	2.5	---	---	**33**	---	---	---	---	---	---	---	---	---	---	
CR1-4b1-0.5	3/26/2017	0.5	---	---	**21**	---	---	---	---	---	---	---	---	---	---	
CR1-4b1-0.5 DUP	3/26/2017	0.5	---	---	**21**	---	---	---	---	---	---	---	---	---	---	
CR1-4b1-2.5	3/26/2017	2.5	---	---	**4.5**	---	---	---	---	---	---	---	---	---	---	
CR1-4c-0.5	11/23/2016	0.5	---	---	**53**	---	---	---	---	---	---	---	---	---	---	
CR1-5-0.25	11/23/2016	0.25	**9.3**	---	**170**	**11**	**0.031 J**	---	---	---	---	---	---	---	---	
CR1-5-0.5	10/30/2016	0.5	**23**	---	**310**	**25**	**0.16 J**	---	---	---	---	---	---	---	---	
CR1-5-2.5	10/30/2016	2.5	**15**	---	**18**	---	---	---	---	---	---	---	---	---	---	
CR1-5-3.5	3/26/2017	3.5	**1.7**	---	---	---	---	---	---	---	---	---	---	---	---	
CR1-5b-0.25	11/23/2016	0.25	**13**	---	**190**	**9.0**	**0.048 J**	---	---	---	---	---	---	---	---	
CR1-5b-0.25 DUP	11/23/2016	0.25	**13**	---	**180**	**12**	**0.034 J**	---	---	---	---	---	---	---	---	
CR1-5b-0.5	11/23/2016	0.5	**32**	---	**630**	**25**	**0.071 J**	---	---	---	---	---	---	---	---	
CR1-5b-2.5	11/23/2016	2.5	**19**	---	**140**	**14**	**0.044 J**	---	---	---	---	---	---	---	---	
CR1-5b-3.5	11/23/2016	3.5	**10**	---	**12**	---	---	---	---	---	---	---	---	---	---	
CR1-5c-0.25	11/23/2016	0.25	**3.6**	---	**43**	---	---	---	---	---	---	---	---	---	---	
CR1-5c-0.5	11/23/2016	0.5	**4.9**	---	**37**	---	---	---	---	---	---	---	---	---	---	
CR1-5c-2.5	11/23/2016	2.5	**1.5**	---	**12**	---	---	---	---	---	---	---	---	---	---	
CR1-5c-3.5	11/23/2016	3.5	**1.9**	---	**6.6**	---	---	---	---	---	---	---	---	---	---	
CR1-5d-0.25	11/23/2016	0.25	**8.6**	---	**91**	**8.5**	**0.024 J**	---	---	---	---	---	---	---	---	
CR1-5d-0.5	11/23/2016	0.5	**6.4**	---	**25**	---	---	---	---	---	---	---	---	---	---	
CR1-5d-2.5	11/23/2016	2.5	**1.9**	---	**22**	---	---	---	---	---	---	---	---	---	---	
CR1-5d-3.5	11/23/2016	3.5	**1.8**	---	**50**	---	---	---	---	---	---	---	---	---	---	
CR1-5d-3.5 DUP	11/23/2016	3.5	**2.3**	---	**5.7**	---	---	---	---	---	---	---	---	---	---	
CR1-5d1-0.5	3/25/2017	0.5	**6.9**	---	**51**	---	---	---	---	---	---	---	---	---	---	
CR1-5d1-0.5 DUP	3/25/2017	0.5	**6.6**	---	**79**	---	---	---	---	---	---	---	---	---	---	
CR1-5d1-2.5	3/25/2017	2.5	**2.6**	---	**3.8**	---	---	---	---	---	---	---	---	---	---	
CR1-6-0.5	10/30/2016	0.5	**3.4**	---	**10**	---	---	---	---	---	---	---	---	---	---	
CR1-6-2.5	10/30/2016	2.5	**2.7**	---	**6.7**	---	---	---	---	---	---	---	---	---	---	
Composite F19	N/A	0.5	---	---	---	---	---	ND<2.0	**0.54J**	ND<2.0	**0.46J**	**5.0J**	ND<2.0	**0.30J**	---	Composite of CR1-4-0.5, CR1-5-0.5, and CR1-6-0.5

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		Units:	mg/kg	mg/L	mg/kg	mg/L	mg/L	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	
P14-0.5	10/29/2016	0.5	**3.1**	---	**6.9**	---	---	---	---	---	---	---	---	---	---	
P14-0.5 DUP	10/29/2016	0.5	**2.6**	---	**6.4**	---	---	---	---	---	---	---	---	---	---	
P14-2.5	10/29/2016	2.5	**3.2**	---	**21**	---	---	---	---	---	---	---	---	---	---	
P15-0.5	10/30/2016	0.5	**3.4**	---	**90**	**4.9**	---	---	---	---	---	---	---	---	---	
P15-2.5	10/30/2016	2.5	**2.9**	---	**140**	**9.7**	ND<0.25	---	---	---	---	---	---	---	---	
P15-3.5	3/25/2017	3.5	---	---	**24**	---	---	---	---	---	---	---	---	---	---	
P15a-0.5	11/22/2016	0.5	---	---	**39**	---	---	---	---	---	---	---	---	---	---	
P15a-2.5	11/22/2016	2.5	---	---	**150**	**2.2**	---	---	---	---	---	---	---	---	---	
P15a-3.5	11/22/2016	3.5	---	---	**13**	---	---	---	---	---	---	---	---	---	---	
P15b-0.5	11/22/2016	0.5	---	---	**190**	**8.5**	**0.014 J**	---	---	---	---	---	---	---	---	
P15b-2.5	11/22/2016	2.5	---	---	**55**	---	---	---	---	---	---	---	---	---	---	
P15b-3.5	11/22/2016	3.5	---	---	**3.6**	---	---	---	---	---	---	---	---	---	---	
P15d-0.5	11/22/2016	0.5	---	---	**140**	**4.8**	---	---	---	---	---	---	---	---	---	
P15d-2.5	11/22/2016	2.5	---	---	**440**	**7.3**	ND<0.25	---	---	---	---	---	---	---	---	
P15d-2.5 DUP	11/22/2016	2.5	---	---	**110**	**11**	**0.043 J**	---	---	---	---	---	---	---	---	
P15d-3.5	11/22/2016	3.5	---	---	**39**	---	---	---	---	---	---	---	---	---	---	
P15d1-0.5	3/25/2017	0.5	---	---	**12**	---	---	---	---	---	---	---	---	---	---	
P15d1-2.5	3/25/2017	2.5	---	---	**21**	---	---	---	---	---	---	---	---	---	---	
P15d1-3.5	3/25/2017	3.5	---	---	**280**	**20**	**0.080 J**	---	---	---	---	---	---	---	---	
P15d1-4.5	3/25/2017	4.5	---	---	**10**	---	---	---	---	---	---	---	---	---	---	
P15d1-4.5 DUP	3/25/2017	4.5	---	---	**11**	---	---	---	---	---	---	---	---	---	---	
P16-0.5	10/30/2016	0.5	**2.9**	---	**110**	**7.4**	**0.028 J**	---	---	---	---	---	---	---	---	
P16-2.5	10/30/2016	2.5	**2.3**	---	**13**	---	---	---	---	---	---	---	---	---	---	
P16a-0.5	11/22/2016	0.5	---	---	**31**	---	---	---	---	---	---	---	---	---	---	
P16b-0.5	11/22/2016	0.5	**5.2**	---	**34**	---	---	---	---	---	---	---	---	---	---	
P16c-0.5	11/22/2016	0.5	**3.1**	---	**84**	**3.6**	---	---	---	---	---	---	---	---	---	
P16c-2.5	11/22/2016	2.5	---	---	**22**	---	---	---	---	---	---	---	---	---	---	
Composite F20	N/A	0.5	**---**	---	**---**	---	---	ND<20	**4.6J**	ND<20	ND<10	ND<85	ND<20	ND<10	**---**	Composite of P14-0.5, P15-0.5, and P16-0.5
Q14-0.5	10/30/2016	0.5	**2.2**	---	**5.6**	---	---	---	---	---	---	---	---	---	---	
Q14-2.5	10/30/2016	2.5	**1.5**	---	**32**	---	---	---	---	---	---	---	---	---	---	
Q15-0.5	10/30/2016	0.5	**3.1**	---	**110**	**6.0**	ND<0.25	---	---	---	---	---	---	---	---	
Q15-2.5	10/30/2016	2.5	**3.8**	---	**59**	---	---	---	---	---	---	---	---	---	---	
Q15a-0.5	11/22/2016	0.5	---	---	**46**	---	---	---	---	---	---	---	---	---	---	
Q15a-2.5	11/22/2016	2.5	---	---	**4200**	**190**	ND<0.25	---	---	---	---	---	---	---	---	
Q15a-3.5	11/22/2016	3.5	---	---	**190**	**120**	**0.029 J**	---	---	---	---	---	---	---	---	
Q15a-3.5 DUP	11/22/2016	3.5	---	---	**280**	**6.5**	ND<0.25	---	---	---	---	---	---	---	---	
Q15a-4.5	3/25/2017	4.5	---	---	**140**	**4.2**	---	---	---	---	---	---	---	---	---	
Q15b-0.5	11/22/2016	0.5	---	---	**56**	---	---	---	---	---	---	---	---	---	---	
Q15b-2.5	11/22/2016	2.5	---	---	**6**	---	---	---	---	---	---	---	---	---	---	
Q15d-0.5	11/22/2016	0.5	---	---	**23**	---	---	---	---	---	---	---	---	---	---	
Q15d-2.5	11/22/2016	2.5	---	---	**97**	**3.9**	---	---	---	---	---	---	---	---	---	
Q15d-3.5	3/25/2017	3.5	---	---	**4.5**	---	---	---	---	---	---	---	---	---	---	
Q15d-4.5	3/25/2017	4.5	---	---	**3.9**	---	---	---	---	---	---	---	---	---	---	
Q15d1-0.5	3/26/2017	0.5	---	---	**5.8**	---	---	---	---	---	---	---	---	---	---	
Q15d1-2.5	3/26/2017	2.5	---	---	**6.3**	---	---	---	---	---	---	---	---	---	---	

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		Units:	mg/kg	mg/L	mg/kg	mg/L	mg/L	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	
Q15d1-2.5 DUP	3/26/2017	2.5	---	---	**7.2**	---	---	---	---	---	---	---	---	---	---	
Q15d1-3.5	3/26/2017	3.5	---	---	**7.0**	---	---	---	---	---	---	---	---	---	---	
Q15d1-4.5	3/26/2017	4.5	---	---	**4.3**	---	---	---	---	---	---	---	---	---	---	
Q16-0.5	10/30/2016	0.5	**5.3**	---	**36**	---	---	---	---	---	---	---	---	---	---	
Q16-2.5	10/30/2016	2.5	**3.1**	---	**5.9**	---	---	---	---	---	---	---	---	---	---	
Composite F21	N/A	0.5	**---**	---	**---**	---	---	**0.30J**	**2.4**	**3.8**	**0.90J**	**13**	**0.58J**	**0.82J**	**---**	Composite of Q14-0.5, Q15-0.5, and Q16-0.5
R14-0.5	10/30/2016	0.5	**2.2**	---	**2.8**	---	---	---	---	---	---	---	---	---	---	
R14-2.5	10/30/2016	2.5	**2.2**	---	**3.4**	---	---	---	---	---	---	---	---	---	---	
R15-0.25	11/22/2016	0.25	---	---	**95**	**0.78 J**	---	---	---	---	---	---	---	---	---	
R15-0.25 DUP	11/22/2016	0.25	---	---	**19**	---	---	---	---	---	---	---	---	---	---	
R15-0.5	10/30/2016	0.5	**3.8**	---	**300**	**1.9**	---	---	---	---	---	---	---	---	---	
R15-2.5	10/30/2016	2.5	**2.5**	---	**22**	---	---	---	---	---	---	---	---	---	---	
R15a-0.25	11/22/2016	0.25	---	---	**63**	---	---	---	---	---	---	---	---	---	---	
R15a-0.5	11/22/2016	0.5	---	---	**9.4**	---	---	---	---	---	---	---	---	---	---	
R15a-2.5	11/22/2016	2.5	---	---	**2.7**	---	---	---	---	---	---	---	---	---	---	
R15b-0.25	11/22/2016	0.25	---	---	**31**	---	---	---	---	---	---	---	---	---	---	
R15b-0.5	11/22/2016	0.5	---	---	**15**	---	---	---	---	---	---	---	---	---	---	
R15c-0.25	11/22/2016	0.25	---	---	**61**	---	---	---	---	---	---	---	---	---	---	
R15c-0.5	11/22/2016	0.5	---	---	**16**	---	---	---	---	---	---	---	---	---	---	
R15d-0.25	11/22/2016	0.25	---	---	**21**	---	---	---	---	---	---	---	---	---	---	
R15d-0.5	11/22/2016	0.5	---	---	**100**	**8.3**	ND<0.25	---	---	---	---	---	---	---	---	
R15d-2.5	11/22/2016	2.5	---	---	**41**	---	---	---	---	---	---	---	---	---	---	
R16-0.5	10/30/2016	0.5	**2.9**	---	**41**	---	---	---	---	---	---	---	---	---	---	
R16-2.5	10/30/2016	2.5	**3.4**	---	**10**	---	---	---	---	---	---	---	---	---	---	
Composite F22	N/A	0.5	**---**	---	**---**	---	---	ND<2.0	**1.7J**	**2.4**	ND<1.0	ND<8.5	ND<2.0	ND<1.0	**---**	Composite of R14-0.5, R15-0.5, and R16-0.5
Area 8 - South Central Portion of Campus																
AA923-1-0.5	10/22/2016	0.5	**2.9**	---	**1.9**	---	---	---	---	---	---	---	---	---	---	
AA923-1-0.5 DUP	10/22/2016	0.5	**3.0**	---	**1.9**	---	---	---	---	---	---	---	---	---	---	
AA923-1-2.5	10/22/2016	2.5	**2.6**	---	**1.8**	---	---	---	---	---	---	---	---	---	---	
AA923-2-0.5	10/22/2016	0.5	**2.4**	---	**1.5**	---	---	---	---	---	---	---	---	---	---	
AA923-2-2.5	10/22/2016	2.5	**3.2**	---	**1.2**	---	---	---	---	---	---	---	---	---	---	
AA923-2-2.5 DUP	10/22/2016	2.5	**3.8**	---	**1.0**	---	---	---	---	---	---	---	---	---	---	
AA923-3-0.5	10/22/2016	0.5	**3.2**	---	**11**	---	---	---	---	---	---	---	---	---	---	
AA923-3-2.5	10/22/2016	2.5	**3.1**	---	**1.8**	---	---	---	---	---	---	---	---	---	---	
Composite D1	N/A	0.5	**---**	---	**---**	---	---	ND<2.0	ND<2.0	ND<2.0	ND<1.0	ND<8.5	ND<2.0	ND<1.0	**---**	Composite of AA923-1-0.5, AA923-2-0.5, and AA923-3-0.5
AA923-4-0.5	10/22/2016	0.5	**8.0**	---	**1.4**	---	---	---	---	---	---	---	---	---	---	
AA923-4-2.5	10/22/2016	2.5	**4.4**	---	**1.7**	---	---	---	---	---	---	---	---	---	---	
AA923-5-0.5	10/22/2016	0.5	**3.5**	---	**2.6**	---	---	---	---	---	---	---	---	---	---	
AA923-5-2.5	10/22/2016	2.5	**3.1**	---	**3.8**	---	---	---	---	---	---	---	---	---	---	
AA923-6-0.5	10/22/2016	0.5	**3.3**	---	**4.8**	---	---	---	---	---	---	---	---	---	---	
AA923-6-2.5	10/22/2016	2.5	**3.1**	---	**2.7**	---	---	---	---	---	---	---	---	---	---	
Composite D2	N/A	0.5	**---**	---	**---**	---	---	ND<2.0	ND<2.0	ND<2.0	ND<1.0	ND<8.5	ND<2.0	ND<1.0	**---**	Composite of AA923-4-0.5, AA923-5-0.5, and AA923-6-0.5

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			TTLC	STLC	TTLC	STLC	TCLP	4,4'-DDD	4,4'-DDE	4,4'-DDT	alpha-Chlordane	Chlordane	Dieldrin	gamma-Chlordane		
		Units:	mg/kg	mg/L	mg/kg	mg/L	mg/L	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	
AA1322-1-0.5	10/22/2016	0.5	**5.1**	---	**1.6**	---	---	---	---	---	---	---	---	---	---	
AA1322-1-2.5	10/22/2016	2.5	**3.2**	---	**2.1**	---	---	---	---	---	---	---	---	---	---	
AA1322-2-0.5	10/22/2016	0.5	**4.9**	---	**1.6**	---	---	---	---	---	---	---	---	---	---	
AA1322-2-2.5	10/22/2016	2.5	**3.0**	---	**1.4**	---	---	---	---	---	---	---	---	---	---	
AA1322-3-0.5	10/22/2016	0.5	**3.6**	---	**2.3**	---	---	---	---	---	---	---	---	---	---	
AA1322-3-2.5	10/22/2016	2.5	**4.7**	---	**1.3**	---	---	---	---	---	---	---	---	---	---	
Composite D3	N/A	0.5	---	---	---	---	---	ND<2.0	ND<2.0	ND<2.0	ND<1.0	ND<8.5	ND<2.0	ND<1.0	---	Composite of AA1322-1-0.5, AA1322-2-0.5, and AA1322-3-0.5
AA1322-4-0.5	10/22/2016	0.5	**4.8**	---	**1.8**	---	---	---	---	---	---	---	---	---	---	
AA1322-4-2.5	10/22/2016	2.5	**4.9**	---	**1.8**	---	---	---	---	---	---	---	---	---	---	
AA1322-5-0.5	10/22/2016	0.5	**6.6**	---	**1.9**	---	---	---	---	---	---	---	---	---	---	
AA1322-5-2.5	10/22/2016	2.5	**3.4**	---	**1.3**	---	---	---	---	---	---	---	---	---	---	
AA1322-6-0.5	10/22/2016	0.5	**2.7**	---	**3.0**	---	---	---	---	---	---	---	---	---	---	
AA1322-6-2.5	10/22/2016	2.5	**2.2**	---	**1.6**	---	---	---	---	---	---	---	---	---	---	
Composite D4	N/A	0.5	---	---	---	---	---	ND<2.0	ND<2.0	ND<2.0	ND<1.0	ND<8.5	ND<2.0	ND<1.0	---	Composite of AA1322-4-0.5, AA1322-5-0.5, and AA1322-6-0.5
AA828-1-0.5	10/23/2016	0.5	**2.1**	---	**3.8**	---	---	---	---	---	---	---	---	---	---	
AA828-1-2.5	10/23/2016	2.5	**2.6**	---	**2.6**	---	---	---	---	---	---	---	---	---	---	
AA828-2-0.5	10/23/2016	0.5	**2.8**	---	**2.5**	---	---	---	---	---	---	---	---	---	---	
AA828-2-2.5	10/23/2016	2.5	**2.6**	---	**1.6**	---	---	---	---	---	---	---	---	---	---	
AA828-3-0.5	10/23/2016	0.5	**2.7**	---	**1.6**	---	---	---	---	---	---	---	---	---	---	
AA828-3-2.5	10/23/2016	2.5	**2.6**	---	**1.1**	---	---	---	---	---	---	---	---	---	---	
Composite D5	N/A	0.5	---	---	---	---	---	ND<2.0	ND<2.0	ND<2.0	ND<1.0	ND<8.5	ND<2.0	ND<1.0	---	Composite of AA828-1-0.5, AA828-2-0.5, and AA828-3-0.5
AA828-4-0.5	10/22/2016	0.5	**10**	---	**16**	---	---	---	---	---	---	---	---	---	---	
AA828-4-2.5	10/22/2016	2.5	**3.9**	---	**1.4**	---	---	---	---	---	---	---	---	---	---	
AA828-5-0.5	10/22/2016	0.5	**3.5**	---	**2.0**	---	---	---	---	---	---	---	---	---	---	
AA828-5-0.5 DUP	10/22/2016	0.5	**3.9**	---	**1.9**	---	---	---	---	---	---	---	---	---	---	
AA828-5-2.5	10/22/2016	2.5	**2.3**	---	**1.3**	---	---	---	---	---	---	---	---	---	---	
AA828-6-0.5	10/22/2016	0.5	**2.5**	---	**1.8**	---	---	---	---	---	---	---	---	---	---	
AA828-6-2.5	10/22/2016	2.5	**2.2**	---	**1.9**	---	---	---	---	---	---	---	---	---	---	
AA828-6-2.5 DUP	10/22/2016	2.5	**2.6**	---	**1.4**	---	---	---	---	---	---	---	---	---	---	
Composite D6	N/A	0.5	---	---	---	---	---	ND<2.0	ND<2.0	ND<2.0	ND<1.0	ND<8.5	ND<2.0	ND<1.0	---	Composite of AA828-4-0.5, AA828-5-0.5, and AA828-6-0.5
AA651/683-1-0.5	10/23/2016	0.5	**2.7**	---	**2.3**	---	---	---	---	---	---	---	---	---	---	
AA651/683-1-2.5	10/23/2016	2.5	**2.6**	---	**1.3**	---	---	---	---	---	---	---	---	---	---	
AA651/683-2-0.5	10/23/2016	0.5	**2.5**	---	**5.6**	---	---	---	---	---	---	---	---	---	---	
AA651/683-2-2.5	10/23/2016	2.5	**1.6**	---	**1.1**	---	---	---	---	---	---	---	---	---	---	
AA651/683-2-2.5 DUP	10/23/2016	2.5	**2.6**	---	**1.5**	---	---	---	---	---	---	---	---	---	---	
AA651/683-3-0.5	10/23/2016	0.5	**2.2**	---	**2.0**	---	---	---	---	---	---	---	---	---	---	
AA651/683-3-0.5 DUP	10/23/2016	0.5	**4.2**	---	**2.6**	---	---	---	---	---	---	---	---	---	---	
AA651/683-3-2.5	10/23/2016	2.5	**1.9**	---	**24**	---	---	---	---	---	---	---	---	---	---	
Composite D7	N/A	0.5	---	---	---	---	---	ND<2.0	ND<2.0	ND<2.0	ND<1.0	ND<8.5	ND<2.0	ND<1.0	---	Composite of AA651/683-1-0.5, AA651/683-2-0.5, and AA651/683-3-0.5
AA651/683-4-0.5	10/23/2016	0.5	**2.6**	---	**6.6**	---	---	---	---	---	---	---	---	---	---	
AA651/683-4-2.5	10/23/2016	2.5	**4.8**	---	**2.3**	---	---	---	---	---	---	---	---	---	---	
AA651/683-5-0.5	10/23/2016	0.5	**3.2**	---	**1.6**	---	---	---	---	---	---	---	---	---	---	
AA651/683-5-2.5	10/23/2016	2.5	**7.3**	---	**1.0J**	---	---	---	---	---	---	---	---	---	---	

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AA651/683-6-0.5	10/23/2016	0.5	**3.3**	---	**1.9**	---	---	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	
AA651/683-6-2.5	10/23/2016	2.5	**2.0**	---	**1.4**	---	---	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	
Composite D8	N/A	0.5	**---**	---	**---**	**---**	**---**	ND<2.0	**0.41J**	ND<2.0	ND<1.0	ND<8.5	ND<2.0	ND<1.0	**---**	Composite of AA651/683-4-0.5, AA651/683-5-0.5, and AA651/683-6-0.5
AA-831-1-0.5	10/23/2016	0.5	**3.4**	---	**2.5**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	
AA-831-1-2.5	10/23/2016	2.5	**3.0**	---	**2.4**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	
AA-831-2-0.5	10/23/2016	0.5	**2.9**	---	**5.4**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	
AA-831-2-2.5	10/23/2016	2.5	**5.4**	---	**2.2**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	
AA-831-3-0.5	10/23/2016	0.5	**2.6**	---	**4.6**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	
AA-831-3-0.5 DUP	10/23/2016	0.5	**3.9**	---	**2.8**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	
AA-831-3-2.5	10/23/2016	2.5	**2.5**	---	**2.0**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	
Composite D9	N/A	0.5	**---**	---	**---**	**---**	**---**	ND<2.0	ND<2.0	ND<2.0	ND<1.0	ND<8.5	ND<2.0	ND<1.0	**---**	Composite of AA831-1-0.5, AA831-2-0.5, and AA831-3-0.5
AA-831-4-0.5	10/23/2016	0.5	**3.0**	---	**2.7**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	
AA-831-4-2.5	10/23/2016	2.5	**2.2**	---	**1.7**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	
AA-831-4-2.5 DUP	10/23/2016	2.5	**3.1**	---	**1.6**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	
AA-831-5-0.5	10/23/2016	0.5	**1.8**	---	**2.5**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	
AA-831-5-2.5	10/23/2016	2.5	**2.7**	---	**2.0**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	
AA-831-6-0.5	10/23/2016	0.5	**2.5**	---	**3.0**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	
AA-831-6-2.5	10/23/2016	2.5	**2.8**	---	**2.4**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	
Composite D10	N/A	0.5	**---**	---	**---**	**---**	**---**	ND<2.0	ND<2.0	ND<2.0	ND<1.0	ND<8.5	ND<2.0	ND<1.0	ND<16	Composite of AA831-4-0.5, AA831-5-0.5, and AA831-6-0.5
Composite D10 DUP	N/A	0.5	**---**	---	**---**	**---**	**---**	ND<2.0	ND<2.0	**0.22J**	ND<1.0	**1.1J**	ND<2.0	ND<1.0	ND<16	Composite of AA831-4-0.5, AA831-5-0.5, and AA831-6-0.5
X-8-0.5	10/22/2016	0.5	**2.6**	---	**2.2**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	
X-8-2.5	10/22/2016	2.5	**1.8**	---	**1.6**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	
X-9-0.5	10/22/2016	0.5	**3.4**	---	**1.1**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	
X-9-2.5	10/22/2016	2.5	**2.6**	---	**1.2**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	
X-10-0.5	10/22/2016	0.5	**2.0**	---	**1.3**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	
X-10-2.5	10/22/2016	2.5	**0.85J**	---	**1.2**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	
X-11-0.5	10/22/2016	0.5	**2.3**	---	**3.8**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	
X-11-2.5	10/22/2016	2.5	**1.4**	---	**1.6**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	
Composite D11	N/A	0.5	**---**	---	**---**	**---**	**---**	ND<2.0	**0.39J**	ND<2.0	ND<1.0	ND<8.5	ND<2.0	ND<1.0	---	Composite of X8-0.5, X9-0.5, X10-0.5, and X11-0.5
Y-8-0.5	10/22/2016	0.5	**2.8**	---	**1.4**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	
Y-8-0.5 DUP	10/22/2016	0.5	**3.5**	---	**1.7**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	
Y-8-2.5	10/22/2016	2.5	**1.2**	**---**	**1.3**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	
Y-9-0.5	10/22/2016	0.5	**2.0**	**---**	**1.5**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	
Y-9-2.5	10/22/2016	2.5	**2.0**	---	**1.4**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	
Y-9-2.5 DUP	10/22/2016	2.5	**2.9**	---	**1.3**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	
Y-10-0.5	10/22/2016	0.5	**1.2**	---	**0.68J**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	
Y-10-2.5	10/22/2016	2.5	**4.6**	---	**1.7**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	
Y-11-0.5	10/22/2016	0.5	**3.1**	---	**2.8**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	
Y-11-2.5	10/22/2016	2.5	**4.1**	---	**1.8**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	
Composite D12	N/A	0.5	**---**	---	**---**	**---**	**---**	ND<2.0	ND<2.0	ND<2.0	ND<1.0	ND<8.5	ND<2.0	ND<1.0	**---**	Composite of Y8-0.5, Y9-0.5, Y10-0.5, and Y11-0.5

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		Units:	mg/kg	mg/L	mg/kg	mg/L	mg/L	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	
Area 9 - Southeast Portion of Campus																	
V-13-0.5	10/22/2016	0.5	**10**	---	**6.3**	---	---	---	---	---	---	---	---	---	---	---	
V-13-2.5	10/22/2016	2.5	**1.8**	---	**2.0**	---	---	---	---	---	---	---	---	---	---	---	
V-14-0.5	10/22/2016	0.5	**3.3**	---	**54**	---	---	---	---	---	---	---	---	---	---	---	
V-14-2.5	10/22/2016	2.5	**1.5**	---	**4.1**	---	---	---	---	---	---	---	---	---	---	---	
V-15-0.5	10/22/2016	0.5	**4.1**	---	**46**	---	---	---	---	---	---	---	---	---	---	---	
V-15-2.5	10/22/2016	2.5	**2.6**	---	**27**	---	---	---	---	---	---	---	---	---	---	---	
Composite E1	N/A	0.5	---	---	---	---	---	ND<2.0	**7.2**	**6.7**	**2.6**	**30**	**0.49J**	**3.0**	---	Composite of V13-0.5, V14-0.5, and V15-0.5
V-16-0.25	11/21/2016	0.25	---	---	**14**	---	---	---	---	---	---	---	---	---	---	
V-16-0.5	10/22/2016	0.5	**2.9**	---	**390**	**2.2**	---	---	---	---	---	---	---	---	---	
V-16-2.5	10/22/2016	2.5	**4.1**	---	**25**	---	---	---	---	---	---	---	---	---	---	
V-16a-0.25	11/21/2016	0.25	---	---	**29**	---	---	---	---	---	---	---	---	---	---	
V-16a-0.5	11/21/2016	0.5	---	---	**21**	---	---	---	---	---	---	---	---	---	---	
V-16b-0.25	11/21/2016	0.25	---	---	**12**	---	---	---	---	---	---	---	---	---	---	
V-16b-0.5	11/21/2016	0.5	---	---	**19**	---	---	---	---	---	---	---	---	---	---	
V-16b-0.5 DUP	11/21/2016	0.5	---	---	**22**	---	---	---	---	---	---	---	---	---	---	
V-16c-0.25	11/21/2016	0.25	---	---	**15**	---	---	---	---	---	---	---	---	---	---	
V-16c-0.5	11/21/2016	0.5	---	---	**29**	---	---	---	---	---	---	---	---	---	---	
V-16d-0.25	11/21/2016	0.25	---	---	**7.6**	---	---	---	---	---	---	---	---	---	---	
V-16d-0.5	11/21/2016	0.5	---	---	**12**	---	---	---	---	---	---	---	---	---	---	
V-17-0.5	10/22/2016	0.5	**5.8**	---	**12**	---	---	---	---	---	---	---	---	---	---	
V-17-2.5	10/22/2016	2.5	**2.3**	---	**23**	---	---	---	---	---	---	---	---	---	---	
Composite E2	N/A	0.5	---	---	---	---	---	ND<2.0	**3.8**	**3.5**	**1.3**	**13**	**0.26J**	**1.2**	---	Composite of V16-0.5 and V17-0.5
W-12-0.5	10/22/2016	0.5	**6.7**	---	**12**	---	---	---	---	---	---	---	---	---	---	
W-12-2.5	10/22/2016	2.5	**2.3**	---	**2.0**	---	---	---	---	---	---	---	---	---	---	
W-13-0.5	10/22/2016	0.5	**3.5**	---	**1.2**	---	---	---	---	---	---	---	---	---	---	
W-13-2.5	10/22/2016	2.5	**3.2**	---	**4.5**	---	---	---	---	---	---	---	---	---	---	
W-14-0.5	10/22/2016	0.5	**2.4**	---	**1.5**	---	---	---	---	---	---	---	---	---	---	
W-14-0.5 DUP	10/22/2016	0.5	**12**	---	**21**	---	---	---	---	---	---	---	---	---	---	
W-14-2.5	10/22/2016	2.5	**3.1**	---	**250**	**17**	**0.47**	---	---	---	---	---	---	---	---	
W-14-3.5	3/25/2017	3.5	---	---	**29**	---	---	---	---	---	---	---	---	---	---	
W-14a-0.5	11/21/2016	0.5	---	---	**6300**	**1.3**	---	---	---	---	---	---	---	---	---	
W-14a-2.5	11/21/2016	2.5	---	---	**7.9**	---	---	---	---	---	---	---	---	---	---	
W-14a-3.5	11/21/2016	3.5	---	---	**6.0**	---	---	---	---	---	---	---	---	---	---	
W-14b-0.5	11/21/2016	0.5	---	---	**10**	---	---	---	---	---	---	---	---	---	---	
W-14b-2.5	11/21/2016	2.5	---	---	**32**	---	---	---	---	---	---	---	---	---	---	
W-14b-2.5 DUP	11/21/2016	2.5	---	---	**10**	---	---	---	---	---	---	---	---	---	---	
W-14b-3.5	11/21/2016	3.5	---	---	**3.3**	---	---	---	---	---	---	---	---	---	---	
W-14c-0.5	11/21/2016	0.5	---	---	**9.8**	---	---	---	---	---	---	---	---	---	---	
W-14c-0.5 DUP	11/21/2016	0.5	---	---	**8.4**	---	---	---	---	---	---	---	---	---	---	
W-14c-0.5	6/14/2017	0.5	**14**	---	---	---	---	---	---	---	---	---	---	---	---	
W-14c-0.5 DUP	6/14/2017	0.5	**13**	---	---	---	---	---	---	---	---	---	---	---	---	
W-14c-2.5	11/21/2016	2.5	---	---	**99**	**3.4**	---	---	---	---	---	---	---	---	---	
W-14c-2.5	6/14/2017	2.5	**2.5**	---	---	---	---	---	---	---	---	---	---	---	---	
W-14c-3.5	11/21/2016	3.5	---	---	**43**	---	---	---	---	---	---	---	---	---	---	

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		Units:	mg/kg	mg/L	mg/kg	mg/L	mg/L	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	
W-14d-0.5	11/21/2016	0.5	---	---	**9.3**	---	---	---	---	---	---	---	---	---	---	
W-14d-2.5	11/21/2016	2.5	---	---	**11**	---	---	---	---	---	---	---	---	---	---	
W-14d-3.5	11/21/2016	3.5	---	---	**3.9**	---	---	---	---	---	---	---	---	---	---	
Composite E3	N/A	0.5	---	---	---	---	---	ND<2.0	**2.6**	**0.74J**	**2.1**	**20**	**0.28J**	**1.8**	---	Composite of W12-0.5, W13-0.5, and W14-0.5
W-15-0.5	10/22/2016	0.5	**3.4**	---	**1.9**	---	---	---	---	---	---	---	---	---	---	
W-15-2.5	10/22/2016	2.5	**2.3**	---	**14**	---	---	---	---	---	---	---	---	---	---	
W-15-2.5 DUP	10/22/2016	2.5	**3.6**	---	**6.3**	---	---	---	---	---	---	---	---	---	---	
W-16-0.5	10/22/2016	0.5	**3.8**	---	**11**	---	---	---	---	---	---	---	---	---	---	
W-16-2.5	10/22/2016	2.5	**2.4**	---	**8.8**	---	---	---	---	---	---	---	---	---	---	
W-17-0.5	10/22/2016	0.5	**3.8**	---	**23**	---	---	---	---	---	---	---	---	---	---	
W-17-2.5	10/22/2016	2.5	**2.6**	---	**8.4**	---	---	---	---	---	---	---	---	---	---	
Composite E4	N/A	0.5	---	---	---	---	---	ND<2.0	**0.65J**	**1.5J**	**0.90J**	**9.2**	ND<2.0	**1.2**	---	Composite of W15-0.5, W16-0.5, and W17-0.5
W-18-0.5	6/14/2017	0.5	**11**	---	---	---	---	---	---	---	---	---	---	---	---	
W-18-2.5	6/14/2017	2.5	**2.4**	---	---	---	---	---	---	---	---	---	---	---	---	
W-18a-0.5	6/14/2017	0.5	**3.0**	---	---	---	---	---	---	---	---	---	---	---	---	
W-18a-2.5	6/14/2017	2.5	**2.5**	---	---	---	---	---	---	---	---	---	---	---	---	
X-12-0.5	10/22/2016	0.5	**13**	---	**13**	---	---	---	---	---	---	---	---	---	---	
X-12-2.5	10/22/2016	2.5	**3.1**	---	**3.3**	---	---	---	---	---	---	---	---	---	---	
X-12a-0.5	6/14/2017	0.5	**12**	---	---	---	---	---	---	---	---	---	---	---	---	
X-12a-2.5	6/14/2017	2.5	**1.7**	---	---	---	---	---	---	---	---	---	---	---	---	
X-12b-0.5	6/14/2017	0.5	**6.5**	---	---	---	---	---	---	---	---	---	---	---	---	
X-12b-2.5	6/14/2017	2.5	**3.1**	---	---	---	---	---	---	---	---	---	---	---	---	
X-12c-0.5	6/14/2017	0.5	**12**	---	---	---	---	---	---	---	---	---	---	---	---	
X-12c-2.5	6/14/2017	2.5	**3.8**	---	---	---	---	---	---	---	---	---	---	---	---	
X-13-0.5	10/22/2016	0.5	**4.1**	---	**5.3**	---	---	---	---	---	---	---	---	---	---	
X-13-2.5	10/22/2016	2.5	**2.7**	---	**41**	---	---	---	---	---	---	---	---	---	---	
X-14-0.5	10/22/2016	0.5	**13**	---	**13**	---	---	---	---	---	---	---	---	---	---	
X-14-2.5	10/22/2016	2.5	**3.0**	---	**80**	**1.5**	---	---	---	---	---	---	---	---	---	
X-14-3.5	3/25/2017	3.5	---	---	**17**	---	---	---	---	---	---	---	---	---	---	
X-14b-0.5	11/21/2016	0.5	---	---	**11**	---	---	---	---	---	---	---	---	---	---	
X-14b-0.5	6/14/2017	0.5	**14**	---	---	---	---	---	---	---	---	---	---	---	---	
X-14b-0.5 DUP	6/14/2017	0.5	**9.8**	---	---	---	---	---	---	---	---	---	---	---	---	
X-14b-2.5	11/21/2016	2.5	---	---	**18**	---	---	---	---	---	---	---	---	---	---	
X-14b-2.5	6/14/2017	2.5	**2.9**	---	---	---	---	---	---	---	---	---	---	---	---	
X-14b-3.5	11/21/2016	3.5	---	---	**13**	---	---	---	---	---	---	---	---	---	---	
X-14c-0.5	11/21/2016	0.5	---	---	**9.8**	---	---	---	---	---	---	---	---	---	---	
X-14c-0.5	6/14/2017	0.5	**9.2**	---	---	---	---	---	---	---	---	---	---	---	---	
X-14c-2.5	11/21/2016	2.5	---	---	**8.7**	---	---	---	---	---	---	---	---	---	---	
X-14c-2.5 DUP	11/21/2016	2.5	---	---	**8.6**	---	---	---	---	---	---	---	---	---	---	
X-14c-2.5	6/14/2017	2.5	**1.7**	---	---	---	---	---	---	---	---	---	---	---	---	
X-14c-3.5	11/21/2016	3.5	---	---	**13**	---	---	---	---	---	---	---	---	---	---	
X-14d-0.5	11/21/2016	0.5	---	---	**5.9**	---	---	---	---	---	---	---	---	---	---	
X-14d-0.5	6/14/2017	0.5	**3.9**	---	---	---	---	---	---	---	---	---	---	---	---	
X-14d-2.5	11/21/2016	2.5	---	---	**10**	---	---	---	---	---	---	---	---	---	---	
X-14d-2.5	6/14/2017	2.5	**2.6**	---	---	---	---	---	---	---	---	---	---	---	---	
X-14d-3.5	11/21/2016	3.5	---	---	**4.5**	---	---	---	---	---	---	---	---	---	---	

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Composite E5	N/A	0.5	---	---	---	---	---	**1.1J**	**1.9J**	**0.99J**	**2.3**	**29**	ND<2.0	**2.4**	---	Composite of X12-0.5, X13-0.5, and X14-0.5
X-15-0.5	10/22/2016	0.5	**9.0**	---	**10**	---	---	---	---	---	---	---	---	---	---	
X-15-2.5	10/22/2016	2.5	**6.0**	---	**8.2**	---	---	---	---	---	---	---	---	---	---	
X-16-0.5	10/22/2016	0.5	**9.1**	---	**8.5**	---	---	---	---	---	---	---	---	---	---	
X-16-2.5	10/22/2016	2.5	**2.3**	---	**5.0**	---	---	---	---	---	---	---	---	---	---	
X-17-0.5	10/22/2016	0.5	**14**	---	**9.0**	---	---	---	---	---	---	---	---	---	---	
X-17-0.5 DUP	10/22/2016	0.5	**15**	---	**8.7**	---	---	---	---	---	---	---	---	---	---	
X-17-2.5	10/22/2016	2.5	**2.7**	---	**7.2**	---	---	---	---	---	---	---	---	---	---	
X-17a-0.5	11/21/2016	0.5	**8.5**	---	---	---	---	---	---	---	---	---	---	---	---	
X-17b-0.5	11/21/2016	0.5	**12**	---	---	---	---	---	---	---	---	---	---	---	---	
X-17b-0.5 DUP	11/21/2016	0.5	**11**	---	---	---	---	---	---	---	---	---	---	---	---	
X-17b-2.5	11/21/2016	2.5	**3.7**	---	---	---	---	---	---	---	---	---	---	---	---	
X-17c-0.5	11/21/2016	0.5	**9.9**	---	---	---	---	---	---	---	---	---	---	---	---	
X-17d-0.5	11/21/2016	0.5	**11**	---	---	---	---	---	---	---	---	---	---	---	---	
X-18-0.5	3/25/2017	0.5	**13**	---	---	---	---	---	---	---	---	---	---	---	---	
X-18-2.5	3/25/2017	2.5	**4.2**	---	---	---	---	---	---	---	---	---	---	---	---	
X-18a-0.5	3/25/2017	0.5	**13**	---	---	---	---	---	---	---	---	---	---	---	---	
X-18a-2.5	3/25/2017	2.5	**3.1**	---	---	---	---	---	---	---	---	---	---	---	---	
X-18c-0.5	3/25/2017	0.5	**14**	---	---	---	---	---	---	---	---	---	---	---	---	
X-18c-2.5	3/25/2017	2.5	**2.5**	---	---	---	---	---	---	---	---	---	---	---	---	
Composite E6	N/A	0.5	---	---	---	---	---	**1.4J**	**3.4**	**1.4J**	**2.0**	**33**	**0.37J**	**3.1**	---	Composite of X15-0.5, X16-0.5, and X17-0.5
Y-12-0.5	10/22/2016	0.5	**8.5**	---	**12**	---	---	---	---	---	---	---	---	---	---	
Y-12-2.5	10/22/2016	2.5	**1.9**	---	**4.1**	---	---	---	---	---	---	---	---	---	---	
Y-12-2.5 DUP	10/22/2016	2.5	**3.1**	---	**4.0**	---	---	---	---	---	---	---	---	---	---	
Y-13-0.5	10/22/2016	0.5	**10**	---	**8.9**	---	---	---	---	---	---	---	---	---	---	
Y-13-2.5	10/22/2016	2.5	**3.0**	---	**30**	---	---	---	---	---	---	---	---	---	---	
Y-14-0.5	10/22/2016	0.5	**6.8**	---	**8.2**	---	---	---	---	---	---	---	---	---	---	
Y-14-2.5	10/22/2016	2.5	**2.8**	---	**4.4**	---	---	---	---	---	---	---	---	---	---	
Composite E7	N/A	0.5	---	---	---	---	---	ND<2.0	**0.65J**	**0.32J**	**0.58J**	**5.8J**	ND<2.0	**0.47J**	ND<16	Composite of Y12-0.5, Y13-0.5, and Y14-0.5
Y-15-0.5	10/22/2016	0.5	**3.6**	---	**8.9**	---	---	---	---	---	---	---	---	---	---	
Y-15-2.5	10/22/2016	2.5	**2.4**	---	**8.0**	---	---	---	---	---	---	---	---	---	---	
Y-16-0.5	10/22/2016	0.5	**2.6**	---	**6.1**	---	---	---	---	---	---	---	---	---	---	
Y-16-2.5	10/22/2016	2.5	**8.9**	---	**11**	---	---	---	---	---	---	---	---	---	---	
Y-17-0.5	10/22/2016	0.5	**16**	---	**12**	---	---	---	---	---	---	---	---	---	---	
Y-17-2.5	10/22/2016	2.5	**2.6**	---	**7.5**	---	---	---	---	---	---	---	---	---	---	
Y-17b-0.5	11/21/2016	0.5	**4.9**	---	---	---	---	---	---	---	---	---	---	---	---	
Y-17c-0.5	11/21/2016	0.5	**14**	---	---	---	---	---	---	---	---	---	---	---	---	
Y-17c-2.5	11/21/2016	2.5	**2.6**	---	---	---	---	---	---	---	---	---	---	---	---	
Y-17d-0.5	11/21/2016	0.5	**4.7**	---	---	---	---	---	---	---	---	---	---	---	---	
Y-17d-0.5 DUP	11/21/2016	0.5	**3.2**	---	---	---	---	---	---	---	---	---	---	---	---	
Composite E8	N/A	0.5	---	---	---	---	---	ND<2.0	**1.1J**	**0.75J**	**0.42J**	**3.9J**	ND<2.0	**0.34J**	---	Composite of Y15-0.5, Y16-0.5, and Y17-0.5
Composite E8 DUP	N/A	0.5	---	---	---	---	---	ND<2.0	**0.87J**	**0.47J**	**0.80J**	**7.4J**	ND<2.0	**1.3**	---	Composite of Y15-0.5, Y16-0.5, and Y17-0.5
Z-17-0.5	3/25/2017	0.5	**11**	---	---	---	---	---	---	---	---	---	---	---	---	
Z-17-2.5	3/25/2017	2.5	**3.0**	---	---	---	---	---	---	---	---	---	---	---	---	

Table 1
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Preliminary Environmental Assessment Equivalent Report
LAUSD - Roosevelt High School
456 South Mathews Street
Los Angeles, California

Sample Location	Sample Date	Depth (feet bgs)	Analyses and Analytical Methods													Comments
			Arsenic (As) EPA 6010B		Lead (Pb) EPA 6010B			Organochlorine Pesticides (OCPs) EPA 8081A							PCBs EPA 8082	
			TTLC	STLC	TTLC	STLC	TCLP	4,4'-DDD	4,4'-DDE	4,4'-DDT	alpha-Chlordane	Chlordane	Dieldrin	gamma-Chlordane		
Units:			mg/kg	mg/L	mg/kg	mg/L	mg/L	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	
Z-17b-0.5	3/25/2017	0.5	**4.6**	---	---	---	---	---	---	---	---	---	---	---	---	
Z-17b-2.5	3/25/2017	2.5	**3.4**	---	---	---	---	---	---	---	---	---	---	---	---	
Z-17d-0.5	3/25/2017	0.5	**10**	---	---	---	---	---	---	---	---	---	---	---	---	
Z-17d-2.5	3/25/2017	2.5	**2.8**	---	---	---	---	---	---	---	---	---	---	---	---	
Units:			mg/L		mg/L			µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	
Equipment Blanks																
EB-1-10/8/16	10/8/2016	-	ND<0.010	---	ND<0.0050	---	---	ND<0.05	ND<0.05	ND<0.05	ND<0.02	ND<0.25	ND<0.05	ND<0.02	ND	
EB-1-10/9/16	10/9/2016	-	ND<0.010	---	ND<0.0050	---	---	ND<0.05	ND<0.05	ND<0.05	ND<0.02	ND<0.25	ND<0.05	ND<0.02	ND	
EB-2-10/9/16	10/9/2016	-	ND<0.010	---	ND<0.0050	---	---	ND<0.05	ND<0.05	ND<0.05	ND<0.02	ND<0.25	ND<0.05	ND<0.02	ND	
EB-4-10/15/16	10/15/2016	-	ND<0.010	---	ND<0.0050	---	---	ND<0.05	ND<0.05	ND<0.05	ND<0.02	ND<0.25	ND<0.05	ND<0.02	ND	
EB-5-10/15/16	10/15/2016	-	ND<0.010	---	ND<0.0050	---	---	ND<0.05	ND<0.05	ND<0.05	ND<0.02	ND<0.25	ND<0.05	ND<0.02	ND	
EB-6-10/16/16	10/16/2016	-	ND<0.010	---	ND<0.0050	---	---	ND<0.05	ND<0.05	ND<0.05	ND<0.02	ND<0.25	ND<0.05	ND<0.02	ND	
EB-7-10/16/16	10/16/2016	-	ND<0.010	---	ND<0.0050	---	---	ND<0.05	ND<0.05	ND<0.05	ND<0.02	ND<0.25	ND<0.05	ND<0.02	ND	
EB-8-10/22/16	10/22/2016	-	ND<0.010	---	ND<0.0050	---	---	ND<0.05	ND<0.05	ND<0.05	ND<0.02	ND<0.25	ND<0.05	ND<0.02	ND	
EB-9-10/22/16	10/22/2016	-	ND<0.010	---	**0.0066**	---	---	ND<0.05	ND<0.05	ND<0.05	ND<0.02	ND<0.25	ND<0.05	ND<0.02	ND	
EB-10-10/22/16	10/22/2016	-	ND<0.010	---	ND<0.0050	---	---	ND<0.05	ND<0.05	ND<0.05	ND<0.02	ND<0.25	ND<0.05	ND<0.02	ND	
EB-11-10/23/16	10/23/2016	-	ND<0.010	---	ND<0.0050	---	---	ND<0.05	ND<0.05	ND<0.05	ND<0.02	ND<0.25	ND<0.05	ND<0.02	ND	
EB-12-10/23/16	10/23/2016	-	ND<0.010	---	ND<0.0050	---	---	ND<0.05	ND<0.05	ND<0.05	ND<0.02	ND<0.25	ND<0.05	ND<0.02	ND	
EB-13-10/29/16	10/29/2016	-	ND<0.050	---	ND<0.025	---	---	ND<0.05	ND<0.05	ND<0.05	ND<0.02	ND<0.25	ND<0.05	ND<0.02	ND	
EB-14-10/29/16	10/29/2016	-	ND<0.050	---	ND<0.025	---	---	ND<0.05	ND<0.05	ND<0.05	ND<0.02	ND<0.25	ND<0.05	ND<0.02	ND	
EB-15-10/30/16	10/30/2016	-	ND<0.010	---	ND<0.0050	---	---	ND<0.05	ND<0.05	ND<0.05	ND<0.02	ND<0.25	ND<0.05	ND<0.02	ND	
EB-16-10/30/16	10/30/2016	-	ND<0.010	---	ND<0.0050	---	---	ND<0.06	ND<0.06	ND<0.06	ND<0.03	ND<0.28	ND<0.06	ND<0.03	ND	
EB-17	11/21/2016	-	ND<0.010	---	ND<0.0050	---	---	---	---	---	---	---	---	---	---	
EB-18	11/21/2016	-	ND<0.010	---	**0.013**	---	---	---	---	---	---	---	---	---	---	
EB-19	11/22/2016	-	ND<0.010	---	ND<0.0050	---	---	---	---	---	---	---	---	---	---	
EB-20	11/22/2016	-	ND<0.010	---	ND<0.0050	---	---	---	---	---	---	---	---	---	---	
EB-21	11/23/2016	-	ND<0.010	---	**0.0030 J**	---	---	---	---	---	---	---	---	---	---	
EB-22	11/23/2016	-	ND<0.010	---	ND<0.0050	---	---	---	---	---	---	---	---	---	---	
EB-23	12/21/2016	-	ND<0.010	---	**0.0031 J**	---	---	---	---	---	---	---	---	---	---	
EB-24-3/25/17	3/25/2017	-	ND<0.010	---	ND<0.0050	---	---	---	---	---	---	---	---	---	---	
EB-25-3/25/17	3/25/2017	-	**0.0093 J**	---	**0.0029 J**	---	---	---	---	---	---	---	---	---	---	
EB-26-3/26/17	3/26/2017	-	**0.0090 J**	---	ND<0.0050	---	---	---	---	---	---	---	---	---	---	
EB-27-3/26/17	3/26/2017	-	ND<0.010	---	ND<0.0050	---	---	---	---	---	---	---	---	---	---	
EB-28-6/14/17	6/14/2017	-	ND<0.010	---	**0.0032 J**	---	---	---	---	---	---	---	---	---	---	
EB-29-6/14/17	6/14/2017	-	ND<0.010	---	**0.0034 J**	---	---	---	---	---	---	---	---	---	---	

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Sample Location	Sample Date	Depth (feet bgs)	Analyses and Analytical Methods													Comments
			Arsenic (As) EPA 6010B		Lead (Pb) EPA 6010B			Organochlorine Pesticides (OCPs) EPA 8081A							PCBs EPA 8082	
			TTLC	STLC	TTLC	STLC	TCLP	4,4'-DDD	4,4'-DDE	4,4'-DDT	alpha-Chlordane	Chlordane	Dieldrin	gamma-Chlordane		
		Units:	mg/kg	mg/L	mg/kg	mg/L	mg/L	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	

Notes:

Table summarizes arsenic and lead laboratory analytical reports for soil samples.
Samples with detectable concentrations presented in **bold** font.
Arsenic screening level based on California background level.
TTLC screening level based on Department of Toxic Substances Control (DTSC) Office of Human Ecological Risk (HERO) Human Health Risk Assessment (HRRA) Note Number 3, Table 1 (DTSC, 2015).
OCPs screening levels are based on Department of Toxic Substances Control (DTSC) Office of Human Ecological Risk (HERO) Human Health Risk Assessment (HRRA) Note Number 3-Table 1 Cancer Value (or Non-Cancer value, lowest value) (DTSC, 2015) or United States Environmental Protection Agency (US EPA) Regional Screening Level [carcinogenic or non-carcinogenic, lowest value) (EPA, 2015).

LAUSD = Los Angeles Unified School District
ID = Identification
bgs = below ground surface
EPA = Environmental Protection Agency
--- = not analyzed

mg/kg = milligrams per kilogram
mg/L = milligrams per liter
µg/L = micrograms per liter
DUP = Duplicate of preceeding sample
J = Analyte detected below the Practical Quantitation Limit but above or equal to the Method Detection Limit. Result is an estimated concentration.

(1) = 3.8J Aroclor 1260
(2) = 11J Aroclor 1260

Table 2
Summary of Hoist and Clarifier Soil Sample Results - TPH, VOCs, OCPs, PCBs, and Metals
Preliminary Environmental Assessment Equivalent Report
LAUSD - Roosevelt High School
456 South Mathews Street
Los Angeles, California

Sample Location	Date	Depth (feet bgs)	Total Petroleum Hydrocarbons (TPH) EPA Method 8015			VOCs EPA Method 8260B	SVOCs EPA Method 8270C	Organochlorine Pesticides (OCPs) EPA 8081A	Polychlorinated Biphenyls (PCBs) - EPA Method 8082	Metals - EPA Methods 6010B/7471A																Comments
			Gasoline Range	Diesel Range (C10-22)	Motor Oil Range (C23-C36)					Antimony	Arsenic	Barium	Berrylium	Cadmium	Chromium	Cobalt	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc	
Units:			mg/kg	mg/kg	mg/kg	(µg/kg)	(µg/kg)	µg/kg	µg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	
Screening Level:			NA	NA	NA					12								80									
Hydraulic Hoist Samples																											
HL1-1-0.5-1.0	10/22/2016	0.5-1.0	---	**2.6**	**3.2**	---	---	---	ND<16	ND<2.0	**1.3**	**72**	**0.34J**	ND<1.0	**7.5**	**3.7**	**6.5**	**2.1**	**0.03J**	ND<1.0	**5.7**	ND<1.0	ND<1.0	ND<1.0	**17**	**19**	
HL1-1-2.0-2.5	10/22/2016	2.0-2.5	---	**2.6**	**2.1**	---	---	---	ND<16	ND<2.0	**1.5**	**99**	**0.36J**	ND<1.0	**11**	**5.7**	**8.7**	**1.8**	**0.02J**	ND<1.0	**7.6**	ND<1.0	ND<1.0	ND<1.0	**32**	**32**	
HL1-1-5.0-5.5	10/22/2016	5.0-5.5	---	**3.1**	**2.2**	---	---	---	ND<16	ND<2.0	**1.4**	**42**	**0.16J**	ND<1.0	**8.0**	**3.6**	**5.2**	**1.3**	**0.03J**	ND<1.0	**5.8**	ND<1.0	ND<1.0	ND<1.0	**14**	**15**	
HL1-1-9.5-10.0	10/22/2016	9.5-10.0	---	**1.5**	**1.0**	---	---	---	ND<16	ND<2.0	**2.3**	**29**	**0.10J**	ND<1.0	**4.0**	**2.4**	**3.3**	**1.1**	ND<0.10	**0.20J**	**2.6**	ND<1.0	ND<1.0	ND<1.0	**19**	**11**	
HL1-2-0.5-1.0	10/22/2016	0.5-1.0	---	**3.2**	**3.6**	---	---	---	ND<16	ND<2.0	ND<1.0	**96**	**0.37J**	ND<1.0	**9.9**	**9.7**	**8.2**	**2.3**	**0.02J**	ND<1.0	**7.3**	ND<1.0	ND<1.0	ND<1.0	**22**	**27**	
HL1-2-2.0-2.5	10/22/2016	2.0-2.5	---	**1.4**	**1.3**	---	---	---	ND<16	ND<2.0	**1.4**	**120**	**0.47J**	ND<1.0	**14**	**5.4**	**13**	**3.1**	**0.05J**	ND<1.0	**9.3**	ND<1.0	ND<1.0	ND<1.0	**29**	**32**	
HL1-2-5.0-5.5	10/22/2016	5.0-5.5	---	**1.6**	**1.3**	---	---	---	ND<16	ND<2.0	**1.4**	**48**	**0.20J**	ND<1.0	**11**	**5.9**	**5.4**	**1.8**	**0.03J**	ND<1.0	**7.0**	ND<1.0	ND<1.0	ND<1.0	**25**	**15**	
HL1-2-9.5-10.0	10/22/2016	9.5-10.0	---	**3.6**	**2.2**	---	---	---	ND<16	ND<2.0	**1.2**	**39**	**0.19J**	ND<1.0	**11**	**4.1**	**4.9**	**1.4**	**0.03J**	ND<1.0	**6.3**	ND<1.0	ND<1.0	ND<1.0	**23**	**15**	
HL1-2-9.5-10.0 Duplicate	10/22/2016	9.5-10.0	---	**1.6**	**1.3**	---	---	---	ND<16	ND<2.0	**1.2**	**39**	ND<1.0	**0.11J**	**8.6**	**4.1**	**5.1**	**1.4**	**0.05J**	ND<1.0	**6.5**	ND<1.0	ND<1.0	ND<1.0	**19**	**16**	
HL2-1-0.5-1.0	10/22/2016	0.5-1.0	---	**2.0**	**1.6**	---	---	---	ND<16	ND<2.0	**1.7**	**75**	**0.25J**	ND<1.0	**9.5**	**4.6**	**8.0**	**5.0**	**0.03J**	ND<1.0	**6.0**	ND<1.0	ND<1.0	**0.56J**	**19**	**30**	
HL2-1-2.0-2.5	10/22/2016	2.0-2.5	---	**4.2**	**3.0**	---	---	---	ND<16	ND<2.0	**1.2**	**61**	**0.34J**	ND<1.0	**10**	**5.6**	**5.8**	**2.1**	**0.02J**	ND<1.0	**8.1**	ND<1.0	ND<1.0	ND<1.0	**24**	**17**	
HL2-1-5.0-5.5	10/22/2016	5.0-5.5	---	**1.3**	**1.5**	---	---	---	ND<16	ND<2.0	**0.77J**	**44**	**0.20J**	ND<1.0	**9.7**	**5.8**	**4.5**	**1.4**	**0.02J**	ND<1.0	**7.1**	ND<1.0	ND<1.0	ND<1.0	**18**	**17**	
HL2-1-9.5-10.0	10/22/2016	9.5-10.0	---	ND<1.0	ND<1.0	---	---	---	ND<16	ND<2.0	**1.7**	**17**	**0.09J**	ND<1.0	**3.2**	**1.7**	**2.6**	**0.72J**	**0.02J**	**1.1**	**1.9**	ND<1.0	ND<1.0	ND<1.0	**13**	**6.4**	
HL2-2-0.5-1.0	10/22/2016	0.5-1.0	---	**3.6**	**4.2**	---	---	---	ND<16	ND<2.0	**1.3**	**76**	**0.37J**	ND<1.0	**12**	**7.9**	**7.9**	**2.7**	**0.03J**	ND<1.0	**7.8**	ND<1.0	ND<1.0	ND<1.0	**27**	**23**	
HL2-2-2.0-2.5	10/22/2016	2.0-2.5	---	**1.9**	**1.4**	---	---	---	ND<16	ND<2.0	**0.89J**	**70**	**0.30J**	ND<1.0	**8.6**	**4.1**	**5.6**	**2.2**	**0.02J**	ND<1.0	**6.5**	ND<1.0	ND<1.0	ND<1.0	**21**	**19**	
HL2-2-5.0-5.5	10/22/2016	5.0-5.5	---	**1900**	**4700**	---	---	---	ND<16	ND<2.0	**1.1**	**70**	**0.23J**	ND<1.0	**11**	**5.3**	**5.9**	**1.6**	**0.03J**	ND<1.0	**8.9**	ND<1.0	ND<1.0	ND<1.0	**19**	**22**	
HL2-2-10.0-10.5	10/22/2016	10.0-10.5	---	**7.3**	**8.2**	---	---	---	ND<16	ND<2.0	**0.88J**	**38**	ND<1.0	ND<1.0	**2.7**	**1.1**	**2.6**	**0.79J**	ND<0.10	**0.52J**	**2.1**	ND<1.0	ND<1.0	ND<1.0	**10**	**5.9**	
HL3-1-0.5-1.0	10/22/2016	0.5-1.0	---	**1.8**	**1.8**	---	---	---	ND<16	ND<2.0	ND<1.0	**51**	**0.22J**	ND<1.0	**7.7**	**3.8**	**5.2**	**3.0**	**0.03J**	ND<1.0	**4.3**	ND<1.0	ND<1.0	ND<1.0	**16**	**17**	
HL3-1-2.0-2.5	10/22/2016	2.0-2.5	---	**2.3**	**2.3**	---	---	---	ND<16	ND<2.0	ND<1.0	**57**	**0.34J**	ND<1.0	**10**	**6.1**	**6.7**	**2.4**	**0.03J**	ND<1.0	**7.1**	ND<1.0	ND<1.0	ND<1.0	**24**	**26**	
HL3-1-5.0-5.5	10/22/2016	5.0-5.5	---	**3.8**	**3.0**	---	---	---	ND<16	ND<2.0	**1.1**	**59**	**0.30J**	ND<1.0	**12**	**4.2**	**5.0**	**1.6**	**0.03J**	ND<1.0	**8.1**	ND<1.0	ND<1.0	ND<1.0	**19**	**16**	
HL3-1-5.0-5.5 Duplicate	10/22/2016	5.0-5.5	---	**1.5**	**1.3**	---	---	---	ND<16	ND<2.0	**1.3**	**54**	ND<1.0	ND<1.0	**13**	**2.9**	**5.7**	**1.7**	**0.03J**	ND<1.0	**7.2**	ND<1.0	ND<1.0	ND<1.0	**19**	**18**	
HL3-1-9.5-10.0	10/22/2016	9.5-10.0	---	**2.4**	**1.6**	---	---	---	ND<16	ND<2.0	**1.1**	**65**	**0.06J**	ND<1.0	**2.5**	**1.2**	**2.0J**	**0.61J**	ND<0.10	**0.61J**	**2.5**	ND<1.0	ND<1.0	ND<1.0	**9.7**	**4.6**	
HL3-2-0.5-1.0	10/22/2016	0.5-1.0	---	**2.3**	**2.7**	---	---	---	ND<16	ND<2.0	**0.93J**	**69**	**0.27J**	ND<1.0	**7.5**	**3.1**	**7.4**	**2.2**	**0.03J**	ND<1.0	**4.4**	ND<1.0	ND<1.0	ND<1.0	**17**	**21**	
HL3-2-2.0-2.5	10/22/2016	2.0-2.5	---	**3.6**	**3.5**	---	---	---	ND<16	ND<2.0	**1.1**	**130**	**0.33J**	ND<1.0	**9.6**	**4.6**	**7.2**	**1.8**	**0.02J**	ND<1.0	**6.8**	ND<1.0	ND<1.0	ND<1.0	**23**	**23**	
HL3-2-5.0-5.5	10/22/2016	5.0-5.5	---	**2.0**	**2.3**	---	---	---	ND<16	ND<2.0	ND<1.0	**36**	**0.09J**	ND<1.0	**5.5**	**2.6**	**3.4**	**0.88J**	ND<0.10	ND<1.0	**2.8**	ND<1.0	ND<1.0	ND<1.0	**12**	**11**	
HL3-2-9.5-10.0	10/22/2016	9.5-10.0	---	**3.6**	**3.3**	---	---	---	ND<16	ND<2.0	**1.9**	**100**	**0.32J**	ND<1.0	**11**	**4.7**	**7.4**	**17**	**0.03J**	ND<1.0	**6.5**	ND<1.0	ND<1.0	ND<1.0	**24**	**37**	
HL4-1-0.5-1.0	10/22/2016	0.5-1.0	---	**3.0**	**13**	---	---	---	ND<16	ND<2.0	**1.5**	**140**	**0.37J**	ND<1.0	**13**	**6.6**	**9.3**	**2.8**	ND<0.10	ND<1.0	**9.3**	ND<1.0	ND<1.0	ND<1.0	**31**	**30**	
HL4-1-2.0-2.5	10/22/2016	2.0-2.5	---	**3.7**	**3.9**	---	---	---	ND<16	ND<2.0	**1.3**	**150**	**0.41J**	ND<1.0	**14**	**6.9**	**9.8**	**3.0**	**0.02J**	ND<1.0	**9.9**	ND<1.0	ND<1.0	ND<1.0	**28**	**32**	
HL4-1-5.0-5.5	10/22/2016	5.0-5.5	---	**1.1**	**1.0**	---	---	---	ND<16	ND<2.0	**1.6**	**99**	**0.42J**	ND<1.0	**14**	**4.2**	**7.0**	**2.9**	**0.02J**	ND<1.0	**8.8**	ND<1.0	ND<1.0	ND<1.0	**30**	**22**	
HL4-1-9.5-10.0	10/22/2016	9.5-10.0	---	**2.7**	**3.1**	---	---	---	ND<16	ND<2.0	**2.6**	**32**	**0.11J**	ND<1.0	**6.6**	**2.1**	**3.3**	**1.2**	ND<0.10	**0.47J**	**3.1**	ND<1.0	ND<1.0	ND<1.0	**34**	**8.8**	
HL4-2-0.5-1.0	10/22/2016	0.5-1.0	---	**5.5**	**11**	---	---	---	**(1)**	ND<2.0	**2.2**	**88**	**0.27J**	ND<1.0	**13**	**5.0**	**8.4**	**4.3**	**0.02J**	ND<1.0	**8.0**	ND<1.0	ND<1.0	ND<1.0	**25**	**25**	
HL4-2-2.0-2.5	10/22/2016	2.0-2.5	---	**1.6**	**1.5**	---	---	---	ND<16	ND<2.0	**1.4**	**82**	**0.21J**	ND<1.0	**8.5**	**4.2**	**5.4**	**1.6**	**0.02J**	ND<1.0	**6.5**	ND<1.0	ND<1.0	ND<1.0	**21**	**19**	
HL4-2-5.0-5.5	10/22/2016	5.0-5.5	---	**5.6**	**5.7**	---	---	---	ND<16	ND<2.0	**2.4**	**54**	**0.28J**	ND<1.0	**10**	**3.5**	**4.5**	**1.8**	**0.02J**	ND<1.0	**8.1**	ND<1.0	ND<1.0	ND<1.0	**26**	**17**	
HL4-2-5.0-5.5 Duplicate	10/22/2016	5.0-5.5	---	**1.0**	**ND<1.0**	---	---	---	ND<16	ND<2.0	**3.0**	**61**	**0.06J**	**0.18J**	**12**	**3.1**	**5.2**	**1.8**	**0.02J**	ND<1.0	**9.1**	ND<1.0	ND<1.0	ND<1.0	**30**	**20**	
HL4-2-9.5-10.0	10/22/2016	9.5-10.0	---	**2.5**	**2.5**	---	---	---	ND<16	ND<2.0	**5.1**	**32**	**0.10J**	ND<1.0	**3.4**	**1.8**	**4.4**	**1.0**	ND<0.10	**0.90J**	**3.6**	ND<1.0	ND<1.0	ND<1.0	**27**	**6.8**	
Clarifier Samples																											
CL1-1-0.5-1.0	10/22/2016	0.5-1.0	---	ND<1.0	ND<1.0	ND	**(2)**	---	---	ND<2.0	**1.8**	**61**	**0.35J**	ND<1.0	**11**	**4.0**	**5.8**	**2.4**	**0.03J**	ND<1.0	**6.4**	ND<1.0	ND<1.0	ND<1.0	**26**	**17**	
CL1-1-2.0-2.5	10/22/2016	2.0-2.5	---	**1.4**	**3.6**	**(3)**	ND	---	---	ND<2.0	**1.2**	**110**	**0.36J**	ND<1.0	**11**	**5.0**	**7.4**	**2.7**	**0.02J**	ND<1.0	**6.7**	ND<1.0	ND<1.0	ND<1.0	**26**	**28**	
CL1-1-5.0-5.5	10/22/2016	5.0-5.5	---	**1.2**	ND<1.0	ND	ND	---	---	ND<2.0	**2.0**	**39**	**0.13J**	ND<1.0	**4.2**	**2.0**	**3.5**	**0.96J**	ND<0.10	ND<1.0	**3.2**	ND<1.0	ND<1.0	ND<1.0	**19**	**9.6**	
CL1-1-9.5-10.0	10/22/2016	9.5-10.0	---	ND<1.0	ND<1.0	ND	ND	---	---	ND<2.0	**6.4**	**86**	**0.13J**	ND<1.0	**4.3**	**2.6**	**4.6**	**1.0**	**0.05J**	ND<1.0	**3.4**	ND<1.0	ND<1.0	ND<1.0	**32**	**12**	
CL1-2-0.5-1.0	10/22/2016	0.5-1.0	---	**2.6**	**7.3**	ND	ND	---	---	ND<2.0	**2.7**	**82**	**0.28J**	ND<1.0	**17**	**4.8**	**12**	**11**	**0.04J**	ND<1.0	**10**	ND<1.0	ND<1.0	**0.58J**	**22**	**28**	
CL1-2-2.0-2.5	10/22/2016	2.0-2.5	---	**4.2**	**1.6**	ND	**(4)**	---	---	ND<2.0	**1.2**	**80**	**0.36J**	ND<1.0	**12**	**6.4**	**6.2**	**2.9**	**0.03J**	ND<1.0	**6.1**	ND<1.0	ND<1.0	ND<1.0	**25**	**21**	
CL1-2-5.0-5.5	10/22/2016	5.0-5.5	---	**2.6**	**2.6**	ND	ND	---	---	ND<2.0	**2.6**	**50**	**0.25J**	ND<1.0	**11**	**4.6**	**4.5**	**1.7**	**0.03J**	ND<1.0	**4.9**	ND<1.0	ND<1.0	ND<1.0	**31**	**12**	
CL1-2-5.0-5.5 Dup	10/22/2016	5.0-5.5	---	**1.2**	ND<1.0	ND	ND	---	---	ND<2.0	**2.5**	**54**	ND<1.0	**0.09 J**	**12**	**8.4**	**5.4**	**1.9**	**0.03 J**	ND<1.0	**5.6**	ND<1.0	ND<1.0	ND<1.0	**34**	**15**	
CL1-2-9.5-10.0	10/22/2016	9.5-10.0	---	**1.4**	ND<1.0	ND	ND	---	---	ND<2.0	**1.5**	**87**	**0.11J**	ND<1.0	**3.7**	**1.9**	**3.1**	**1.0**	**0.02J**	**0.51J**	**2.1**	ND<1.0	ND<1.0	ND<1.0	**14**	**8.9**	

Table 2
Summary of Hoist and Clarifier Soil Sample Results - TPH, VOCs, OCPs, PCBs, and Metals
Preliminary Environmental Assessment Equivalent Report
LAUSD - Roosevelt High School
456 South Mathews Street
Los Angeles, California

Sample Location	Date	Depth (feet bgs)	Total Petroleum Hydrocarbons (TPH) EPA Method 8015					Organochlorine Pesticides (OCPs) EPA 8081A	Polychlorinated Biphenyls (PCBs) - EPA Method 8082	Metals - EPA Methods 6010B/7471A															Comments
			Gasoline Range	Diesel Range (C10-22)	Motor Oil Range (C23-C36)	VOCs EPA Method 8260B	SVOCs EPA Method 8270C			Antimony	Arsenic	Barium	Berrylium	Cadmium	Chromium	Cobalt	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc	
Units:			mg/kg	mg/kg	mg/kg	(µg/kg)	(µg/kg)	µg/kg	µg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	
Screening Level:			NA	NA	NA					12								80									
Undocumented Fill Samples																											
FILL-1-5.0-5.5	10/22/2016	5.0-5.5	ND<0.82	--	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	--	---	---	
Composite 1	N/A	N/A	---	**1.7**	**3.4**	---	ND	ND	ND<16	ND<2.0	**3.0**	**74**	ND<1.0	**0.13J**	**10**	**4.8**	**8.0**	**6.9**	**0.02J**	ND<1.0	**6.7**	ND<1.0	ND<1.0	ND<1.0	**33**	**23**	Composite of FILL-1-2.0-2.5, FILL-1-5.0-5.5, and FILL-1-10-10.5
FILL-2-10.0-10.5	10/22/2016	10.0-10.5	ND<1.0	---	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
Composite 2	N/A	N/A	---	**1.5**	**1.8**	---	ND	ND	ND<16	ND<2.0	**3.5**	**42**	ND<1.0	**0.14J**	**10**	**2.6**	**5.1**	**1.3**	**0.02J**	ND<1.0	**5.6**	ND<1.0	ND<1.0	ND<1.0	**24**	**17**	Composite of FILL-2-2.0-2.5, FILL-2-5.0-5.5, FILL-2-10-10.5, and FILL-2-13.5-14.0
Equipment Blanks																											
Units:			mg/L	mg/L	mg/L	µg/L	µg/L		µg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	
EB-CL-10-22-16	10/22/2016	N/A	---	ND<0.05	ND<0.05	ND	ND	---	---	ND<0.010	ND<0.010	ND<0.0030	ND<0.0030	ND<0.0030	ND<0.0030	ND<0.0030	ND<0.0090	ND<0.0050	ND<0.00020	ND<0.0050	ND<0.0050	**0.0042J**	**0.0007J**	ND<0.015	ND<0.0030	**0.0075J**	
EB-HL-10-22-16	10/22/2016	N/A	---	ND<0.05	ND<0.05	---	---	---	ND	ND<0.010	ND<0.010	ND<0.0030	ND<0.0030	ND<0.0030	ND<0.0030	ND<0.0030	**0.0030J**	ND<0.0050	ND<0.00020	ND<0.0050	ND<0.0050	**0.0046J**	ND<0.0030	ND<0.015	ND<0.0030	**0.0042J**	
EB-UF-10-22-16	10/22/2016	N/A	ND<0.05	ND<0.05	ND<0.05	ND	ND	---	ND	**0.0028J**	ND<0.010	ND<0.0030	**0.0005J**	ND<0.0030	ND<0.0030	ND<0.0030	ND<0.0090	ND<0.0050	ND<0.00020	**0.0011J**	ND<0.0050	**0.0058J**	ND<0.0030	**0.0028J**	ND<0.0030	ND<0.025	
Trip Blanks																											
Units:			mg/L	mg/L	mg/L	µg/L	µg/L			mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	
Trip Blank	10/22/2016	N/A	ND<0.05	---	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
Trip Blank	10/22/2016	N/A	ND<0.05	---	---	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	

Notes:

Table summarizes TPH, VOC, PCB, and Metals laboratory analytical reports for all soil samples.
Samples with detectable concentrations presented in **bold** font.

Screening levels are based on Department of Toxic Substances Control (DTSC) Office of Human Ecological Risk (HERO) Human Health Risk Assessment (HRRA) Note Number 3-Table 1 Cancer Value (or Non-Cancer value, lowest value) (DTSC, 2015) or United States Environmental Protection Agency (US EPA) Regional Screening Level [carcinogenic or non-carcinogenic, lowest value) (EPA, 2015).

Samples exceeding the screening levels are highlighted yellow.
* Samples analyzed past holding time for confirmation only.

LAUSD = Los Angeles Unified School District
ID = Identification
bgs = Below ground surface
C4-C11 = Indicates the hydrocarbon chain range
EPA = Environmental Protection Agency
µg/kg = Micrograms per kilogram
mg/kg = Milligrams per kilogram
µg/L = micrograms per liter
PQL = Practical Quantitation Limit as identified in the laboratory reports
NA = US EPA Region IX Regional Screening Level Resident Soil not available
CS = Compound specific
ND<2.0 = Constituent not detected at or above the laboratory PQL shown
--- = Sample was not analyzed for the particular constituent

(1) = 6.7J µg/kg Aroclor 1254
(2) = 180J µg/kg Phenol
(3) = 1.5J µg/kg Carbon disulfide
(4) = 190J µg/kg bis(2-ethylhexyl)phthalate

Table 3

REVISED SUMMARY OF PROPOSED EXCAVATION VOLUMES
SCREENING LEVELS: 80 mg/kg LEAD AND 12 mg/kg ARSENIC
Preliminary Environmental Assessment Equivalent Report
LAUSD - Roosevelt High School
456 South Mathews Street
Los Angeles, California

Location ID	Chemicals of Concern	Length (feet)	Width (feet)	Depth (feet)	Volume (cubic yards)	Volume (tons)	Notes
AREA 2							
C-12	Lead (Pb)	20	20	2.5	37.04	55.56	
B-6	Lead (Pb)	40	30	4.5	200.00	300.00	Confirmation sample at 4.5 feet bgs. See Table 3A, includes CAL-HAZ lead-affected soil.
PE-3	Lead (Pb)	40	15	4.5	100.00	150.00	Confirmation sample at 4.5 feet bgs. See Table 3A, includes CAL-HAZ lead-affected soil.
H-2	Lead (Pb)	20	45	3.5	116.67	175.00	H-2 total volume: 204.17 cubic yards or 306.25 tons.
H-2	Lead (Pb)	27	25	3.5	87.50	131.25	
Area 2 Subtotal					***541.20***	***811.81***	
AREA 3							
C-17 / C-17b	Lead (Pb)	50	25	2.5	115.74	173.61	See Table 3A, includes CAL-HAZ lead-affected soil.
B-16 / B-16a	Arsenic (As) & Lead (Pb)	25	25	3.5	81.02	121.53	
B-15b	Lead (Pb)	25	25	2.5	57.87	86.81	
B-13b / B-14 / B-14a/b / B-15 / B-15a	Arsenic (As)	100	25	2.5	231.48	347.22	
B-13 / B-13a	Arsenic (As) & Lead (Pb)	20	25	4.5	83.33	125.00	Confirmation sample at 4.5 feet bgs. See Table 3A, includes CAL-HAZ lead-affected soil.
B-13c / C-13 / C-13c	Lead (Pb)	20	75	2.5	138.89	208.33	See Table 3A, includes CAL-HAZ lead-affected soil.
Area 3 Subtotal					***708.33***	***1062.50***	
AREA 5							
MB-6	Lead (Pb)	15	20	2.5	27.78	41.67	
AUD-3a / AUD-3a1	Lead (Pb)	55	55	2.5	280.09	420.14	See Table 3A, includes CAL-HAZ lead-affected soil.
AUD-3 /AUD-3b	Lead (Pb)	35	45	2.5	145.83	218.75	See Table 3A, includes CAL-HAZ lead-affected soil.
AUD-3c / AUD-3c1	Lead (Pb)	57	37	2.5	195.28	292.92	See Table 3A, includes CAL-HAZ lead-affected soil.
AUD-4/AUD-4c	Lead (Pb)	20	100	2.5	185.19	277.78	See Table 3A, includes CAL-HAZ lead-affected soil.
AUD-5 / AUD-5b	Lead (Pb)	35	53	2.5	171.76	257.64	See Table 3A, includes CAL-HAZ lead-affected soil.
AUD-5c / AA2038-9	Lead (Pb)	20	60	2.5	111.11	166.67	See Table 3A, includes CAL-HAZ lead-affected soil.
AUD-6 / AUD-6b	Lead (Pb)	35	62	2.5	200.93	301.39	See Table 3A, includes CAL-HAZ lead-affected soil.
AUD-6c	Lead (Pb)	60	58	2.5	322.22	483.33	See Table 3A, includes CAL-HAZ lead-affected soil.
Area 5 Subtotal					***1640.19***	***2460.28***	
AREA 6							
FS-2	Arsenic (As)	15	15	2.5	20.83	31.25	FS-2 total: 28.24 cubic yards or 42.36 tons
FS-2	Arsenic (As)	10	8	2.5	7.41	11.11	
AA1917	Lead (Pb)	20	15	4.5	50.00	75.00	Confirmation sample at 4.5 feet bgs
IM1	Arsenic (As)	30	17	3.5	66.11	99.17	
IM-2 / IM-2b	Lead (Pb)	45	17	3.5	99.17	148.75	See Table 3A, includes CAL-HAZ lead-affected soil.
IM-3 / IM-3c	Arsenic (As)	15	40	4.5	100.00	150.00	
IM-4	Arsenic (As)	20	10	3.5	25.93	38.89	
IM-5 / IM-5d	Arsenic (As)	35	10	4.5	58.33	87.50	
IM-6	Arsenic (As)	15	30	2.5	41.67	62.50	
CRA-2	Lead (Pb)	45	22	4.5	165.00	247.50	See Table 3A, includes CAL-HAZ lead-affected soil.
CRA-3	Arsenic (As)	25	22	2.5	50.93	76.39	
CR1-2	Lead (Pb)	50	15	2.5	69.44	104.17	See Table 3A, includes CAL-HAZ lead-affected soil.
CR1-4 / CR1-4b	Lead (Pb)	82	7	2.5	53.15	79.72	CR1-4 / CR1-4b total: 87.87 cubic yards or 131.80 tons. See Table 3A, includes CAL-HAZ lead-affected soil.
CR1-4 / CR1-4b	Lead (Pb)	15	25	2.5	34.72	52.08	
CR1-5 / CR1-5b	Arsenic (As) & Lead (Pb)	85	12	3.5	132.22	198.33	See Table 3A, includes CAL-HAZ lead-affected soil.
CR1-5d	Lead (Pb)	35	17	0.5	11.02	16.53	See Table 3A, includes CAL-HAZ lead-affected soil.
R-15	Lead (Pb)	40	22	2.5	81.48	122.22	See Table 3A, includes CAL-HAZ lead-affected soil.
Q-15b / Q-15d	Lead (Pb)	50	32	3.5	207.41	311.11	See Table 3A, includes CAL-HAZ lead-affected soil.
P-15 / P-15a/d / P-15d1 / Q-15a	Lead (Pb)	48	50	5.5	488.89	733.33	Confirmation sample at 5.5 feet bgs. See Table 3A, includes CAL-HAZ lead-affected soil.
P-15b / P-16 / P-16a/b/c	Lead (Pb)	48	38	2.5	168.89	253.33	Total: 196.67 cubic yards or 295 tons. See Table 3A, includes CAL-HAZ lead-affected soil.
P-15b / P-16 / P-16a/b/c	Lead (Pb)	25	12	2.5	27.78	41.67	

Table 3

REVISED SUMMARY OF PROPOSED EXCAVATION VOLUMES
SCREENING LEVELS: 80 mg/kg LEAD AND 12 mg/kg ARSENIC
Preliminary Environmental Assessment Equivalent Report
LAUSD - Roosevelt High School
456 South Mathews Street
Los Angeles, California

Location ID	Chemicals of Concern	Length (feet)	Width (feet)	Depth (feet)	Volume (cubic yards)	Volume (tons)	Notes
AA2684-2 / AA2684-3 AA2684-6 / AA2543-1 AA2543-2	Arsenic (As)	60	30	4.5	300.00	450.00	Total: 337.50 cubic yards or 506.25 tons. Confirmation sample at 4.5 feet bgs
AA2684-2 / AA2684-3 AA2684-6 / AA2543-1 AA2543-2	Arsenic (As)	15	15	4.5	37.50	56.25	
AA2543-6	Arsenic (As)	10	28	3.5	36.30	54.44	Confirmation sample at 3.5 feet bgs
AA2543-5	Arsenic (As)	45	15	4.5	112.50	168.75	Confirmation sample at 4.5 feet bgs
AA2038-1 / AA2249-1	Arsenic (As)	70	18	4.5	210.00	315.00	Confirmation sample at 4.5 feet bgs
AA2038-3 / AA2038-4	Arsenic (As)	15	60	4.5	150.00	225.00	Confirmation sample at 4.5 feet bgs
AA2038-2	Arsenic (As)	30	15	4.5	75.00	112.50	Confirmation sample at 4.5 feet bgs
AA2249-2	Arsenic (As)	10	38	4.5	63.33	95.00	Confirmation sample at 4.5 feet bgs
Area 6 Subtotal					***2945.00***	***4417.50***	
AREA 9							
V-16	Lead (Pb)	25	25	2.5	57.87	86.81	
X-12	Arsenic (As)	12	50	2.5	55.56	83.33	
W-14 / W-14a	Lead (Pb)	25	60	3.5	194.44	291.67	See Table 3A, includes CAL-HAZ lead-affected soil.
X-14	Arsenic (As) & Lead (Pb)	62	62	3.5	498.30	747.44	
Y-17 / Y-17c	Arsenic (As)	25	48	2.5	111.11	166.67	
X-17 / X-17b / X-18 X-18 a/c	Arsenic (As)	30	25	2.5	69.44	104.17	X-17/X-18 total volume: 219.90 cubic yards or 329.86 tons.
X-17 / X-17b / X-18 X-18 a/c	Arsenic (As)	25	65	2.5	150.46	225.69	
Area 9 Subtotal					***1137.19***	***1705.78***	
HYDRAULIC HOISTS AND CLARIFIER							
HL2-2	Hydrocarbons	18	10	7	46.67	70.00	Confirmation sample at 7 feet bgs
Hydraulic Hoists and Clarifier Subtotal					***46.67***	***70.00***	
Total Proposed Excavation Volume					***7018.58***	***10527.87***	

Notes:

1 cubic yard = 1.5 tons
bgs = below ground surface
CAL-HAZ = California Hazardous Waste

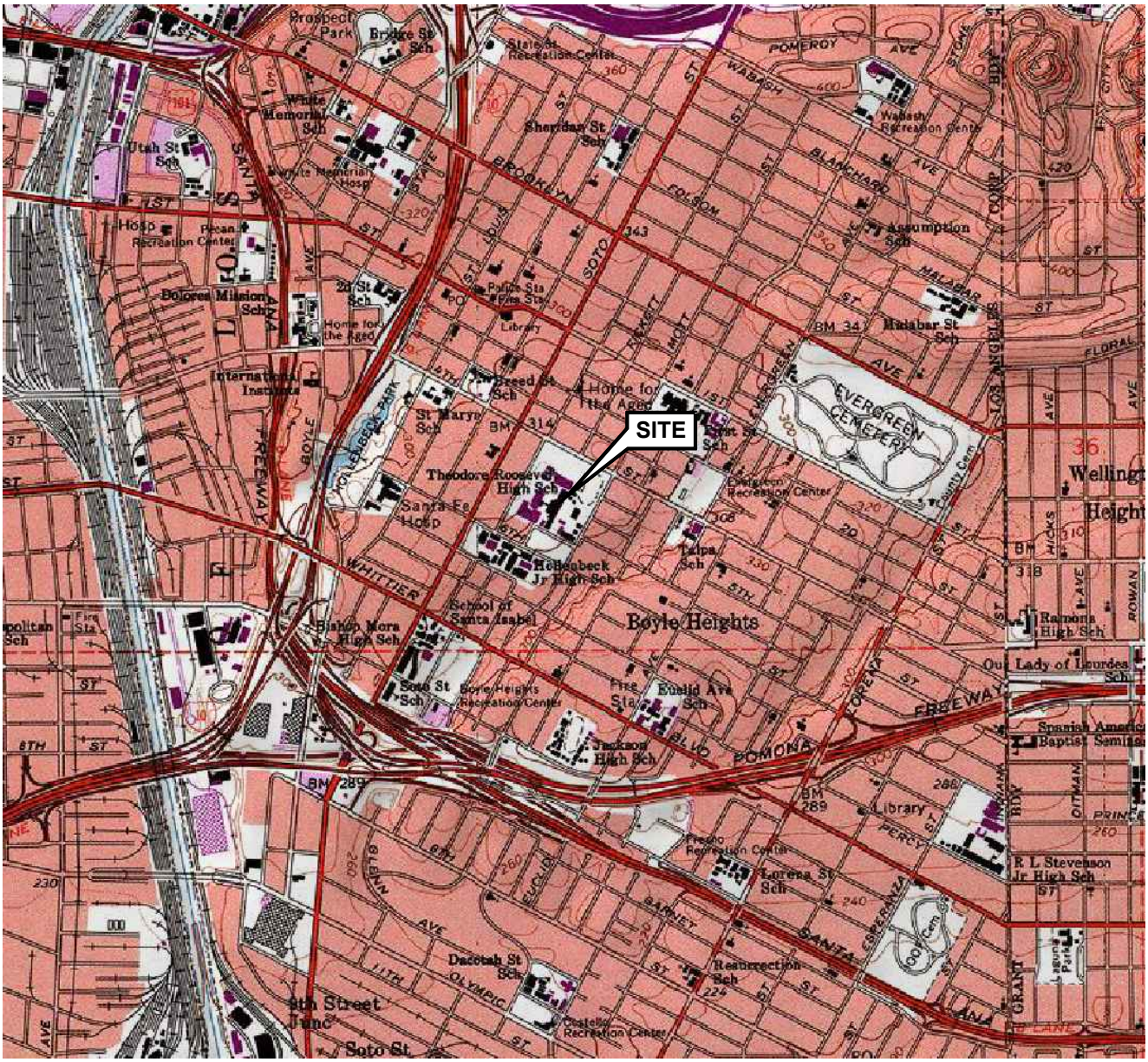
Table 3A

SUMMARY OF CALIFORNIA HAZARDOUS LEAD EXCAVATION VOLUMES
SCREENING LEVEL 80 mg/kg LEAD
Preliminary Environmental Assessment Equivalent Report
LAUSD - Roosevelt High School
456 South Mathews Street
Los Angeles, California

Location ID	Chemicals of Concern	Length (feet)	Width (feet)	Depth (feet)	Volume (cubic yards)	Volume (tons)	Notes
AREA 2							
B-6b	CAL-HAZ Lead (Pb)	29	15	3.5	56.39	84.58	
PE-3 / PE-3b	CAL-HAZ Lead (Pb)	27	15	4.5	67.50	101.25	Confirmation sample at 4.5 feet bgs
Area 2 Subtotal					***123.89***	***185.83***	
AREA 3							
C-17b	CAL-HAZ Lead (Pb)	25	25	2.5	57.87	86.81	
B-13 / B-13a	CAL-HAZ Lead (Pb)	20	25	3.5	64.81	97.22	
C-13	CAL-HAZ Lead (Pb)	20	25	2.5	46.30	69.44	
Area 3 Subtotal					***168.98***	***253.47***	
AREA 5							
AUD-3a / AUD-3a1	CAL-HAZ Lead (Pb)	55	55	2.5	280.09	420.14	
AUD-3 / AUD-3b	CAL-HAZ Lead (Pb)	35	45	2.5	145.83	218.75	
AUD-3c	CAL-HAZ Lead (Pb)	35	37	2.5	119.91	179.86	
AUD-4	CAL-HAZ Lead (Pb)	20	50	2.5	92.59	138.89	
AUD-5 AUD-5b	CAL-HAZ Lead (Pb)	35	53	2.5	171.76	257.64	
AUD-5c / AA2038-9	CAL-HAZ Lead (Pb)	20	60	2.5	111.11	166.67	
AUD-6 AUD-6b	CAL-HAZ Lead (Pb)	35	62	2.5	200.93	301.39	
AUD-6c	CAL-HAZ Lead (Pb)	60	58	2.5	322.22	483.33	
Area 5 Subtotal					***1444.44***	***2166.67***	
AREA 6							
IM-2 / IM-2b	CAL-HAZ Lead (Pb)	45	17	3.5	99.17	148.75	
CRA-2 / CRA-2b CRA-2c	CAL-HAZ Lead (Pb)	45	22	4.5	165.00	247.50	
CR1-2 / CR1-2d CR1-2d1	CAL-HAZ Lead (Pb)	50	15	2.5	69.44	104.17	
CR1-4 / CR1-4b	CAL-HAZ Lead (Pb)	82	7	2.5	53.15	79.72	CR1-4 / CR1-4b total: 87.87 cubic yards or 131.80 tons
CR1-4 / CR1-4b	CAL-HAZ Lead (Pb)	15	25	2.5	34.72	52.08	
CR1-5	CAL-HAZ Lead (Pb)	40	12	2.5	44.44	66.67	
CR1-5b	CAL-HAZ Lead (Pb)	45	12	3.5	70.00	105.00	
CR1-5d	CAL-HAZ Lead (Pb)	35	17	0.5	11.02	16.53	
R-15d	CAL-HAZ Lead (Pb)	30	20	2.5	55.56	83.33	
Q-15	CAL-HAZ Lead (Pb)	20	25	2.5	46.30	69.44	
P-16	CAL-HAZ Lead (Pb)	20	20	2.5	37.04	55.56	
P-15b	CAL-HAZ Lead (Pb)	25	50	2.5	115.74	173.61	
P-15 / P-15d P-15d1 /Q-15a	CAL-HAZ Lead (Pb)	50	45	4.5	375.00	562.50	
Area 6 Subtotal					***1176.57***	***1764.86***	
AREA 9							
W-14	CAL-HAZ Lead (Pb)	25	25	3.5	81.02	121.53	
W-14a	CAL-HAZ Lead (Pb)	25	25	2.5	57.87	86.81	
Area 9 Subtotal					***138.89***	***208.33***	
Total Proposed Excavation Volume					***3052.78***	***4579.17***	

Notes:

1 cubic yard = 1.5 tons
bgs = below ground surface
CAL-HAZ = California Hazardous Waste



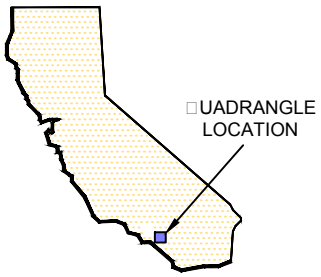
0 1/4 1/2 3/4 1 MILE

SCALE 1:24□000

N

SOURCE:

United States Geological Survey
□.5 Minute Topograp□ic Map:
Los Angeles □uadrangle



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PROJECT:
LAUSD
ROOSEVELT HIGH SCHOOL
456 S. MATHEWS STREET
LOS ANGELES, CALIFORNIA

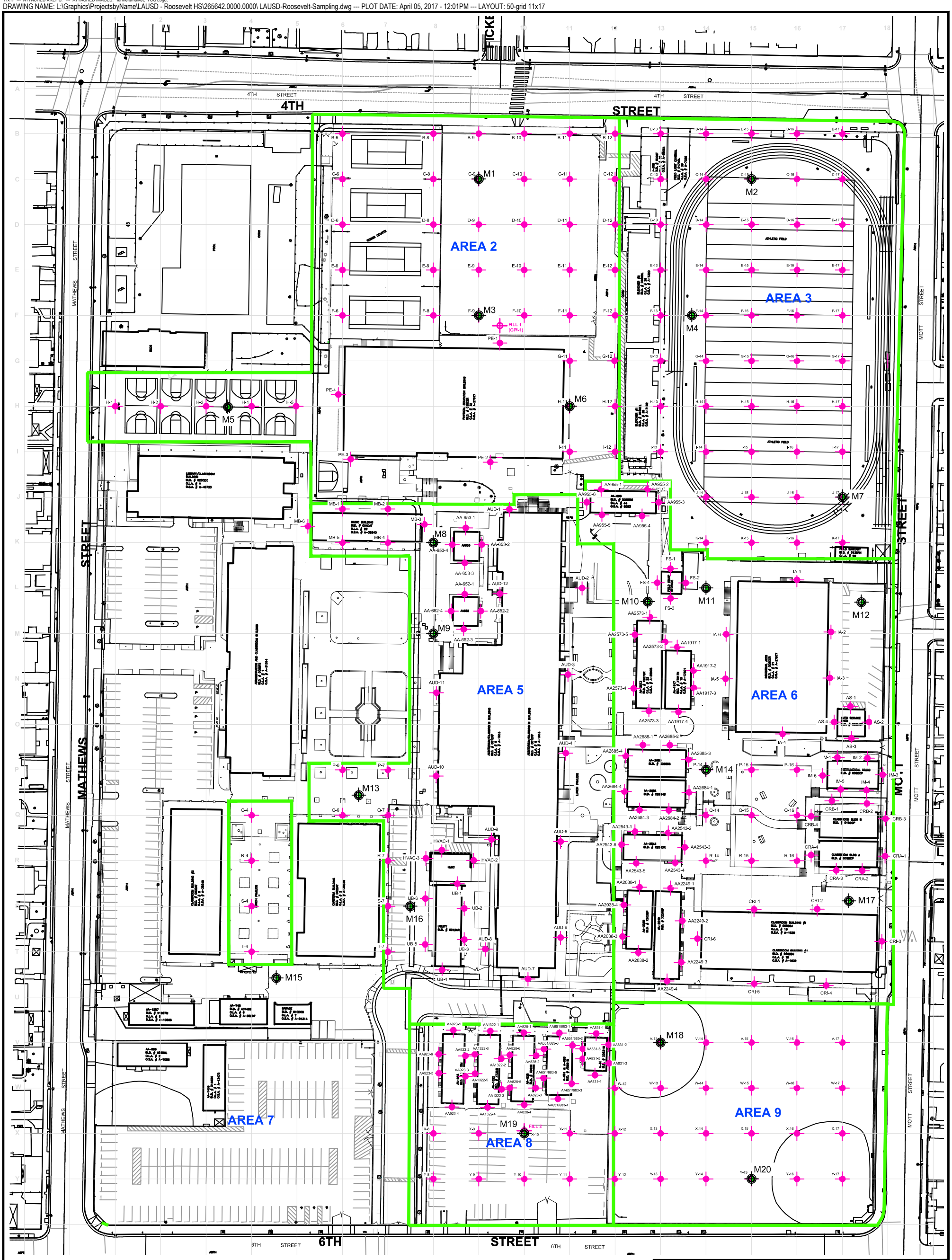
TITLE:
VICINITY MAP

DRAWN BY:	RMC
CHECKED BY:	JM
APPROVED BY:	JM
DATE:	11/03/2016
PROJ. NO.:	265642.0000.0000
FILE:	LAUSD-Roosevelt-□M.dwg

FIGURE 1

8.5x11 --- ATTACHED XREFS: --- ATTACHED IMAGES: LAUSD-Roosevelt.VM:
DRAWING NAME: L:\Graphics\ProjectsbyName\LAUSD - Roosevelt HS\265642.0000.0000\LAUSD-Roosevelt-VM.dwg --- PLOT DATE: November 03, 2016 - 3:07PM --- LAYOUT: 8.5X11P

11x17 --- ATTACHED XREF'S: --- ATTACHED IMAGES: farmersmarket; TCG Logo;
DRAWING NAME: L:\Graphics\ProjectsbyName\LAUSD - Roosevelt HS\265642.0000.0000\ LAUSD-Roosevelt-Sampling.dwg --- PLOT DATE: April 05, 2017 - 12:01PM --- LAYOUT: 50-grid 11x17



LEGEND

- LBP AND OCP Sample Location
- Undocumented Fill Sampling Location
- Methane Probe Location

N

APPROXIMATE SCALE (FEET)

0 100 200

Source: Base map provided by Converse Consultants.

PROJECT:	LAUSD ROOSEVELT HIGH SCHOOL 456 S. MATHEWS STREET LOS ANGELES, CALIFORNIA
TITLE:	SITE PLAN
DRAWN BY: RMC	PROJ NO.: 265642.0000.0000
CHECKED BY: JM	FIGURE 2
APPROVED BY: JM	
DATE: 11/03/2016	

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FILE NO.: LAUSD-Roosevelt-Sampling.dwg

AREA 2

B-6d B-6b B-6 B-6c B-7 B-8 B-9 B-10 B-11 B-12

C-6 C-7 C-8 C-9 C-10 C-11 C-12 C-12a C-12d C-12c

D-6 D-8 D-9 D-10 D-11 D-12

E-6 E-8 E-9 E-10 E-11 E-12

F-6 F-8 F-9 F-10 F-11 F-12

FILL 1 (GPI-1)

PE-1

G-11 G-12

PE-4

H-1 H-1c H-1c1 H-2 H-2a H-2b H-2b1 H-2c H-2c1 H-2d H-2d1 H-3 H-4 H-5

H-11 H-12

PE-3 PE-3b PE-3b1 PE-3c PE-3c1 PE-3d

I-11 I-12

PE-2

MB-1 MB-2 MB-6 MB-6a

AUD-1

AA955-1 AA955-6

BLDG

POOL

BENCH

CONC

TENNIS COURTS

ASPH

SIGN

ELEC. BOX UPRISER

GROUND PLUG

SLIDING GATE

PHYSICAL EDUCATION BUILDING
BLD. # 025CEX
O.L.A. # 4
O.S.A. # A-27577

LIBRARY/CLASSROOM BUILDING
BLD. # 025CEX
O.L.A. # 4
O.S.A. # A-48733

AA-955
BLD. # X0955M
O.L.A. # 44
O.S.A. # 8093

sub floor soil excavation

LEGEND

- B-12 — Sample Location
- Undocumented Fill Sampling Location
- Proposed Excavation Area for Lead

N

APPROXIMATE SCALE (FEET)

0 50 100

Source: Base map provided by Converse Consultants.

PROJECT:
LAUSD
ROOSEVELT HIGH SCHOOL
456 S. MATHEWS STREET
LOS ANGELES, CALIFORNIA

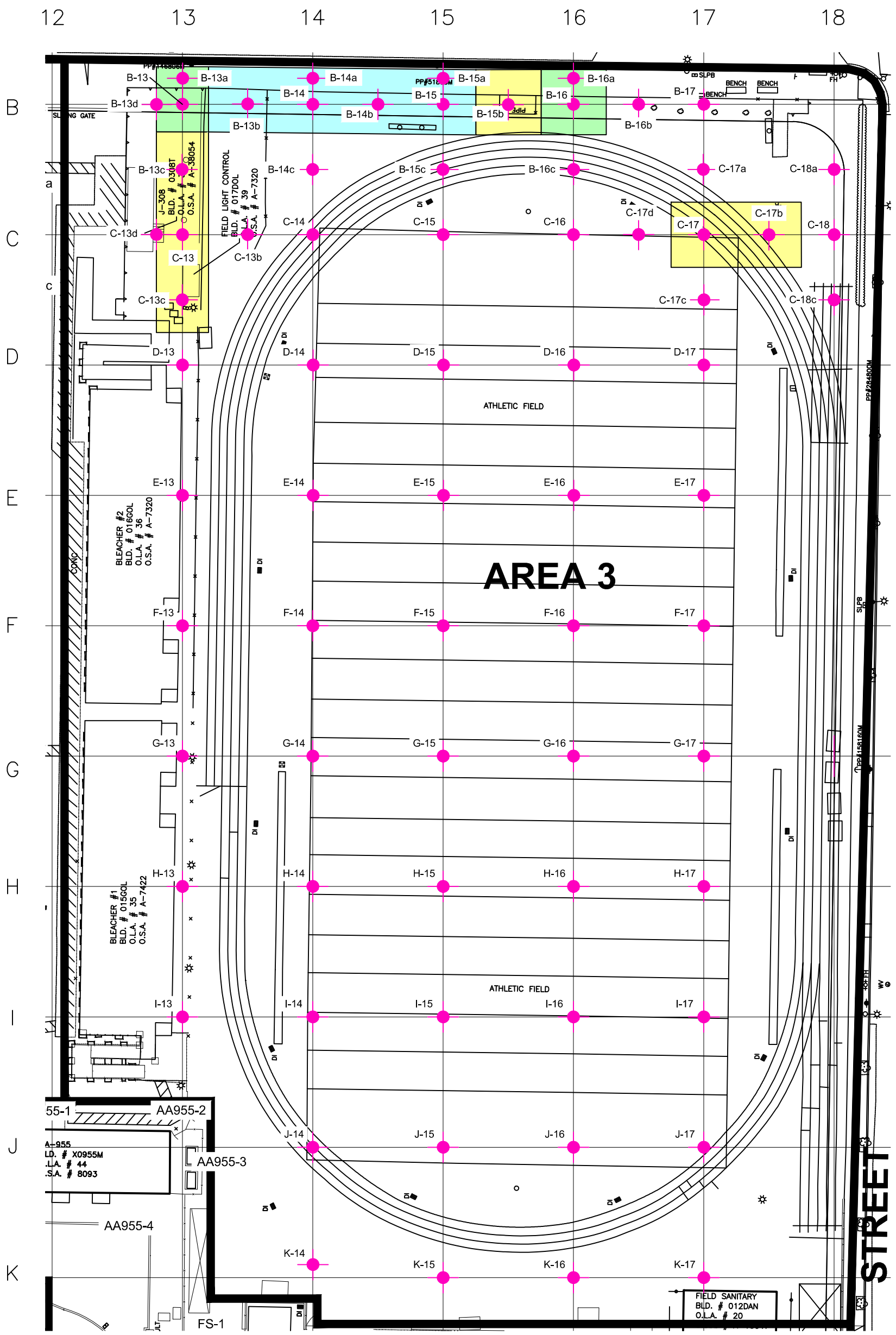
TITLE:
AREA 2 EXCAVATION LOCATIONS

DRAWN BY:	RMC	PROJ NO.:	265642.0000.0000
CHECKED BY:	JM		
APPROVED BY:	JM		**FIGURE 3A**
DATE:	June 2017		

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FILE NO.: LAUSD-Roosevelt-Sampling.dwg

11-17 -- ATTACHED XREFS: -- ATTACHED IMAGES: -- Incremental: TCC.cpgx
DRAWING NAME: L:\Graphics\Projects\Name\LAUSD - Roosevelt HS\265642.0000.0000 LAUSD-Roosevelt-Sampling.dwg -- PLOT DATE: June 26, 2017 - 2:29PM -- LAYOUT: AREA2-Ex.gsv



LEGEND

B-13 Sample Location

Proposed Excavation Area for Lead

Proposed Excavation Area for Arsenic

Proposed Excavation Area for Lead and Arsenic

N

APPROXIMATE SCALE (FEET)

0 40 80

Source: Base map provided by Converse Consultants.

PROJECT:	LAUSD ROOSEVELT HIGH SCHOOL 456 S. MATHEWS STREET LOS ANGELES, CALIFORNIA
TITLE:	AREA 3 EXCAVATION LOCATIONS
DRAWN BY:	RMC
CHECKED BY:	JM
APPROVED BY:	JM
DATE:	11/03/2016
PROJ NO.:	265642.0000.0000
	FIGURE 4A

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FILE NO.: LAUSD-Roosevelt-Sampling.dwg

11x17 --- ATTACHED XREF'S: --- ATTACHED IMAGES: farmersmarket; TCG Logo;
DRAWING NAME: L:\Graphics\ProjectsbyName\LAUSD - Roosevelt HS\265642.0000.0000\ LAUSD-Roosevelt-Sampling.dwg --- PLOT DATE: April 13, 2017 - 2:28PM --- LAYOUT: AREA5-Excav

AREA 5

MB-1 MB-2 MB-3 MB-4 MB-5 MB-6 MB-6a MB-6c MB-6d
AA-653-1 AA-653-2 AA-653-3 AA-653-4 AA653
AA-652-1 AA-652-2 AA-652-3 AA-652-4 AA652
AUD-1 AUD-2 AUD-3 AUD-3a AUD-3a1 AUD-3b AUD-3b1 AUD-3c AUD-3c1 AUD-4 AUD-4b AUD-4c AUD-4c1 AUD-5 AUD-5b AUD-5c AUD-6 AUD-6b AUD-6c AUD-7 AUD-8 AUD-9 AUD-10 AUD-11 AUD-12
AA2543-8 AA2543-7 AA2038-9 AA2038-8 AA2038-7 AA2038-6
P-6 P-7 Q-4 Q-6 Q-7 R-4 R-7 S-4 S-7 T-4 T-7
HVAC-1 HVAC-2 HVAC-3 HVAC
UB-1 UB-2 UB-3 UB-4 UB-5 UB-6
LIBRARY/CLASSROOM BUILDING BLD. # 025CEX O.L.A. # 4 O.S.A. # A-46733
MUSIC BUILDING BLD. # 004DAT O.L.A. # 29 O.S.A. # A-38340
ADMINISTRATION AND CLASSROOM BUILDING BLD. # 005BFS O.L.A. # 1 O.S.A. # A-31314
CLASSROOM BUILDING #3 BLD. # 002DAT O.L.A. # 2 O.S.A. # A-38340
CAFETERIA BUILDING BLD. # 002DAT O.L.A. # 3 O.S.A. # A-38340
AUDITORIUM/CLASSROOM BUILDING BLD. # 001CFF O.L.A. # 9 O.S.A. # A-1613
UTILITY BLD. # 021DAR
LUNCH PAVILION
ASPH
SD
SS
W
G
E
T

LEGEND

MB-1 Sample Location

Proposed Excavation Area for Lead

N

APPROXIMATE SCALE (FEET)

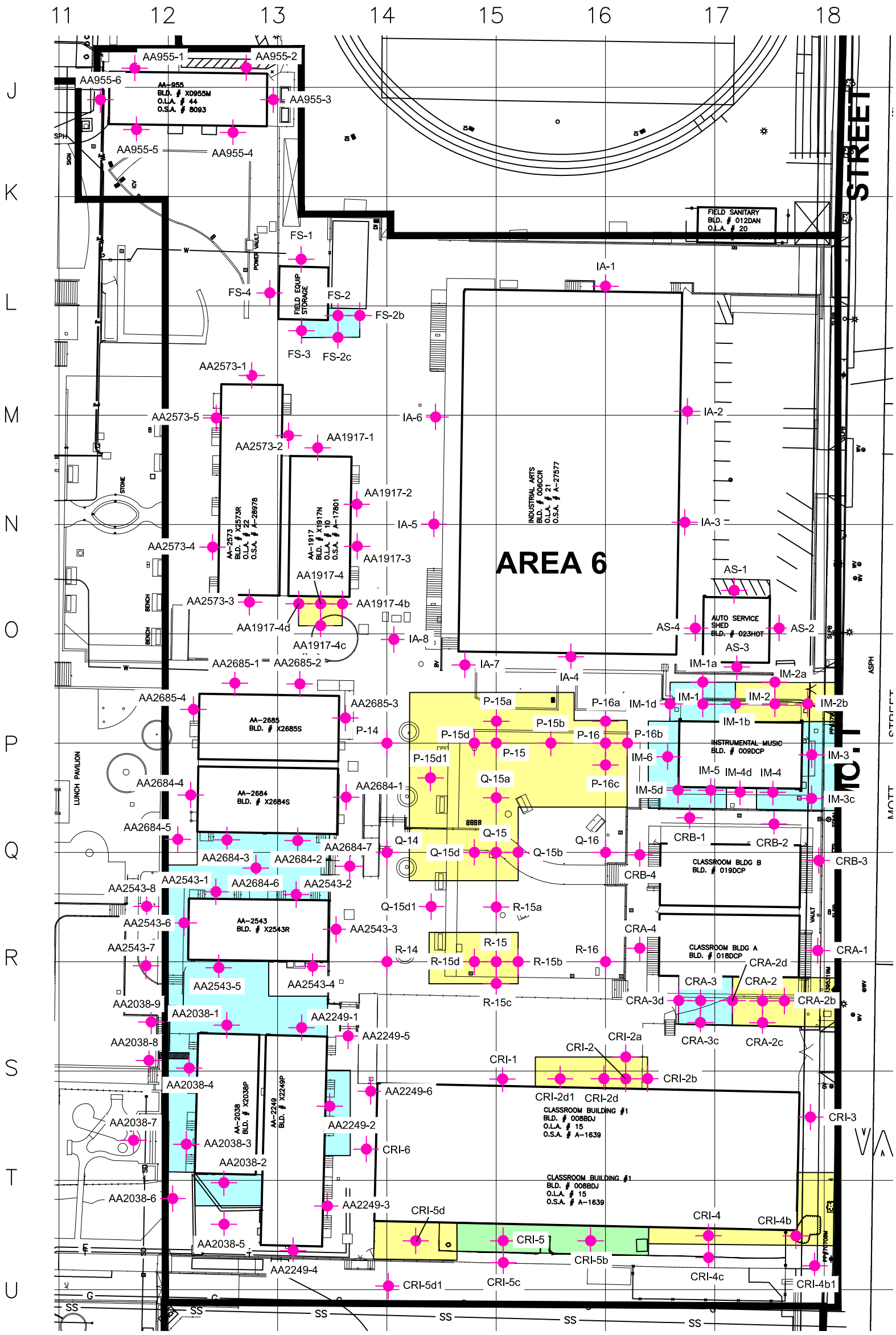
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Source: Base map provided by Converse Consultants.

PROJECT:	LAUSD ROOSEVELT HIGH SCHOOL 456 S. MATHEWS STREET LOS ANGELES, CALIFORNIA
TITLE:	AREA 5 EXCAVATION LOCATIONS
DRAWN BY:	RMC
CHECKED BY:	JM
APPROVED BY:	JM
DATE:	11/03/2016
PROJ NO.:	265642.0000.0000
	FIGURE 5A

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LEGEND

FS-1 Sample Location

Proposed Excavation Area for Lead

Proposed Excavation Area for Arsenic

Proposed Excavation Area for Lead and Arsenic

N

APPROXIMATE SCALE (FEET)

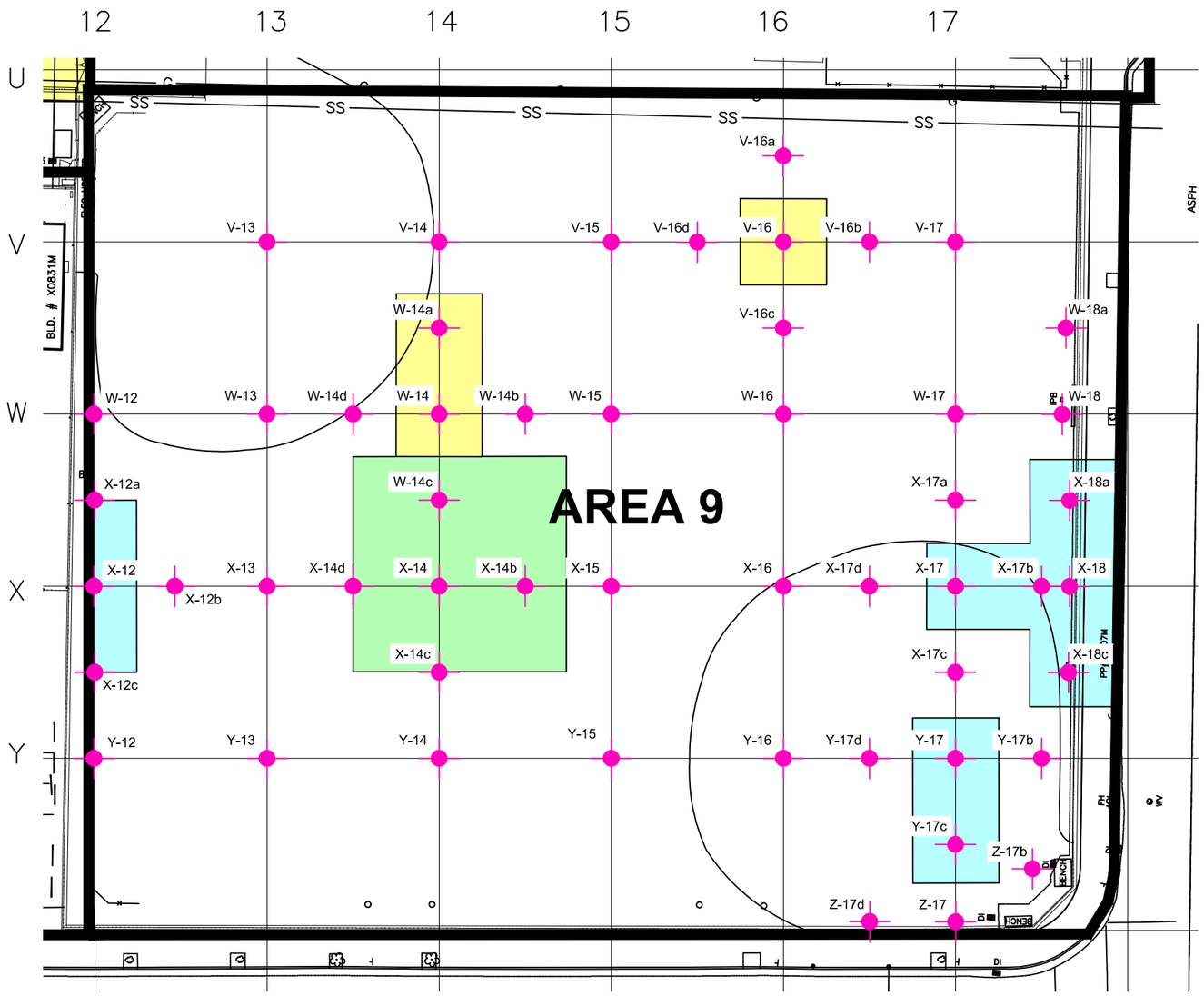
0 50 100

Source: Base map provided by Converse Consultants.

PROJECT:	LAUSD ROOSEVELT HIGH SCHOOL 456 S. MATHEWS STREET LOS ANGELES, CALIFORNIA
TITLE:	AREA 6 EXCAVATION LOCATIONS
DRAWN BY: RMC	PROJ NO.: 265642.0000.0000
CHECKED BY: JM	FIGURE 6A
APPROVED BY: JM	
DATE: 11/03/2016	

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FILE NO.: LAUSD-Roosevelt-Sampling.dwg



LEGEND

Y-17 Sample Location

Proposed Excavation Area for Lead

Proposed Excavation Area for Arsenic

Proposed Excavation Area for Lead and Arsenic

N

APPROXIMATE SCALE (FEET)

0 40 80

Source: Base map provided by Converse Consultants.

PROJECT:
LAUSD
ROOSEVELT HIGH SCHOOL
456 S. MATHEWS STREET
LOS ANGELES, CALIFORNIA

TITLE:
AREA 9 EXCAVATION LOCATIONS

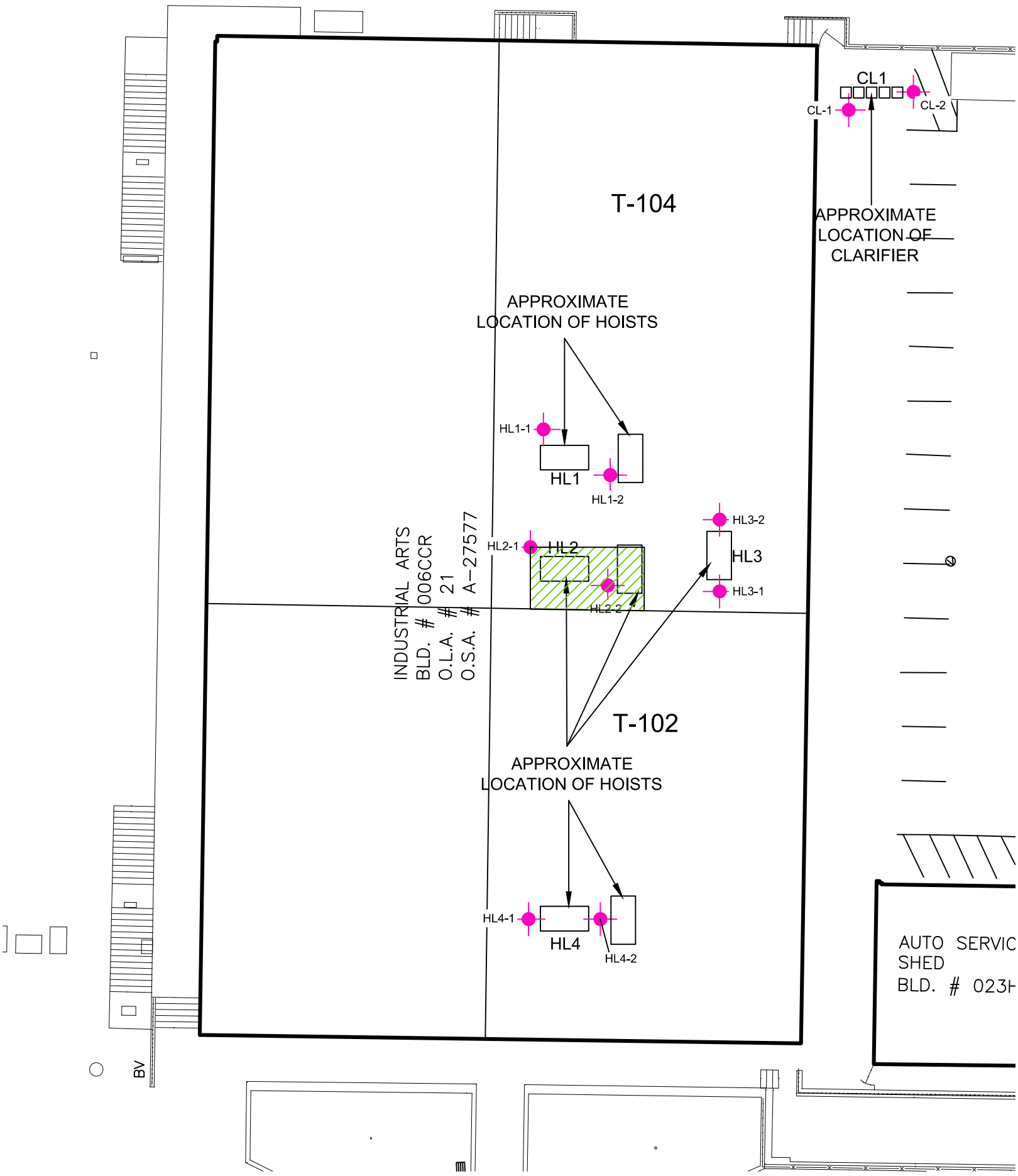
DRAWN BY:	RMC	PROJ NO.:	265642.0000.0000
CHECKED BY:	JM		
APPROVED BY:	JM		**FIGURE 8A**
DATE:	June 2017		

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FILE NO.: LAUSD-Roosevelt-Sampling.dwg

XREFs: --- ATTACHED IMAGES: --- PLOT DATE: June 28, 2017 - 10:15AM --- LAYOUT: AREA9-Excav
DRAWING NAME: L:\Graphics\Projects\by Name\LAUSD - Roosevelt HS\265642.0000.0000\LAUSD-Roosevelt-Sampling.dwg

11x17 --- ATTACHED XREF'S: --- ATTACHED IMAGES: farmersmarket; TCG Logo;
DRAWING NAME: L:\Graphics\ProjectsbyName\LAUSD - Roosevelt HS\265642.0000.0000\ LAUSD-Roosevelt-Sampling-Hoist.dwg --- PLOT DATE: April 14, 2017 - 9:31AM --- LAYOUT: Excavation



LEGEND

CL-1 — Sample Location

Proposed Excavation Area for Hydrocarbons

N

APPROXIMATE SCALE (FEET)

0 20 40

Source: Base map provided by Converse Consultants.

PROJECT:	LAUSD ROOSEVELT HIGH SCHOOL 456 S. MATHEWS STREET LOS ANGELES, CALIFORNIA
TITLE:	HYDRAULIC HOIST AND CLARIFIER EXCAVATION LOCATIONS
DRAWN BY: RMC	PROJ NO.: 265642.0000.0000
CHECKED BY: JM	FIGURE 9A
APPROVED BY: JM	
DATE: 11/03/2016	

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FILE NO.: LAUSD-Roosevelt-Sampling-Hoist.dwg

APPENDIX 3.4

Noise Data

Roosevelt High School Noise Monitoring Report



Monitoring Location: South Mathews Street approximately 650 feet south of East 4th Street. Location #4 on the Sensitive Receptors map.

Ambient Noise Level (dBA L_{eq}): 57.1

Measurement Period: April 11, 2017. 9:00AM to 9:15AM

Notes: 1 helicopter flyover. 2 passenger jet flyovers.



Monitoring Location: East 6th Street between South Mathews Street and South Mott Street Street. Location #3 on the Sensitive Receptors map.

Ambient Noise Level (dBA L_{eq}): 56.6

Measurement Period: April 11, 2017. 9:24AM to 9:39AM

Notes: 1 helicopter flyover. 1 passenger jet flyover. 1 car door slam.



Monitoring Location: South Mott Street approximately 400 feet south of East 4th Street. Location #1 on the Sensitive Receptors map.

Ambient Noise Level (dBA L_{eq}): 60.5

Measurement Period: April 11, 2017. 9:43AM to 9:57AM

Notes: 4 passenger jet flyovers. Barking dogs 200-300 feet to the east and south. Moderate car traffic.



Monitoring Location: South Fickett Street at East 4th Street. Location #2 on the Sensitive Receptors map.

Ambient Noise Level (dBA L_{eq}): 68.1

Measurement Period: April 11, 2017. 10:06AM to 10:21AM

Notes: Moderate automobile and bus traffic. Light pedestrian traffic.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 12/20/2017
Case Description: Roosevelt Building Construction

---- Receptor #1 ----

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Reference Receptor at 50 feet	Residential	65	65	65

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Crane	No	16		80.6	50	0
Man Lift	No	20		74.7	50	0
Generator	No	50		80.6	50	0
Man Lift	No	20		74.7	50	0
Man Lift	No	20		74.7	50	0
Tractor	No	40	84		50	0
Tractor	No	40	84		50	0
Tractor	No	40	84		50	0
Welder / Torch	No	40		74	50	0

Equipment	Calculated (dBA) *Lmax	Leq	Results Noise Limits (dBA) Day Lmax	Day Leq	Evening Lmax	Evening Leq	Night Lmax	Night Leq	Noise Limit Exceedance (dBA) Day Lmax	Day Leq	Evening Lmax	Evening Leq	Night Lmax	Night Leq
Crane	80.6	72.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Man Lift	74.7	67.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Generator	80.6	77.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Man Lift	74.7	67.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Man Lift	74.7	67.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tractor	84	80	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tractor	84	80	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tractor	84	80	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Welder / Torch	74	70	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	84	86.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 12/20/2017
Case Description: Roosevelt Site Preparation

---- Receptor #1 ----

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Reference Receptor at 50 feet	Residential	65	65	65

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Dozer	No	40		81.7	50	0
Dozer	No	40		81.7	50	0
Dozer	No	40		81.7	50	0
Tractor	No	40	84		50	0
Tractor	No	40	84		50	0
Tractor	No	40	84		50	0
Tractor	No	40	84		50	0

Results

		Calculated (dBA)		Noise Limits (dBA)						Noise Limit Exceedance (dBA)					
				Day		Evening		Night		Day		Evening		Night	
Equipment		*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Dozer		81.7	77.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dozer		81.7	77.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dozer		81.7	77.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tractor		84	80	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tractor		84	80	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tractor		84	80	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tractor		84	80	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Total	84	87.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roosevelt High School - Construction Noise - Unmitigated

Reference Noise Distance 50
Reference Noise Level 87.6

Sensitive Receptor	Distance (feet)	Attenuation Factors	Maximum Construction Noise Level (dBA)	Existing Ambient (dBA, Leq)	New Ambient (dBA, Leq)	Increase
Adjacent Residential (Mott St)	150	6	72.1	60.5	72.4	11.9
Adjacent Residential (Mathews St)	165	6	71.2	57.1	71.4	14.3
Adjacent Residential (4th St)	185	6	70.2	68.1	72.3	4.2
Hollenbeck Middle School Exterior	240	6	68.0	56.6	68.3	11.7
Hollenbeck Middle School Interior	240	31	43.0	31.6	43.3	11.7
Nichiren Shu Beikoku Betsuin Temple	530	9	58.1	68.1	68.5	0.4
Promise Hospital of East LA	540	9	57.9	57.1	60.5	3.4
Kingdom Hall of Jehovah's Witnesses	565	9	57.5	68.1	68.5	0.4
On-site Uses Exterior	150	6	72.1	57.1	72.2	15.1
On-site Uses Interior	150	31	47.1	32.1	47.2	15.1

A 6 dBA attenuation was given for hard ground surfuce, and 3 dBA reduction was given for the first row of buildings intervening between the construction site and sensitive receptors (1.5 dBA for subsequent intervening structures), as recommended by the Caltrans Technical Noise Supplement.

The depth of the project construction area is approximately 650 feet. It was assumed that the majority of construction activity would occur with an approximate minimum 100 foot setback from the property line.

Roosevelt High School - Construction Noise - Mitigated

Reference Noise Distance 50

Reference Noise Level 87.6

Sensitive Receptor	Distance (feet)	Mitigation Factors	Attenuation Factors	Maximum Construction Noise Level (dBA)	Existing Ambient (dBA, Leq)	New Ambient (dBA, Leq)	Increase
Adjacent Residential (Mott St)	150	13	6	59.1	60.5	62.8	2.3
Adjacent Residential (Mathews St)	165	13	6	58.2	57.1	60.7	3.6
Adjacent Residential (4th St)	185	13	6	57.2	68.1	68.4	0.3
Hollenbeck Middle School Exterior	240	13	6	55.0	56.6	58.9	2.3
Hollenbeck Middle School Interior	240	13	31	30.0	31.6	33.9	2.3
Nichiren Shu Beikoku Betsuin Temple	530	13	9	45.1	68.1	68.1	0.0
Promise Hospital of East LA	540	13	9	55.3	57.1	59.3	2.2
Kingdom Hall of Jehovah's Witnesses	565	13	9	55.1	68.1	68.3	0.2
On-site Uses Exterior	150	13	6	63.8	57.1	64.7	7.6
On-site Uses Interior	150	13	31	38.8	32.1	39.7	7.6

A 3 dBA reduction was given for mufflers. A 10 dBA reduction was given for construction sound barrier.

A 6 dBA attenuation was given for hard ground surfuce, and 3 dBA reduction was given for the first row of buildings intervening between the construction site and sensitive receptors (1.5 dBA for subsequent intervening structures), as recommended by the Caltrans Technical Noise

The depth of the project construction area is approximately 650 feet. It was assumed that the majority of construction activity would occur with an approximate minimum 100 foot setback from the property line.

Exterior to interior attenuation
approximately 25 dBA

Roosevelt High School - Rooftop HVAC Stationary Noise - Unmitigated

Reference Noise Distance 50
Reference Noise Level 56

Sensitive Receptor	Distance (feet)	Attenuation Factors	Maximum Noise Level (dBA)	Existing Ambient (dBA, Leq)	New Ambient (dBA, Leq)	Increase
Adjacent Residential (Mott St)	50	6	50.0	60.5	60.9	0.4
Adjacent Residential (Mathews St)	65	6	47.7	57.1	57.6	0.5
Adjacent Residential (4th St)	85	6	45.4	68.1	68.1	0.0
Hollenbeck Middle School Exterior	140	6	41.1	56.6	56.7	0.1
Nichiren Shu Beikoku Betsuin Temple	430	9	28.3	68.1	68.1	0.0
Promise Hospital of East LA	440	9	28.1	57.1	57.1	0.0
Kingdom Hall of Jehovah's Witnesses	465	9	27.6	68.1	68.1	0.0
On-site Uses Exterior	50	6	50.0	57.1	57.9	0.8
On-site Uses Interior	50	31	25.0	32.1	32.9	0.8

A 6 dBA attenuation was given for a point source over a hard ground surfuce, and 3 dBA reduction was given for the first row of buildings intervening between the construction site and sensitive receptors (1.5 dBA for subsequent intervening structures), as recommended by the Caltrans Technical Noise Supplement.

Roosevelt High School - Parking Lot Noise - Unmitigated

Reference Noise Distance 50

Reference Noise Level 58.1

Sensitive Receptor	Distance (feet)	Attenuation Factors	Maximum Parking Noise Level (dBA)	Existing Ambient (dBA, Leq)	New Ambient (dBA, Leq)	Increase
Adjacent Residential (Mott St)	50	6	52.1	60.5	61.1	0.6
Adjacent Residential (Mathews St)	65	6	49.8	57.1	57.8	0.7
Adjacent Residential (4th St)	85	6	47.5	68.1	68.1	0.0
Hollenbeck Middle School Exterior	140	6	43.2	56.6	56.8	0.2
Hollenbeck Middle School Interior	140	31	18.2	31.6	31.8	0.2
Nichiren Shu Beikoku Betsuin Temple	430	9	30.4	68.1	68.1	0.0
Promise Hospital of East LA	440	9	30.2	57.1	57.1	0.0
Kingdom Hall of Jehovah's Witnesses	465	9	29.7	68.1	68.1	0.0
On-site Uses Exterior	50	6	52.1	57.1	58.3	1.2
On-site Uses Interior	50	31	27.1	32.1	33.3	1.2

A 6 dBA attenuation was given for a point source over a hard ground surfuce, and 3 dBA reduction was given for the first row of buildings intervening between the construction site and sensitive receptors (1.5 dBA for subsequent intervening structures), as recommended by the Caltrans Technical Noise Supplement.

Roosevelt High School Construction Vibration — On-Site Receptors

Ref= Reference vibration level (PPV)

RefD= Reference distance for Reference vibration level (Feet)

Vibration PPV

Ref=	0.644	Based on type of equipment
RefD=	25	
D=	25	Distance from equipment to sensitive receptor
Equip=	0.644	

Annoyance VdB

Ref=	104	Based on type of equipment
RefD=	25	
D=	25	Distance from equipment to sensitive receptor
Equip=	104	

Peak vibration based on utilizing an impact pile driver.

Source: FTA Tranist Noise and Vibration Impact Assessment, 2006.

Roosevelt High School Construction Vibration — Residences Along Mott St

Ref= Reference vibration level (PPV)

RefD= Reference distance for Reference vibration level (Feet)

Vibration PPV

Ref=	0.644	Based on type of equipment
RefD=	25	
D=	50	Distance from equipment to sensitive receptor
Equip=	0.228	

Annoyance VdB

Ref=	104	Based on type of equipment
RefD=	25	
D=	50	Distance from equipment to sensitive receptor
Equip=	95	

Peak vibration based on utilizing an impact pile driver.

Source: FTA Tranist Noise and Vibration Impact Assessment, 2006.

Roosevelt High School Construction Vibration — Residences Along Mathews St

Ref= Reference vibration level (PPV)

RefD= Reference distance for Reference vibration level (Feet)

Vibration PPV

Ref=	0.644	Based on type of equipment
RefD=	25	
D=	65	Distance from equipment to sensitive receptor
Equip=	0.154	

Annoyance VdB

Ref=	104	Based on type of equipment
RefD=	25	
D=	65	Distance from equipment to sensitive receptor
Equip=	92	

Peak vibration based on utilizing a large bulldozer.

Source: FTA Tranist Noise and Vibration Impact Assessment, 2006.

Roosevelt High School Construction Vibration — Residences Along 4th St

Ref= Reference vibration level (PPV)

RefD= Reference distance for Reference vibration level (Feet)

Vibration PPV

Ref=	0.644	Based on type of equipment
RefD=	25	
D=	85	Distance from equipment to sensitive receptor
Equip=	0.103	

Annoyance VdB

Ref=	104	Based on type of equipment
RefD=	25	
D=	85	Distance from equipment to sensitive receptor
Equip=	88	

Peak vibration based on utilizing a large bulldozer.

Source: FTA Tranist Noise and Vibration Impact Assessment, 2006.

Roosevelt High School Construction Vibration — Hollenbeck Middle School

Ref= Reference vibration level (PPV)

RefD= Reference distance for Reference vibration level (Feet)

Vibration PPV

Ref=	0.644	Based on type of equipment
RefD=	25	
D=	140	Distance from equipment to sensitive receptor
Equip=	0.049	

Annoyance VdB

Ref=	104	Based on type of equipment
RefD=	25	
D=	140	Distance from equipment to sensitive receptor
Equip=	82	

Peak vibration based on utilizing a large bulldozer.

Source: FTA Tranist Noise and Vibration Impact Assessment, 2006.

Roosevelt High School Construction Vibration — Nichiren Shu Beikoku Betsuin Tem

Ref= Reference vibration level (PPV)

RefD= Reference distance for Reference vibration level (Feet)

Vibration PPV

Ref=	0.644	Based on type of equipment
RefD=	25	
D=	430	Distance from equipment to sensitive receptor
Equip=	0.009	

Annoyance VdB

Ref=	104	Based on type of equipment
RefD=	25	
D=	430	Distance from equipment to sensitive receptor
Equip=	67	

Peak vibration based on utilizing a large bulldozer.

Source: FTA Tranist Noise and Vibration Impact Assessment, 2006.

Roosevelt High School Construction Vibration — Promise Hospital of East LA

Ref= Reference vibration level (PPV)

RefD= Reference distance for Reference vibration level (Feet)

Vibration PPV		
Ref=	0.644	Based on type of equipment
RefD=	25	
D=	440	Distance from equipment to sensitive receptor
Equip=	0.009	
Annoyance VdB		
Ref=	104	Based on type of equipment
RefD=	25	
D=	440	Distance from equipment to sensitive receptor
Equip=	67	

Peak vibration based on utilizing a large bulldozer.

Source: FTA Tranist Noise and Vibration Impact Assessment, 2006.

Roosevelt High School Construction Vibration — Kingdom Hall of Jehovah's Witnesses

Ref= Reference vibration level (PPV)

RefD= Reference distance for Reference vibration level (Feet)

Vibration PPV		
Ref=	0.644	Based on type of equipment
RefD=	25	
D=	465	Distance from equipment to sensitive receptor
Equip=	0.008	
Annoyance VdB		
Ref=	104	Based on type of equipment
RefD=	25	
D=	465	Distance from equipment to sensitive receptor
Equip=	66	

Peak vibration based on utilizing a large bulldozer.

Source: FTA Tranist Noise and Vibration Impact Assessment, 2006.

Roosevelt High School Construction Vibration - MITIGATED On-Site Receptors

Ref= Reference vibration level (PPV)

RefD= Reference distance for Reference vibration level (Feet)

Vibration PPV		
Ref=	0.17	Based on type of equipment
RefD=	25	
D=	60	Distance from equipment to sensitive receptor
Equip=	0.046	
Annoyance VdB		
Ref=	93	Based on type of equipment
RefD=	25	
D=	60	Distance from equipment to sensitive receptor
Equip=	82	

Peak vibration based on utilizing an impact pile driver.

Source: FTA Tranist Noise and Vibration Impact Assessment, 2006.

Roosevelt High School Construction Vibration - MITIGATED Residences Along Mott St

Ref= Reference vibration level (PPV)

RefD= Reference distance for Reference vibration level (Feet)

Vibration PPV		
Ref=	0.17	Based on type of equipment
RefD=	25	
D=	75	Distance from equipment to sensitive receptor
Equip=	0.033	
Annoyance VdB		
Ref=	93	Based on type of equipment
RefD=	25	
D=	75	Distance from equipment to sensitive receptor
Equip=	79	

Peak vibration based on utilizing a sonic piledriver.

Source: FTA Tranist Noise and Vibration Impact Assessment, 2006.

Roosevelt High School Construction Vibration - MITIGATED Residences Along Mathews St
Ref= Reference vibration level (PPV)
RefD= Reference distance for Reference vibration level (Feet

Vibration PPV

Ref=	0.17	Based on type of equipment
RefD=	25	
D=	75	Distance from equipment to sensitive receptor
Equip=	0.033	

Annoyance VdB

Ref=	93	Based on type of equipment
RefD=	25	
D=	75	Distance from equipment to sensitive receptor
Equip=	79	

Peak vibration based on utilizing a sonic piledriver.
Source: FTA Tranist Noise and Vibration Impact Assessment, 2006.

Roosevelt High School Construction Vibration - MITIGATED Residences Along 4th St
Ref= Reference vibration level (PPV)
RefD= Reference distance for Reference vibration level (Feet

Vibration PPV

Ref=	0.17	Based on type of equipment
RefD=	25	
D=	85	Distance from equipment to sensitive receptor
Equip=	0.027	

Annoyance VdB

Ref=	93	Based on type of equipment
RefD=	25	
D=	85	Distance from equipment to sensitive receptor
Equip=	77	

Peak vibration based on utilizing a sonic piledriver.
Source: FTA Tranist Noise and Vibration Impact Assessment, 2006.

Roosevelt High School Construction Vibration - MITIGATED Hollenbeck Middle School

Ref= Reference vibration level (PPV)

RefD= Reference distance for Reference vibration level (Feet)

Vibration PPV

Ref=	0.17	Based on type of equipment
RefD=	25	
D=	140	Distance from equipment to sensitive receptor
Equip=	0.013	

Annoyance VdB

Ref=	93	Based on type of equipment
RefD=	25	
D=	140	Distance from equipment to sensitive receptor
Equip=	71	

Peak vibration based on utilizing a sonic piledriver.

Source: FTA Tranist Noise and Vibration Impact Assessment, 2006.

Roosevelt High School Construction Vibration - MITIGATED Nichiren Shu Beikoku Betsuin Temple

Ref= Reference vibration level (PPV)

RefD= Reference distance for Reference vibration level (Feet)

Vibration PPV

Ref=	0.17	Based on type of equipment
RefD=	25	
D=	430	Distance from equipment to sensitive receptor
Equip=	0.002	

Annoyance VdB

Ref=	93	Based on type of equipment
RefD=	25	
D=	430	Distance from equipment to sensitive receptor
Equip=	56	

Peak vibration based on utilizing a sonic piledriver.

Source: FTA Tranist Noise and Vibration Impact Assessment, 2006.

Roosevelt High School Construction Vibration - MITIGATED Promise Hospital of East LA

Ref= Reference vibration level (PPV)

RefD= Reference distance for Reference vibration level (Feet)

Vibration PPV		
Ref=	0.17	Based on type of equipment
RefD=	25	
D=	440	Distance from equipment to sensitive receptor
Equip=	0.002	
Annoyance VdB		
Ref=	93	Based on type of equipment
RefD=	25	
D=	440	Distance from equipment to sensitive receptor
Equip=	56	

Peak vibration based on utilizing a sonic piledriver.

Source: FTA Tranist Noise and Vibration Impact Assessment, 2006.

Roosevelt High School Construction Vibration - MITIGATED Kingdom Hall of Jehovah's Witnesses

Ref= Reference vibration level (PPV)

RefD= Reference distance for Reference vibration level (Feet)

Vibration PPV		
Ref=	0.17	Based on type of equipment
RefD=	25	
D=	465	Distance from equipment to sensitive receptor
Equip=	0.002	
Annoyance VdB		
Ref=	93	Based on type of equipment
RefD=	25	
D=	465	Distance from equipment to sensitive receptor
Equip=	55	

Peak vibration based on utilizing a sonic piledriver.

Source: FTA Tranist Noise and Vibration Impact Assessment, 2006.

APPENDIX 3.6

Traffic and Transportation

Traffic Study for
LAUSD Roosevelt High School
Comprehensive Modernization
Los Angeles, California

December 19, 2017

Prepared For:

Impact Sciences
28 North Marengo Avenue
Pasadena, CA 91101
(626) 564-1500

Prepared by:

KOA CORPORATION
PLANNING & ENGINEERING

1100 Corporate Center Drive, Suite 201
Monterey Park, California 91754
(323) 260-4703

JB11057-002

KOA CORPORATION
PLANNING & ENGINEERING

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Executive Summary

This traffic study report was prepared for the Los Angeles Unified School District (LAUSD) by KOA on behalf of Impact Sciences, for use in related environmental documentation for the Roosevelt High School site reconfiguration/improvements (Project). The project would rebuild and remodel structures and reconfigure the campus grounds.

The Project site is located within the City of Los Angeles and therefore the local area falls within the jurisdiction of the City of Los Angeles Department of Transportation (LADOT) for traffic study review.

Analysis Results

Project Details and Study Area

- The proposed Project will continue to provide seats for up to 2,600 students for the existing high school instruction in grades 9-12. The project site facility improvements are expected to be operational by the year 2022.
- Pick-up/drop-off operations occur informally along the perimeter of the campus, and the proposed campus improvements will not change this.
- The study area for this Project traffic analysis included five intersections on area travel routes and in the vicinity of the proposed Project site, to analyze current traffic operations.

Existing and Future Baseline Conditions

- Under the Existing (Year 2017) baseline conditions analysis, all of the study intersections are operating at LOS D or better.
- The traffic analysis included ambient growth through the Project peak construction year of 2018, and trips generated by identified cumulative/area projects.
- Under future with Project construction conditions, all of the study intersections would continue to operate at LOS D or better, except one that would operate at LOS E during the a.m. and p.m. peak hours.

Site Access

- There are not any identified significant impacts for pedestrian access or general safety issues for the proposed school access configuration, based on the review of the conceptual site plan. No formal mitigation measures in these areas are therefore recommended.

- No particular operations issues with existing vehicle pick-up/drop-off operations have been identified.

Impacts and Mitigation Measures

- Based on the applied significant impact standards, Project construction activities would not create significant impacts at the study intersections.

- The following measures are recommended for implementation during the construction period:

    - LAUSD should require its contractors to submit a construction worksite traffic control plan to the City of Los Angeles for review prior to construction. The plan will show the location of any haul routes, hours of operation, protective devices, warning signs, and access to abutting properties.
    - The worksite traffic control plan should define measures to avoid the overlap of truck trips at construction site access points/driveways during student pedestrian travel to and from the campus on adjacent sidewalks.
    - The worksite traffic control plan should define measures to minimize the impacts of all construction traffic flows and vehicle parking areas on site pick-up/drop-off activities.
    - LAUSD should encourage its contractor to limit construction-related truck trips to avoid peak school travel times.
    - All measures identified in the detailed Traffic Control Plan should be implemented during construction to ensure that adequate and safe access remains available on-site.
    - Flag persons should be stationed at each site construction access point to control conflicts between pedestrians, vehicles in travel lanes, and pedestrians on the sidewalk.

- As the Project is a site improvement and reconfiguration project, and as the Project will not add any student seating/program capacity to the school or significantly change site access or pick-up/drop-off operations, the Project will not create any new vehicle trip generation or long-term significant traffic impacts.

- As the Project in the long-term would not create new trip generation, it is not expected that 50 or more new trips per hour would be added to area CMP locations.

- There are not any identified significant impacts for pedestrian access or general safety issues for the proposed school access configuration, based on the review of the existing school campus layout and access, and the conceptual site plan. No formal mitigation measures in these areas are therefore recommended.

1. Introduction

This study report identifies the potential traffic impacts associated with the proposed Theodore Roosevelt High School improvement project (Project). The proposed Project site is located at 456 South Mathews Street in the City of Los Angeles community of Boyle Heights.

The Theodore Roosevelt High School campus is bounded by Mathews Street on the west, Mott Street on the east, 4th Street on the north, and 6th Street on the south. The Project would rebuild and remodel structures and the campus grounds and access points, and provide additional parking facility.

The Theodore Roosevelt High School (grades 9 through 12) currently serves approximately 2,600 students, and will not expect to increase student capacity. The school main entrance is currently located on 6th Street and will remain in that location after the Project is complete. The Project is expected to be operational by the year 2022.

Traffic analysis was completed for the weekday AM and PM peak-hour traffic periods at the study intersections and included the following traffic scenarios:

- Existing Conditions
- Future No Project Conditions
- Future Conditions with Project Construction

Project Study Area

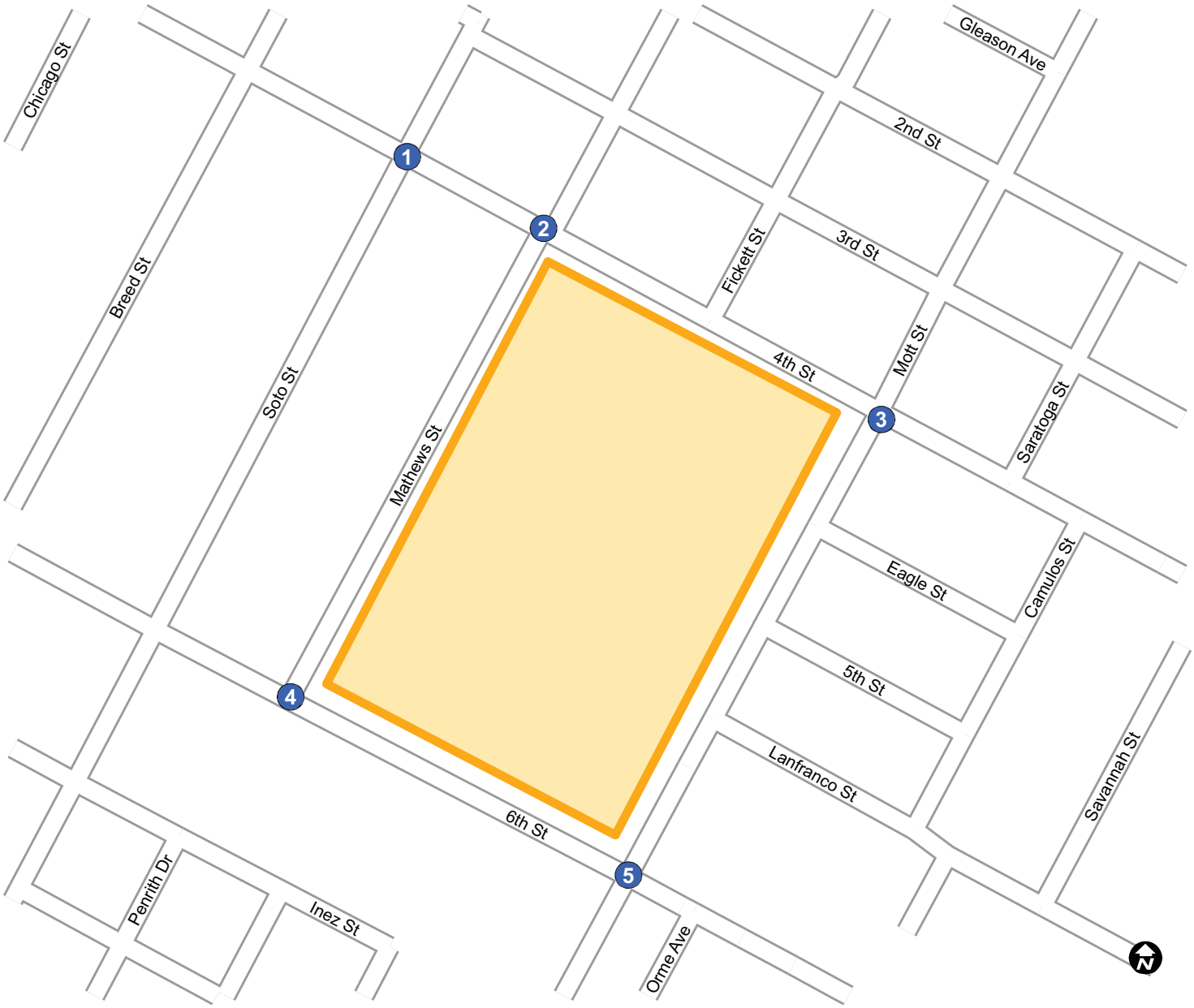
The Project study area was defined by the following study intersection locations:

1. Soto Street & 4th Street
2. Mathews Street & 4th Street
3. Mott Street & 4th Street
4. Mathews Street & 6th Street *
5. Mott Street & 6th Street *

* *Unsignalized intersection*

Figure 1 illustrates the locations of the study intersections and the Project site. Figure 2 provides the preliminary Project site plan.

Figure 1: Study Area and Intersection



LEGEND

- Project Site
- Study Intersection

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Figure 2: Preliminary Site Plan



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Project Access

The primary pedestrian access to the Project site would remain on 4th Street, at the school main entrance. Access to staff parking would remain on Mathews Street.

Analysis Methodology

The following text describes the methodology applied to this report.

Existing (Year 2017) Baseline Conditions

Fieldwork within the Project study area was undertaken to identify the conditions of major roadways, to identify traffic control and approach lane configuration at each study intersection, and to identify the locations of on-street parking and transit stops.

KOA compiled new manual intersection turn movement counts that were conducted at the study intersections on Wednesday, December 14, 2016.

The results of the counts were used to determine existing weekday AM and PM peak-hour conditions. Traffic counts conducted during the year 2016 were factored to Existing (Year-2017) baseline conditions.

Traffic count summaries are provided in Appendix A of this report. Existing level of service values for each of the eight study intersections are discussed within Section 2 of this report.

Future No Project Conditions

In order to acknowledge regional traffic growth that would affect operations at the study intersections during the anticipated peak construction activity year of 20, an ambient/background traffic growth rate was applied. An annual ambient growth rate of two percent was utilized to estimate future baseline traffic volumes. The applied growth rate represents regional population and employment growth outside of the study area.

In addition to future ambient growth, traffic from cumulative/area projects (approved and pending developments) was also included as part of the future-period analysis. KOA obtained information from LADOT pertaining to area projects that would add measurable volumes to the study area intersections.

Project Construction Trip Generation

The construction truck trip generation totals were determined based on the most intense period of demolition activity for the project. Daily and hourly truck trip estimated were multiplied by a Passenger Car Equivalency (PCE) factor for the LOS analysis.

.

Level of Service Methodology

For analysis of Level of Service (LOS) at signalized intersections within the City of Los Angeles, LADOT has designated the Circular 212 Planning methodology as the desired tool. The concept of roadway LOS under the Circular 212 method is calculated as the volume of vehicles that pass through the facility divided by the capacity of that facility. A facility is "at capacity" (V/C of 1.00 or greater) whereby extreme congestion occurs. This volume/capacity ratio value is a function of hourly volumes signal phasing, and approach lane configuration on each leg of the intersection.

SB 743 requires that the State Office of Planning and Research (OPR) change State CEQA guidelines for traffic significance thresholds to utilize new metrics, including vehicle miles traveled (VMT), in addition to LOS values. At the time of the Notice of Preparation for this EIR, OPR has not issued guidance upon these thresholds, and LADOT has not adopted such thresholds for traffic impact studies. The intersection-based LOS analysis is currently required by LADOT. Therefore, VMT data was not used as the basis for assessing significance of impacts.

LOS values range from LOS A to LOS F. LOS A indicates excellent operating conditions with little delay to motorists, whereas LOS F represents congested conditions with excessive vehicle delay. LOS E is typically defined as the operating "capacity" of a roadway.

Table 1 defines the level of service criteria applied to the study intersections.

Table 1: Level of Service Definitions

LOS	Interpretation	Signalized Intersection Volume to Capacity Ratio (CMA)	Unsignalized Intersection Delay in Seconds (HCM)
A	Excellent operation. All approaches to the intersection appear quite open, turning movements are easily made, and nearly all drivers find freedom of operation.	0.000 - 0.600	< 10 seconds
B	Very good operation. Many drivers begin to feel somewhat restricted within platoons of vehicles. This represents stable flow. An approach to an intersection may occasionally be fully utilized and traffic queues start to form.	0.601 - 0.700	>10 and 15 sec
C	Good operation. Occasionally backups may develop behind turning vehicles. Most drivers feel somewhat restricted.	0.701 - 0.800	>15 and 25 sec
D	Fair operation. There are no long-standing traffic queues. This level is typically associated with design practice for peak periods.	0.801 - 0.900	>35 and 35 sec
E	Poor operation. Some long standing vehicular queues develop on critical approaches.	0.901 - 1.000	>35 and 50 sec
F	Forced flow. Represents jammed conditions. Backups from locations downstream or on the cross street may restrict or prevent movements of vehicles out of the intersection approach lanes; therefore, volumes carried are not predictable. Potential for stop and go type traffic flow.	Over 1.000	>50 seconds

Source: Highway Capacity Manual, Special Report 209, Transportation Research Board, Washington D.C., 2000 and Interim Materials on Highway Capacity, NCHRP Circular 212, 1982

Traffic Signal Synchronization

Automated Traffic Surveillance and Control (ATSAC) is a computer-based traffic signal control system whereby engineers can monitor traffic conditions and system performance as the system selects appropriate signal timing (control) strategies and performs equipment diagnostics and alert functions. Sensors in the street detect the passage of vehicles, vehicle speed, and the level of congestion. This information is received on a real-time basis and is analyzed on a minute-by-minute basis at the ATSAC Operations Center to determine if better traffic flow can be achieved by changing the signal timing.

If required, the signal timing is either automatically changed by the ATSAC computers or manually changed by the operator using communication lines that connect the ATSAC Center with each traffic signal. To supplement the information from electronic detectors, closed-circuit television (CCTV) surveillance equipment has been and continues to be installed at critical locations throughout the City.

Adaptive Traffic Control System (ATCS) is the latest enhancement to ATSAC and uses a personal computer-based traffic signal control software program which provides fully traffic adaptive signal control based on real-time traffic conditions. The ATCS automatically adjusts traffic signal timing in response to current traffic demands by simultaneously controlling all three critical components of traffic signal timing – namely cycle length, phase split and offset.

For capacity analysis, LADOT guidelines suggest a 0.10 reduction in volume-to-capacity ratio with the implementation of ATSAC/ATCS. This reduction represents field measured benefits in flow and capacity increase by operation of this combined program.

Based on information obtained from LADOT, all signalized study intersections within the City of Los Angeles are currently equipped with both ATSAC and ATCS functionality.

Significant Traffic Impacts

As defined by the local agency traffic study guidelines, significant impacts of a proposed project at an intersection must be mitigated to a level of insignificance. In cases where capacity increases are possible, KOA analyzed mitigation measures that would restore operations commensurate with the removal of the incremental impacts of the Project.

The analysis of study locations focused on LOS values only and long-term traffic impacts were not analyzed, as the Project would not cause any changes in vehicle trip generation. Construction-period effects on study intersection LOS values were analyzed for the peak period of construction.

2. Existing Conditions

This section describes the existing conditions within the study area, in terms of roadway facilities and operating conditions within the study area.

Existing Roadway System

Fieldwork within the Project study area was undertaken to identify traffic control and approach lane configuration at each study intersection, and to identify the locations of on-street parking availability and the locations of transit stops. Key roadways within the study area are described below in Table 2. The discussion presented here is limited to specific roadways that traverse the study intersections and serve the Project site. Figure 3 illustrates the existing study intersection approach lane and control configurations.

Table 2: Study Area Roadway Descriptions

Segment	From	To	# Lanes		Median Type	Parking Restrictions		General Land Use	Posted Speed Limit
			NB/EB	SB/WB		NB/EB	SB/WB		
4th Street	Breed Street	e/o Mott Street	2	2	DY	No Stopping 4PM-6PM NSAT	No Stopping 7AM-9AM 1 Hr Parking 9AM-6PM	School / Residential	25 MPH*
6th Street	Breed Street	e/o Mott Street	1	1	NS	Permitted 2 Hr 9AM-1:30PM Passenger Loading Only 6:30 AM-9AM 1:30 PM-4PM	Permitted / NSAT 2 Hr 9AM-1:30PM Passenger Loading Only 6:30 AM-9AM 1:30 PM-4PM	School / Residential	#
Matthews Street	4th Street	6th Street	1	1	NS	Permitted	Permitted	School / Residential	#
Mott Street	4th Street	6th Street	1	1	NS	Permitted	Permitted	School / Residential	#

DY = Double Yellow
NS = Not Striped
NSAT = No Stopping Anytime
* When children are present
# Residential area, speed limit sign was not posted, prima facie speed limit is 25 MPH.

Existing Transit Service

Table 3 provides descriptions of the transit lines that traverse major roadway corridors in the immediate vicinity of the Project site. The Project would be served directly by area transit lines. Transit use by students is therefore expected to be typical for a school site. Figure 4 illustrates the existing transit lines within walking distance of the Project site.

Table 3: Transit Service Summary

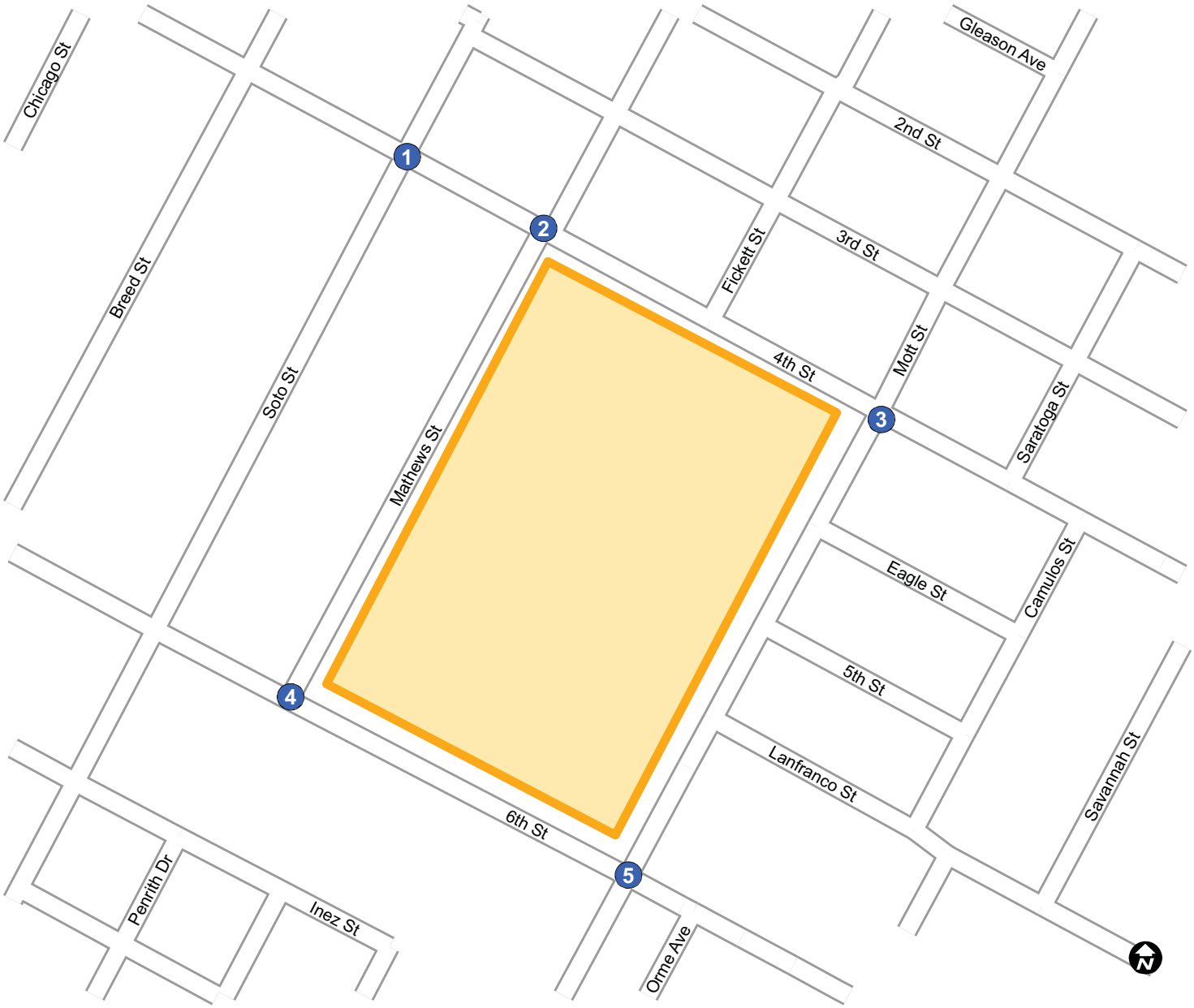
Agency	Line	From	To	Via	Peak Frequency
Metro	106	East Los Angeles	Boyle Heights	4th Street, Soto Street	50-60 Minutes
	251	Lynwood	Cypress Park	Soto Street	15-20 Minutes
	751	Huntington Park	Cypress Park	Soto Street	12-15 Minutes
	605	Boyle Heights	Boyle Heights	4th Street, Soto Street	15 Minutes
Montebello	40	Montebello	Downtown Los Angeles	4th Street	15 Minutes

Existing Traffic Volumes

KOA compiled new manual intersection turn movement counts that were conducted at the study intersections on Thursday, June 2, 2016 from 7:00 a.m. to 10:00 a.m. and 3:00 p.m. to 6:00 p.m.

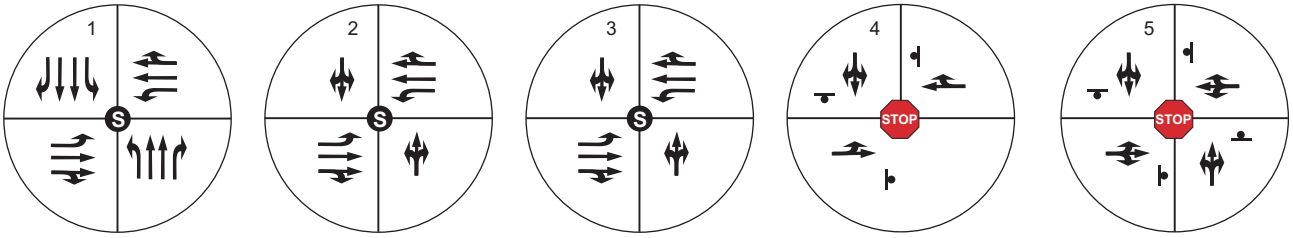
The results of the counts were used to determine existing weekday AM and PM peak-hour conditions. Traffic counts conducted during the year 2016 were factored to existing year-2017 conditions.

Figure 3: Existing Intersection Lane Configuration



LEGEND

- Project Site
- Study Intersection
- Signalized Intersection
- Stop Sign Controlled
- Stop Sign
- Lane Configuration



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Figure 4: Existing Transit Services



LEGEND

- Project Site
- Study Intersection
- Montebello Line 40
- Metro 106
- Metro 251/751
- Metro 605

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Existing Intersection Levels of Service

Based on the AM and PM peak period traffic counts at the study area intersections, a volume-to-capacity ratio or average vehicle delay value in seconds and corresponding LOS value were determined for each of the study area intersections. Table 4 provides the LOS results at each study intersection under Existing (Year 2017) baseline conditions.

Table 4: Existing Peak-Hour Level of Service Summary

	Study Intersections	AM Peak		PM Peak	
		V/C or Delay	LOS	V/C or Delay	LOS
1	Soto Street / 4th Street	0.854	D	0.895	D
2	Matthews Street / 4th Street	0.567	A	0.575	A
3	Mott Street / 4th Street	0.653	B	0.556	A
4	Matthews Street / 6th Street *	10.1	B	8.1	A
5	Mott Street / 6th Street *	9.9	A	8.4	A

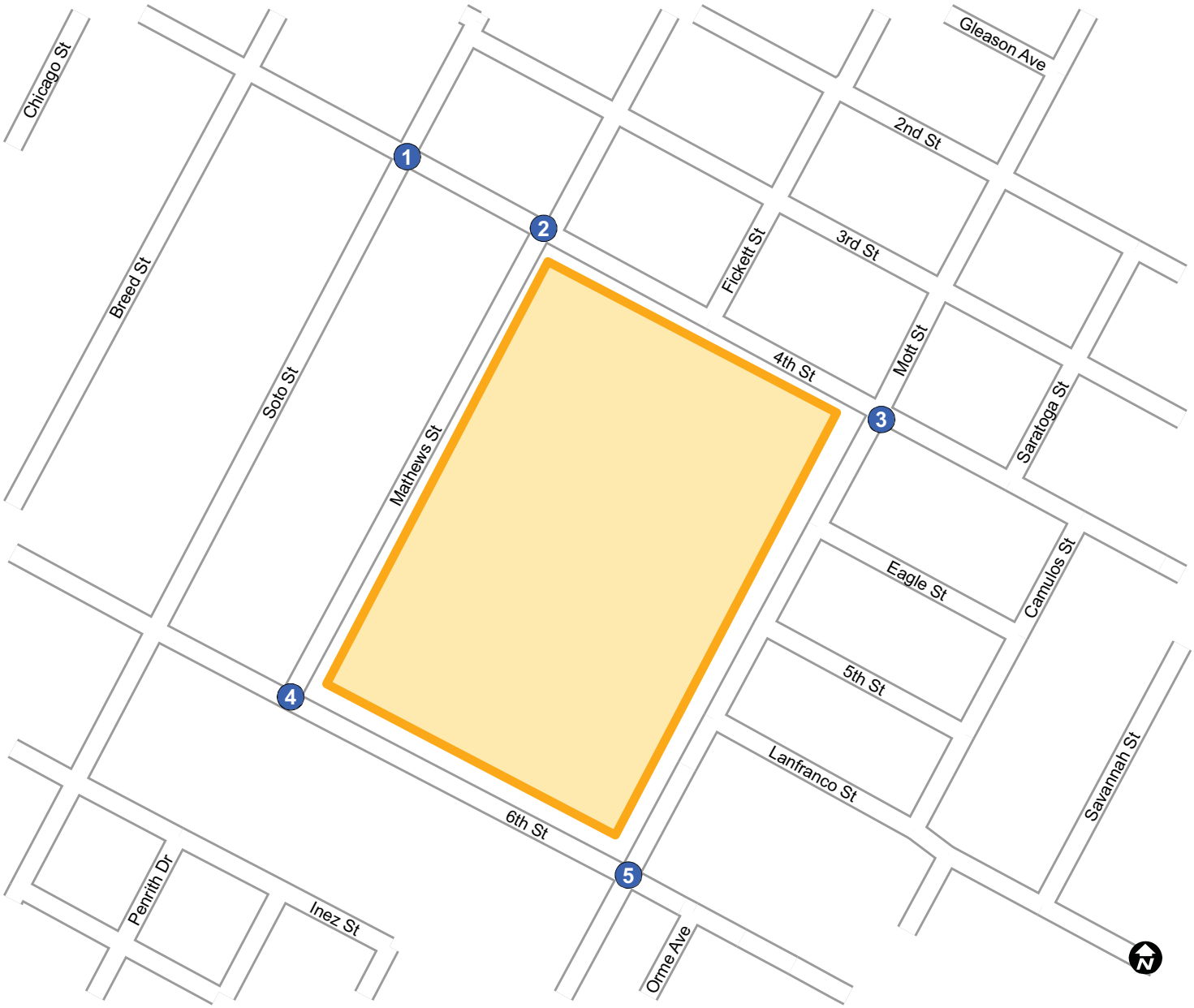
LOS = Level of Service *V/C = Volume-to-Capacity Ratio*
Delay = Seconds of delay ** Unsignalized intersection.*

The analysis indicated that all of the study intersections are currently operating at LOS D or better during the a.m. and p.m. peak hours under the existing conditions.

Traffic count summaries are provided in Appendix A of this report. LOS worksheets for the study intersections are provided in Appendix B of this report.

The existing peak-hour study intersection volumes are illustrated on Figure 5 (a.m. peak) and Figure 6 (p.m. peak).

Figure 5: Existing AM Peak Hour Traffic Volumes

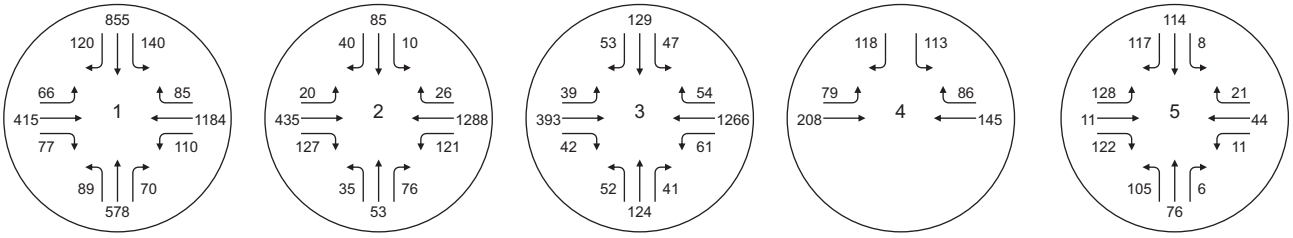


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Project Site

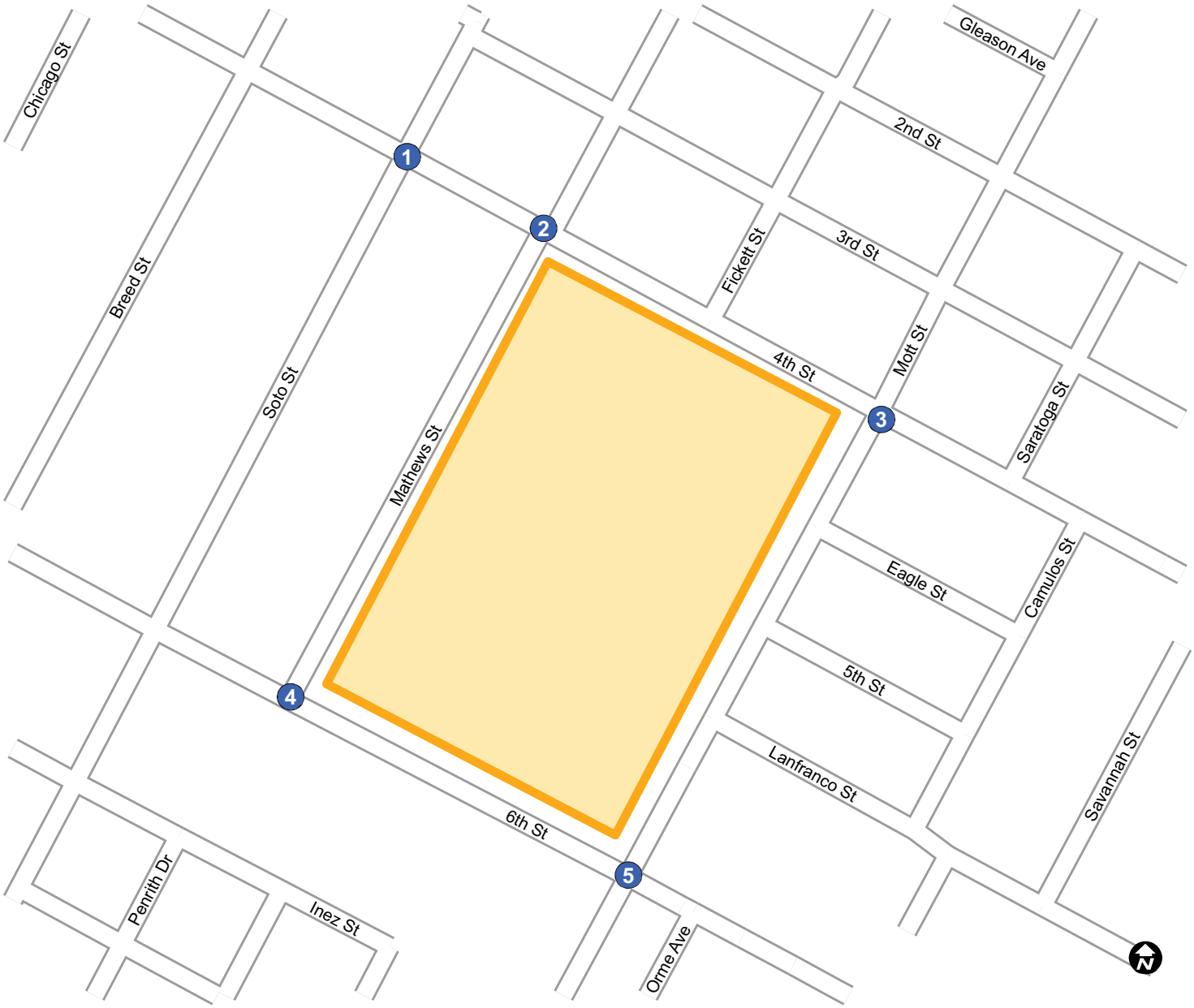
Study Intersection

xx Intersection Turn Volume



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Figure 6: Existing PM Peak Hour Traffic Volumes

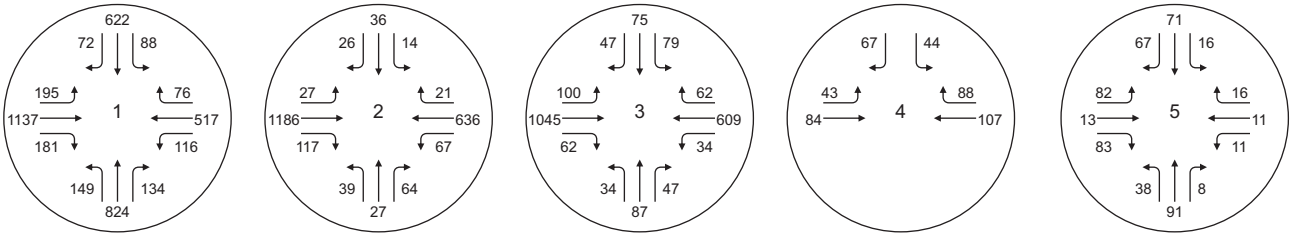


LEGEND

Project Site

Study Intersection

xx Intersection Turn Volume



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3. Project Traffic

This section summarizes the estimated trip generation for the existing school campus. The Project is not expected to create new vehicle trips, so these calculations are provided for reference. Impact calculations are therefore not included in this traffic study for any new generated trips from the school campus for the long-term period.

Project Trip Generation

The applied rates are based on *Trip Generation (9th Edition)*, published by the Institute of Transportation Engineers (ITE). The rate category used was High School, operated as a public facility, and the analyzed rates incorporate average vehicle trips, with reductions by local walking trips and transit use.

The peak roadway traffic rate was used for the a.m. and p.m. peak analysis to calculate the project trip generation. Table 5 summarizes the project trip generation rates and the school vehicle trips.

Table 5: Project Trip Generation

TRIP GENERATION RATES									
Land Use		Units	**Daily Total**	**Weekday AM Total**	Weekday AM IN	Weekday AM OUT	**Weekday PM Total**	Weekday PM IN	Weekday PM OUT
High School *		student	1.71	0.39	0.21	0.18	0.13	0.06	0.07
FORECAST TRIP GENERATION									
Land Use	Intensity	Units	**Daily Total**	**Weekday AM Total**	Weekday AM IN	Weekday AM OUT	**Weekday PM Total**	Weekday PM IN	Weekday PM OUT
High School	2,600	students	4,446	1,014	546	468	338	159	179

** AM rates for high school derived from Memorandum of Cooperation (MOC), City of Los Angeles/LAUSD, June 2005; PM rates for high school taken from ITE Trip Generation, 9th edition. Student rates for the high school use provide total trips for students, staff, visitors, and other trips.*

Based on these trip rates, the 2,600 seats provided by the existing campus are estimated to generate 4,446 daily trips, including 1,014 weekday a.m. peak-hour trips (546 inbound and 468 outbound) and 338 weekday p.m. peak-hour trips (159 inbound and 179 outbound).

4. Future Conditions

This section provides an analysis of future traffic conditions in the study area with ambient growth and related/cumulative projects. The year 2018 was selected for analysis, as this is the anticipated year that Project site construction activities would reach their peak intensity.

Ambient Growth

The future period forecast includes an ambient growth rate to account for both regional population and employment growth outside of the study area. An annual growth rate of 2% was used for this purpose.

Area/Cumulative Projects

Based on a review of pending project data provided by a database maintained by LADOT Development Review staff, a list of 24 planned area projects was included in the traffic analysis.

Table 6 summarizes the trip generation of the included projects. This traffic was added to the surrounding street system based on the roadway network and regional arterial routes and freeway connections. The area projects trip generation was defined by information maintained by LADOT.

Figure 7 illustrates the locations of the included area projects. The area projects trip assignment is illustrated on Figures 8 (a.m. peak) and Figure 9 (p.m. peak).

Table 6: Area Projects Trip Generation Summary

Map ID	Name	Location	Land Use	Intensity	Units	Daily Total	AM Peak Hour			PM Peak Hour		
							Total	In	Out	Total	In	Out
1	Mixed-Use Project (Megatoys)	905 E 2nd St	Condominiums	320	d.u.	1,207	64	-6	70	92	69	23
			Retail	18.716	k.s.f.							
2	Boyle Heights Mixed-Use	2901 E Olympic Blvd	Apartments	4,400	d.u.	19,382	1,507	463	1,044	1,927	1,123	804
			Retail	185.000	k.s.f.							
			Office	125.000	k.s.f.							
			Medical Office	25.000	k.s.f.							
			Daycare	15.000	k.s.f.							
			Library	15.000	k.s.f.							
3	1902-1901 Marengo Mixed-Use	1902 E Marengo St	Retail	4.415	k.s.f.	1,637	111	70	41	119	52	67
			Fast Food Restaurant	1.500	k.s.f.							
			High-Turnover Restaurant	4.500	k.s.f.							
			Medical Office	16.820	k.s.f.							
4	Medical Office Expansion	1828 E Cesar Chavez St	Medical Office	32.300	k.s.f.	1,168	74	58	16	112	30	82
5	Linda Vista Senor Housing & Medical Office	610 S St. Louis St	Condominiums	97	d.u.	1,530	89	65	24	130	41	89
			Medical Office	33.000	k.s.f.							
6	Santa Fe Freight Yard Redevelopmenet	950 E 3rd St	School	532	students	6,372	339	162	177	458	245	213
			Retail	30.062	k.s.f.							
			Apartments	635	d.u.							
7	Mixed-Use	2051 E 7th st	Apartments	240	d..u.	2,196	106	9	97	193	138	55
			Retail	8.000	k.s.f.							
			Restaurant	12.000	k.s.f.							
8	Lorena Plaza Mixed-Use	3401 E 1st St	Apartments	49	d.u.	458	24	6	18	42	25	17
			Retail	10.000	k.s.f.							
9	Mixed-Use (Coca Cola)	963 E 4th St	Office	78.600	k.s.f.	2,512	128	106	22	251	113	138
			Retail	25.000	k.s.f.							
			Restaurant	20.000	k.s.f.							
10	Mixed-Use	2407 E 1st St	Apartments	50	d.u.	354	26	12	14	35	16	19
			Office	8.500	k.s.f.							
			Retail	3.400	k.s.f.							
11	Mixed-Use (Sears Project)	2650 E Olympic Blvd	Apartments	1,000	d.u.	11,307	945	482	463	1,076	550	526
			Retail	34.000	k.s.f.							
			High-Turnover Restaurant	46.000	k.s.f.							
			Office	230.000	k.s.f.							
12	Mixed-Use	826 S Mateo St	Condominiums	90	d.u.	1,267	45	11	34	101	62	39
			Retail	11.000	k.s.f.							
			Restaurant	5.600	k.s.f.							
13	Retail (Palmetto & Mateo)	555 S Mateo St	Retail	153.000	k.s.f.	4,300	35	5	30	425	220	205
14	Mixed-Use	1147 E Palmetto St	Apartments	120	d.u.	2,908	215	73	141	230	147	83
			Hotel	141	rooms							
			Restaurant	20.000	k.s.f.							
15	Mixed-Use (Old Ford Factory)	2030 E 7th St	Office	243.583	k.s.f.	2,306	308	274	34	318	69	249
			Retail	40.000	k.s.f.							
16	Office	540 S Santa Fe Ave	Office	65.812	k.s.f.	726	102	90	12	98	17	81
17	Hotel	1030 N Soto St	Hotel	81	rooms	662	43	25	18	48	25	23
18	Metro Emergency Security Operations Center	410 N Center St	Office	110.000	k.s.f.	1,165	87	77	10	79	13	66
19	Restaurant	500 S Mateo St	High-Turnover Restaurant	12.882	k.s.f.	1,052	89	48	41	81	50	31
20	Mixed-Use	2130 E Violet St	Office	94.000	k.s.f.	1,351	167	137	30	161	39	122
			Retail	3.500	k.s.f.							
			Restaurant	4.000	k.s.f.							
21	Mixed-Use Project (mostly private club)	929 E 2nd St	Retail	40.034	k.s.f.	2,014	70	61	9	189	101	88
			Private Retail	0.985	k.s.f.							
			Event Space	7.843	k.s.f.							
			Drinking Place	10.369	k.s.f.							
			Private Office	40.249	k.s.f.							
			Private Health Club	5.383	k.s.f.							
			Private Movie Theather	49.000	k.s.f.							
22	Mixed-Use (Revised)	1800 E 7th St	Apartments	122	d.u.	816	71	26	45	82	45	37
			Office	136.000	k.s.f.							
23	La Veranda Mixed-Use	2420 Cesar Chavez Ave	Apartments	77	d.u.	1,087	61	25	36	98	54	44
			Bank	4.000	k.s.f.							
			Health Club	4.000	k.s.f.							
24	Mixed-Use	520 S Mateo St	Apartments	200	d.u.	4,314	304	77	227	388	255	133
			Office	30.000	k.s.f.							
			Retail	15.000	k.s.f.							
			Restaurant	15.000	k.s.f.							
TOTAL						**72,091**	**5,010**	**2,356**	**2,653**	**6,733**	**3,499**	**3,234**

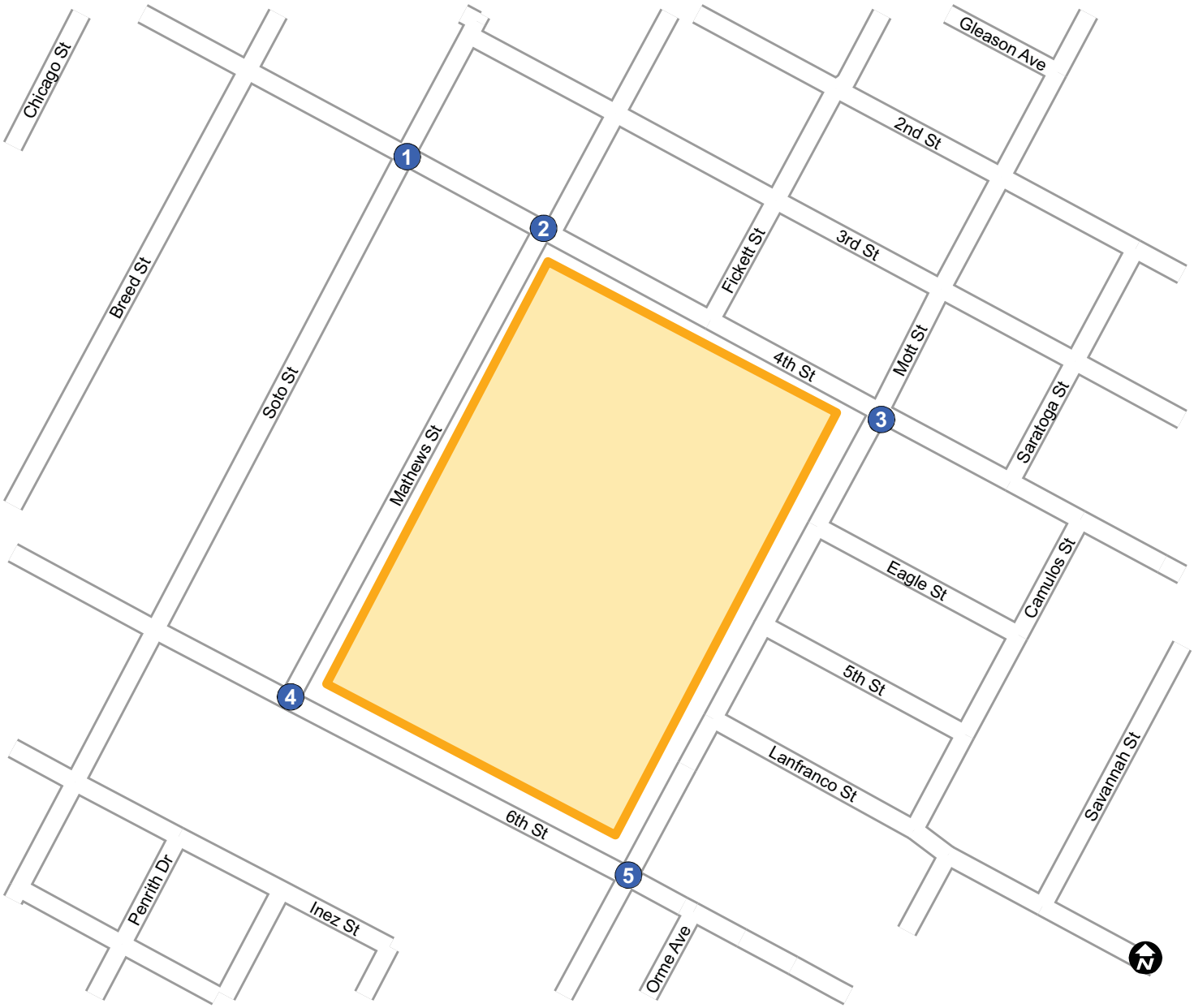
d.u. = dwelling units, k.s.f. = 1,000 square feet of floor area
Source: Trip generation for the area projects are provided by LADOT.

Figure 7: Location of Area Projects



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Figure 8: Area Project Trips - AM Peak-Hour Volumes

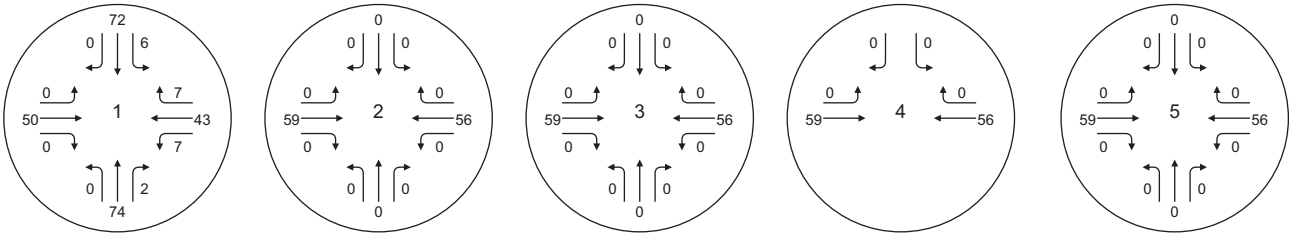


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Project Site

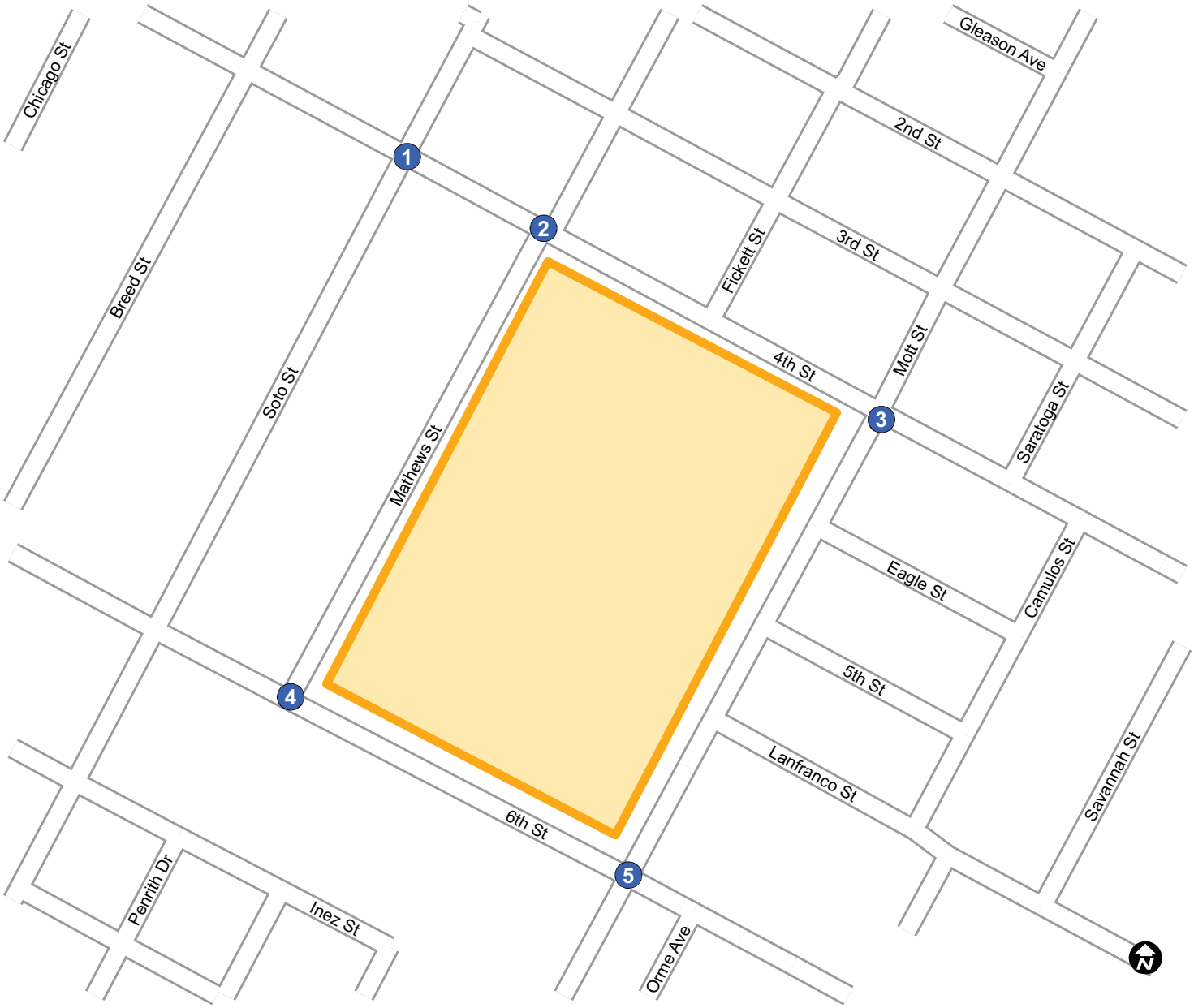
Study Intersection

xx Intersection Turn Volume



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Figure 9: Area Project Trips - PM Peak-Hour Volumes

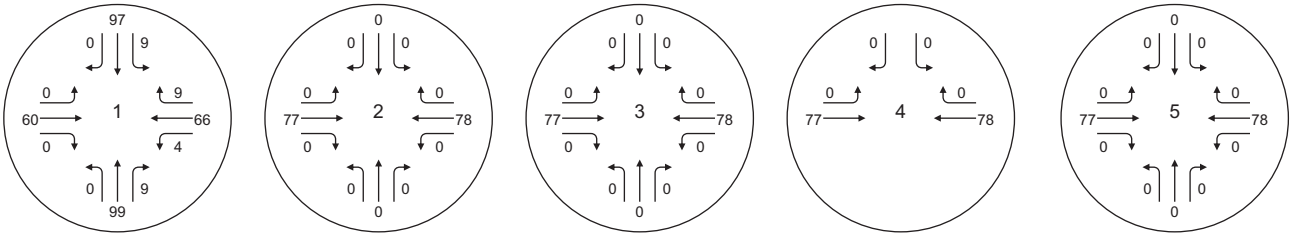


LEGEND

Project Site

Study Intersection

xx Intersection Turn Volume



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Peak-Hour Intersection Level of Service

Based on the traffic forecast parameters discussed, a future peak-hour level of service analysis was conducted at the study intersections. Table 7 summarizes the results of the level of service analysis for this scenario.

Table 7: Future (Year 2018) No Project
Peak-Hour Level of Service Summary

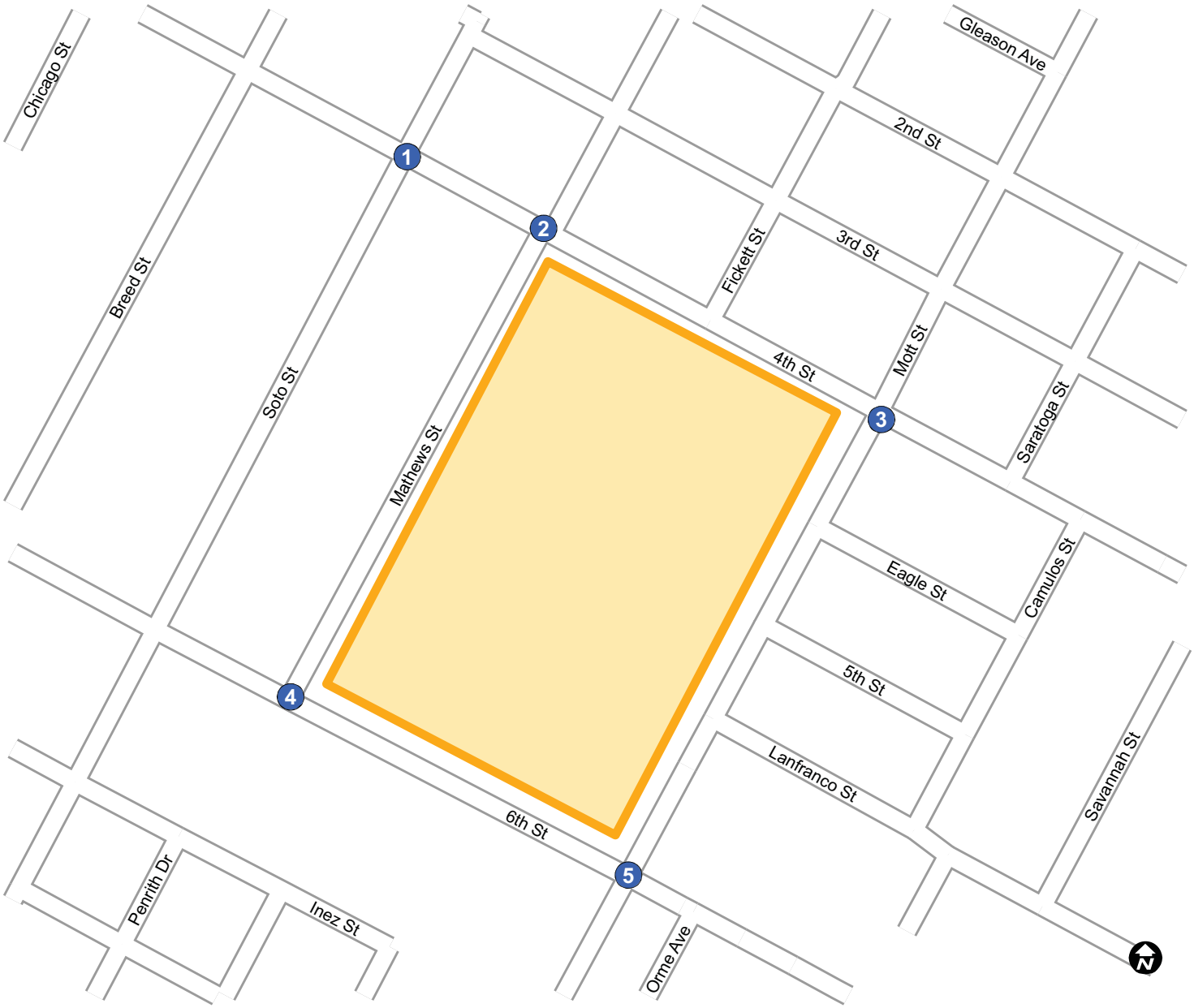
	Study Intersections	AM Peak		PM Peak	
		V/C or Delay	LOS	V/C or Delay	LOS
1	Soto Street / 4th Street	0.905	**E**	0.969	**E**
2	Matthews Street / 4th Street	0.592	A	0.606	B
3	Mott Street / 4th Street	0.679	B	0.588	A
4	Matthews Street / 6th Street *	11.3	B	9.0	A
5	Mott Street / 6th Street *	11.1	B	9.3	A

LOS = Level of Service *V/C = Volume-to-Capacity Ratio*
Delay = Seconds of delay ** Unsignalized intersection.*

Based on this scenario analysis, four of the five study intersections would continue to operate at LOS D or better during both a.m. and p.m. peak hours. Operations at the intersection of Soto Street and 4th Street would worsen to LOS E during both a.m. and p.m. peak hours, as a result of new vehicle trips generated by the area projects.

The peak-hour study intersection volumes for this scenario are illustrated on Figures 10 (a.m. peak) and Figure 11 (p.m. peak). The level of service worksheets for the study intersections under this scenario are provided in Appendix C of this report.

Figure 10: Future Without-Project - AM Peak Hour Traffic Volumes

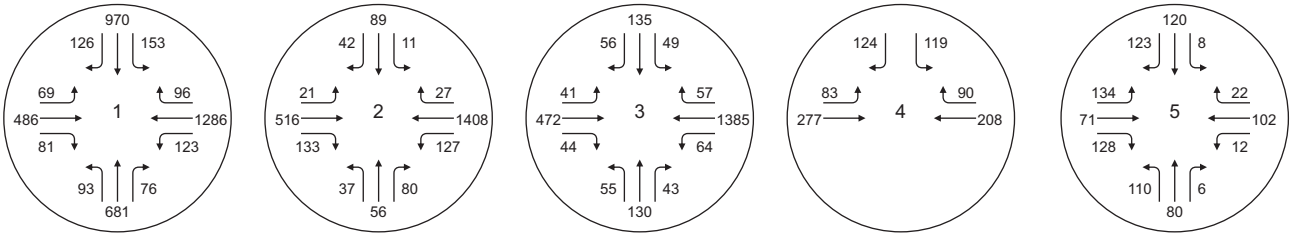


LEGEND

Project Site

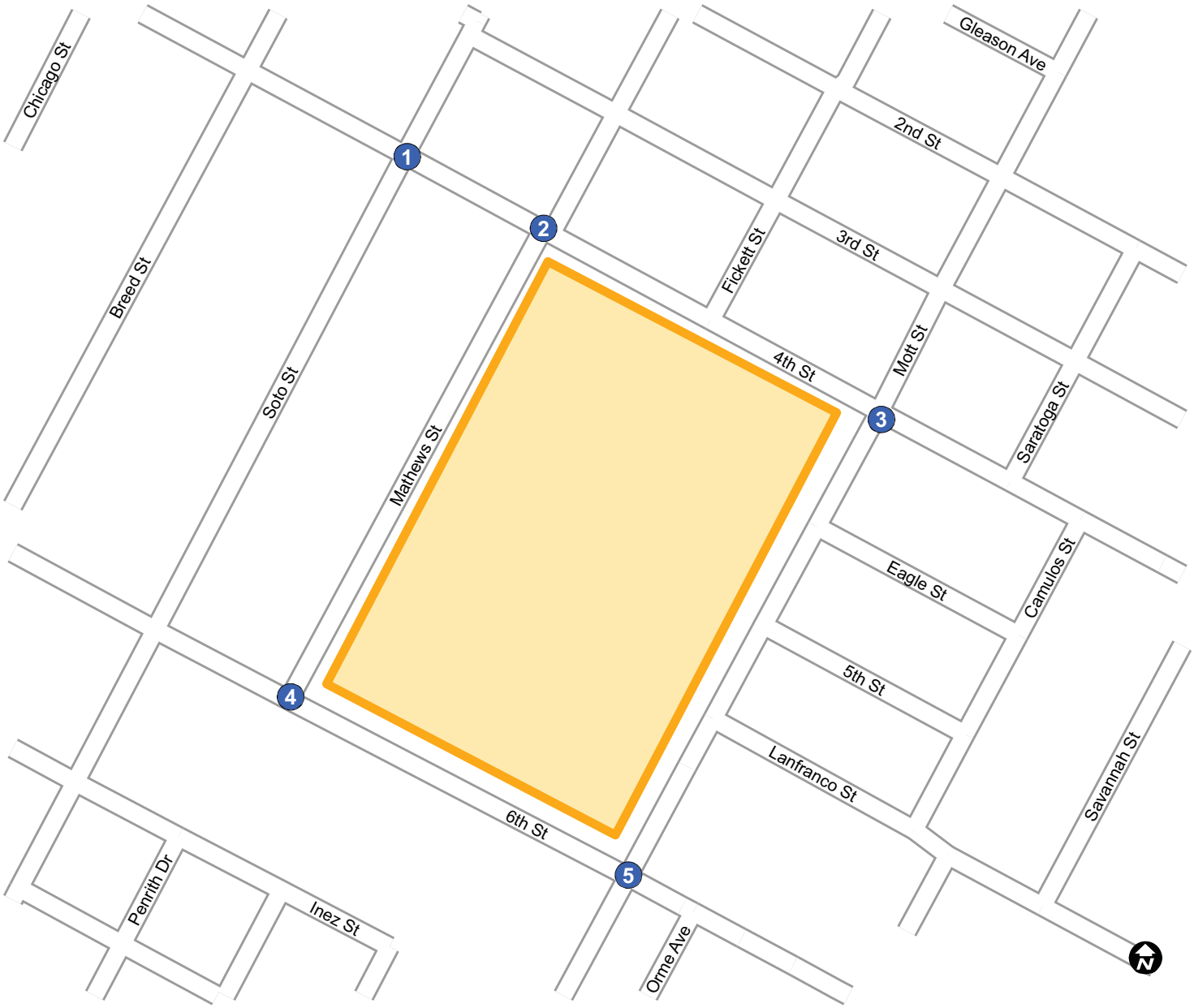
Study Intersection

xx Intersection Turn Volume



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Figure 11: Future Without-Project - PM Peak Hour Traffic Volumes

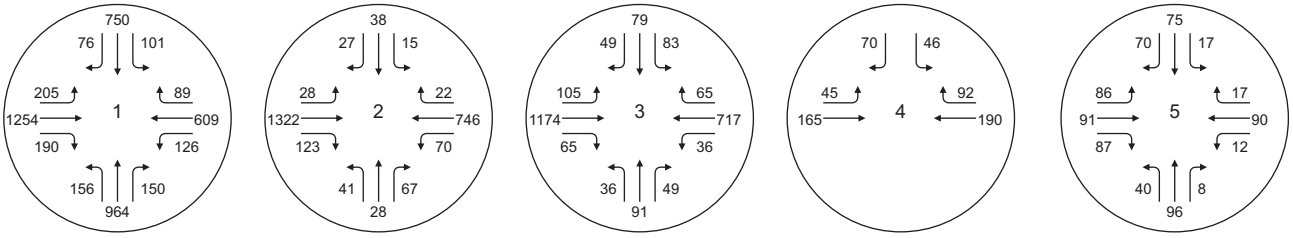


LEGEND

Project Site

Study Intersection

xx Intersection Turn Volume



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5. Project Construction Conditions

Project Construction Details

Construction truck trips and constriction employee vehicle trips would likely access the Project site via the freeway network, area arterials, and then local roadways. This trip distribution pattern would generally include the I-5 freeway to the west, the 4th Street interchange, the 4th Street roadway, and the local roadways of Mathews Street, Mott Street, and to a lesser extent 6th Street.

Consistent with the City of Los Angeles Building Construction Noise Ordinance, construction is scheduled to occur Monday through Friday from 7:00 AM to 5:00 PM. No construction would occur on Sundays or holidays. Therefore, construction workers would typically arrive before the weekday morning commute peak period when construction commences at 7:00 AM, and would likely leave during the weekday afternoon commute peak period, but not overlap the peak afternoon pick-up and outbound trip period of the school.

Construction employees would park in a number of campus areas, depending on the Project construction phase:

- South side of 6th Street, west of Mathews Street
- North side of 6th street, adjacent to ball fields at southeast corner of campus
- Adjacent to Mott Street, east side of campus

Project demolition and construction is anticipated to start in the third quarter of the year 2018, and this would be the peak activity period in terms of daily truck trips generated. Excavation and cleanup activities would start in November 2018 and occur through the end of February 2019, in a non-continuous manner. Final excavation and cleanup activities would occur between June 2020 and November 2020.

These major phases of construction include the Gymnasium & Parking Lot, the Classroom Building, and the Administration/WN/CR Building & Performing Arts Center (PAC). Work focused during the summer months will include Interim Housing, special work on utilities, the lunch shelter, the pool parking lot, exterior renovation of existing buildings, and interior maintenance in Building 1.

Trip Generation Calculations

The construction truck trip generation totals were determined based on the most intense period of demolition activity for the project.

In converting trucks to passenger car equivalents, a Passenger Car Equivalent (PCE) factor of 2.5 was assumed. The applied value matches typical factors used in area studies that include trips generated by trucking activities. The factor is based on conservative factors defined by the Southern California Association of Governments (SCAG) Heavy Duty Truck Model. Each round trip by truck would generate the equivalent of 2.5 inbound vehicle trips and 2.5 outbound vehicle trips.

The proposed Project construction would require up to 100 daily round-trip truck loads for demolition and excavation activities. During project demolition and excavation activities, daily truck haul activities will occur over an eight-hour period that begins during the a.m. peak period and is completed during the p.m. peak period.

Based on these assumptions, up to 100 daily truck trips would generate 125 weekday a.m. peak-hour trips (63 inbound and 62 outbound) and 125 weekday p.m. peak-hour trips (63 inbound and 62 outbound). The peak construction activities would generate a daily total of 500 truck trips. Table 8 summarizes the construction truck trips, including the applied PCE factor of 2.5.

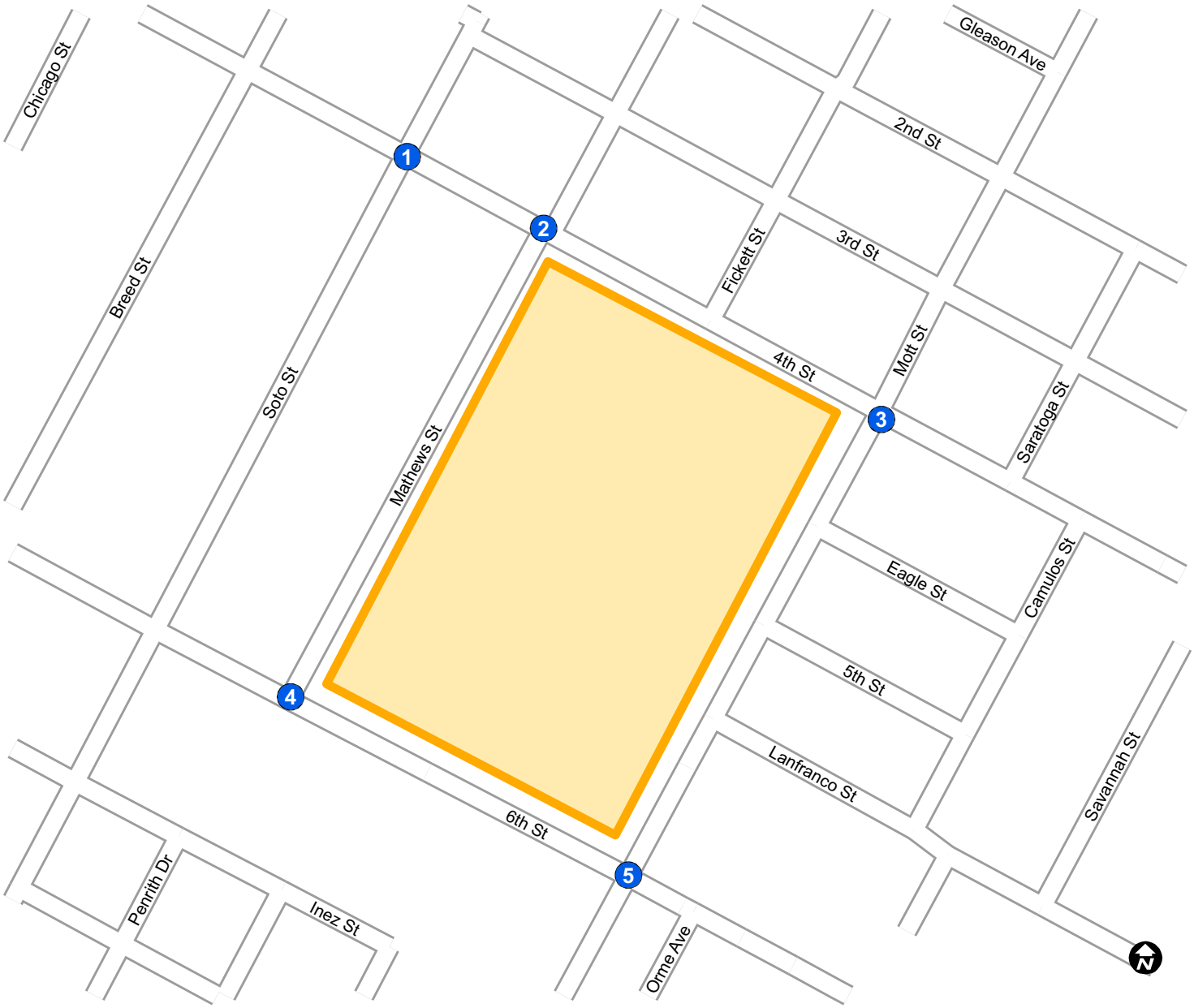
Table 8: Project Trip Generation

Land Use	Daily Total	AM Peak Hour			PM Peak Hour		
		Total	In	Out	Total	In	Out
Trip Generation Estimates							
Construction	500	125	63	62	125	63	62
Total	500	125	63	62	125	63	62

Note: The total of construction trucks was based on the Transportation Plan of August 2017.

The study area construction peak-hour traffic assignment for the construction trips only are illustrated on Figure 12 (a.m. peak) and Figure 13 (p.m. peak).

Figure 12: Project Construction Trip Assignment - AM Peak Hour

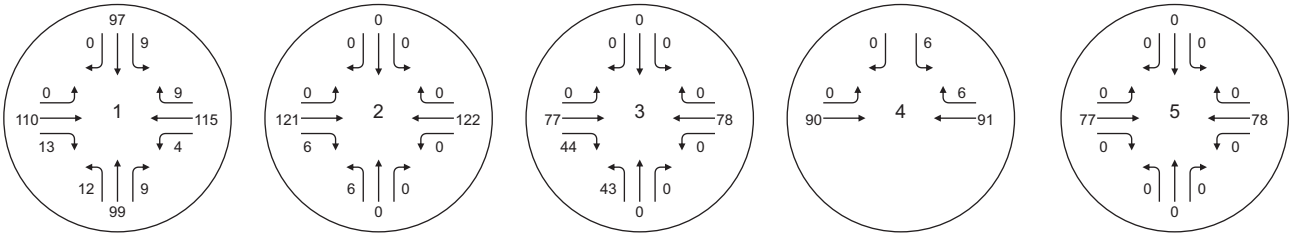


LEGEND

Project Site

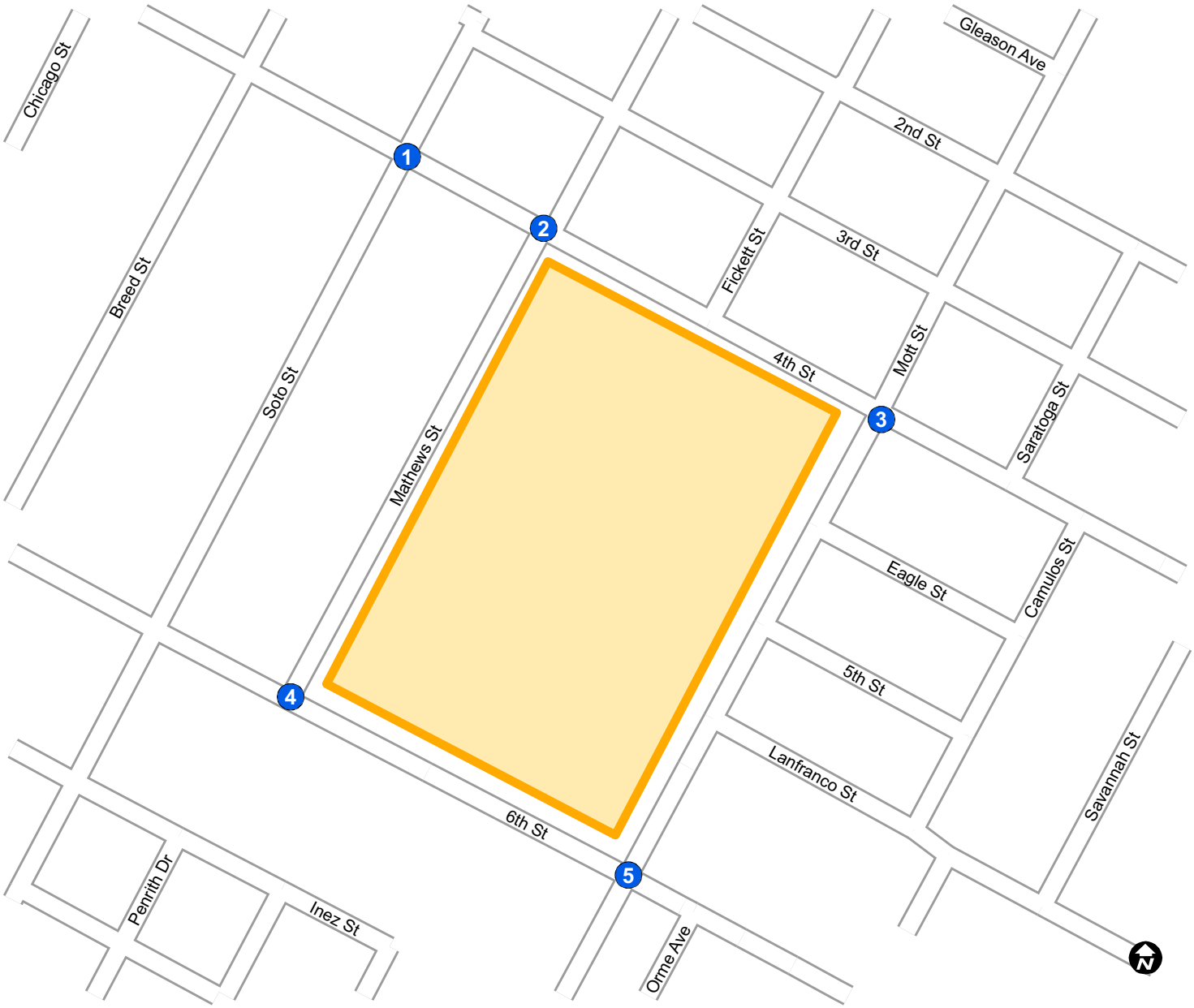
Study Intersection

xx Intersection Turn Volume



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Figure 13: Project Construction Trip Assignment - PM Peak Hour

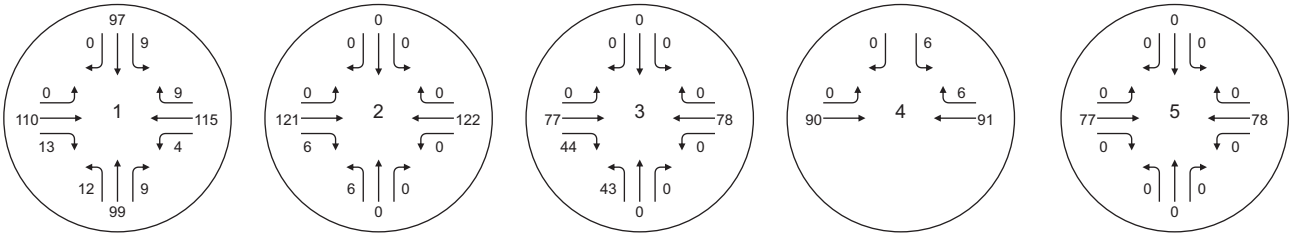


LEGEND

Project Site

Study Intersection

xx Intersection Turn Volume



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Construction Impacts

Traffic impacts are identified by local agencies if the proposed development will result in a significant change in traffic conditions at a study intersection. A significant impact is typically identified if project-related traffic will cause service levels to deteriorate beyond a threshold limit specified by the overseeing agency. Impacts can also be significant if an intersection is already operating below an acceptable level of service value and project traffic will cause a further decline below the applicable threshold.

The City of Los Angeles Department of Transportation has established specific thresholds for project related increases in the volume-to-capacity ratio (V/C) of signalized study intersections. The following increases in peak-hour V/C ratios are considered "significant" impacts:

Level of Service	**Final V/C***	**Project Related v/c increase**
C	< 0.701 – 0.800	Equal to or greater than 0.040
D	< 0.801 – 0.900	Equal to or greater than 0.020
E	0.901 or 1.000	Equal to or greater than 0.010
F	Greater than 1.000	Equal to or greater than 0.010

Note: Final V/C is the V/C ratio at an intersection, considering impacts from the project, ambient and related project growth, and without proposed traffic impact mitigations.

LADOT does not define impact thresholds for unsignalized intersections, nor does LADOT define impact thresholds for construction activities. The impact standards applied to this analysis were based on conditions worsening to LOS F (over capacity) due to Project construction activities.

The analysis of the study intersections focused on level of service values only and more specific LADOT incremental impact thresholds were not applied. The proposed Project involves only site buildings demolition and the activities would not be long-term in duration.

Project construction would potentially disrupt traffic flow within the study area. The impact analysis included the assignment of construction haul/delivery trips to the study area, for the review of the significance of traffic impacts during the peak period of construction.

Table 9 provides a comparison of existing conditions scenario to future year-2018 conditions with Project construction. LOS values of E or F are shown below in bold text.

Table 9: Project Impact Summary

	Study Intersections	Peak Hour	Existing 2017 Conditions V/C or Delay	Existing 2017 Conditions LOS	Future 2018 No Project V/C or Delay	Future 2018 No Project LOS	Future 2018 + Construction V/C or Delay	Future 2018 + Construction LOS
1	Soto Street / 4th Street	AM	0.854	D	0.905	**E**	0.949	**E**
		PM	0.895	D	0.969	**E**	0.991	**E**
2	Matthews Street / 4th Street	AM	0.567	A	0.592	A	0.618	B
		PM	0.575	A	0.606	B	0.627	B
3	Mott Street / 4th Street	AM	0.653	B	0.679	B	0.715	C
		PM	0.556	A	0.588	A	0.631	B
4	Matthews Street / 6th Street *	AM	10.1	B	11.3	B	12.3	B
		PM	8.1	A	9.0	A	9.2	A
5	Mott Street / 6th Street *	AM	9.9	A	11.1	B	11.5	B
		PM	8.4	A	9.3	A	9.3	A

LOS = Level of Service *V/C = Volume-to-Capacity Ratio*
Delay = Seconds of delay ** Unsignalized intersection.*

The intersection of Soto Street and 4th Street would operate at LOS E during both a.m. and p.m. peak hours. The LOS value of E represents the intersection operations approaching capacity. Based on applied significant impact standards, Project construction activities would not create significant impacts at the study intersections.

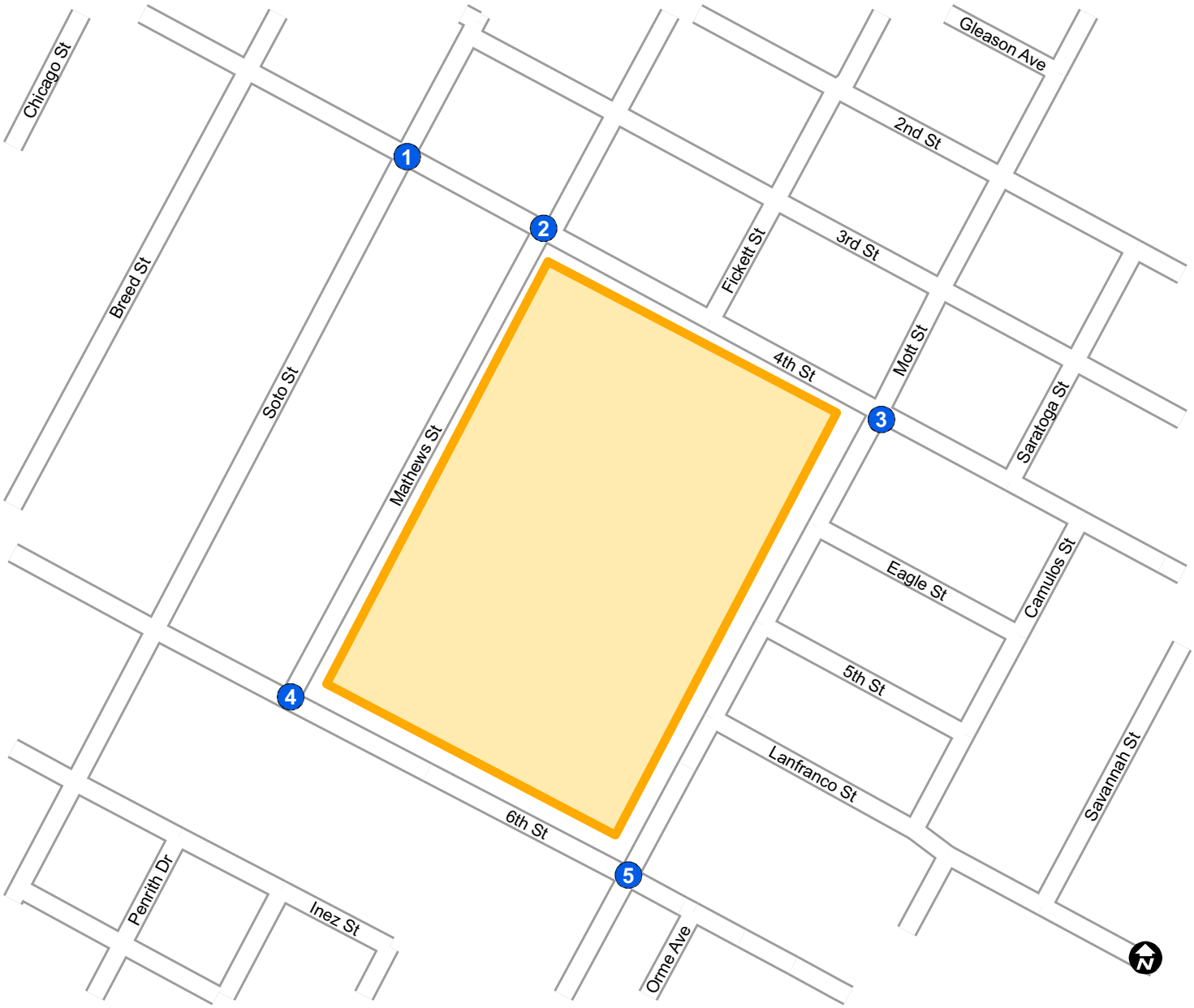
The study area traffic volumes for the future with-Project construction period scenario are illustrated on Figure 14 (a.m. peak) and Figure 15 (p.m. peak). The level of service worksheets for the study intersections under this scenario are provided in Appendix D of this report.

Recommended Construction-Period Mitigation

The following measures are recommended for implementation during the construction period:

- LAUSD should require its contractors to submit a construction worksite traffic control plan to the City of Los Angeles for review prior to construction. The plan will show the location of any haul routes, hours of operation, protective devices, warning signs, and access to abutting properties.
- The worksite traffic control plan should define measures to avoid the overlap of truck trips at construction site access points/driveways during student pedestrian travel to and from the campus on adjacent sidewalks.
- The worksite traffic control plan should define measures to minimize the impacts of all construction traffic flows and vehicle parking areas on site pick-up/drop-off activities.
- LAUSD should encourage its contractor to limit construction-related truck trips to avoid peak school travel times.
- All measures identified in the detailed Traffic Control Plan should be implemented during construction to ensure that adequate and safe access remains available on-site.
- Flag persons should be stationed at each site construction access point to control conflicts between pedestrians, vehicles in travel lanes, and pedestrians on the sidewalk.

Figure 14: Future with Construction Period - AM Peak Hour Traffic Volumes

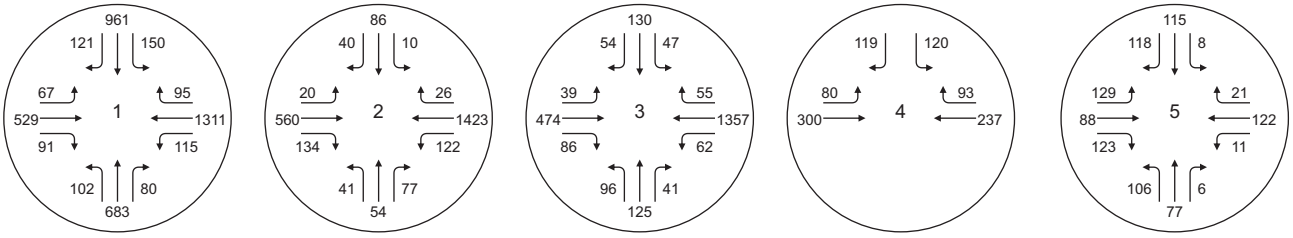


LEGEND

Project Site

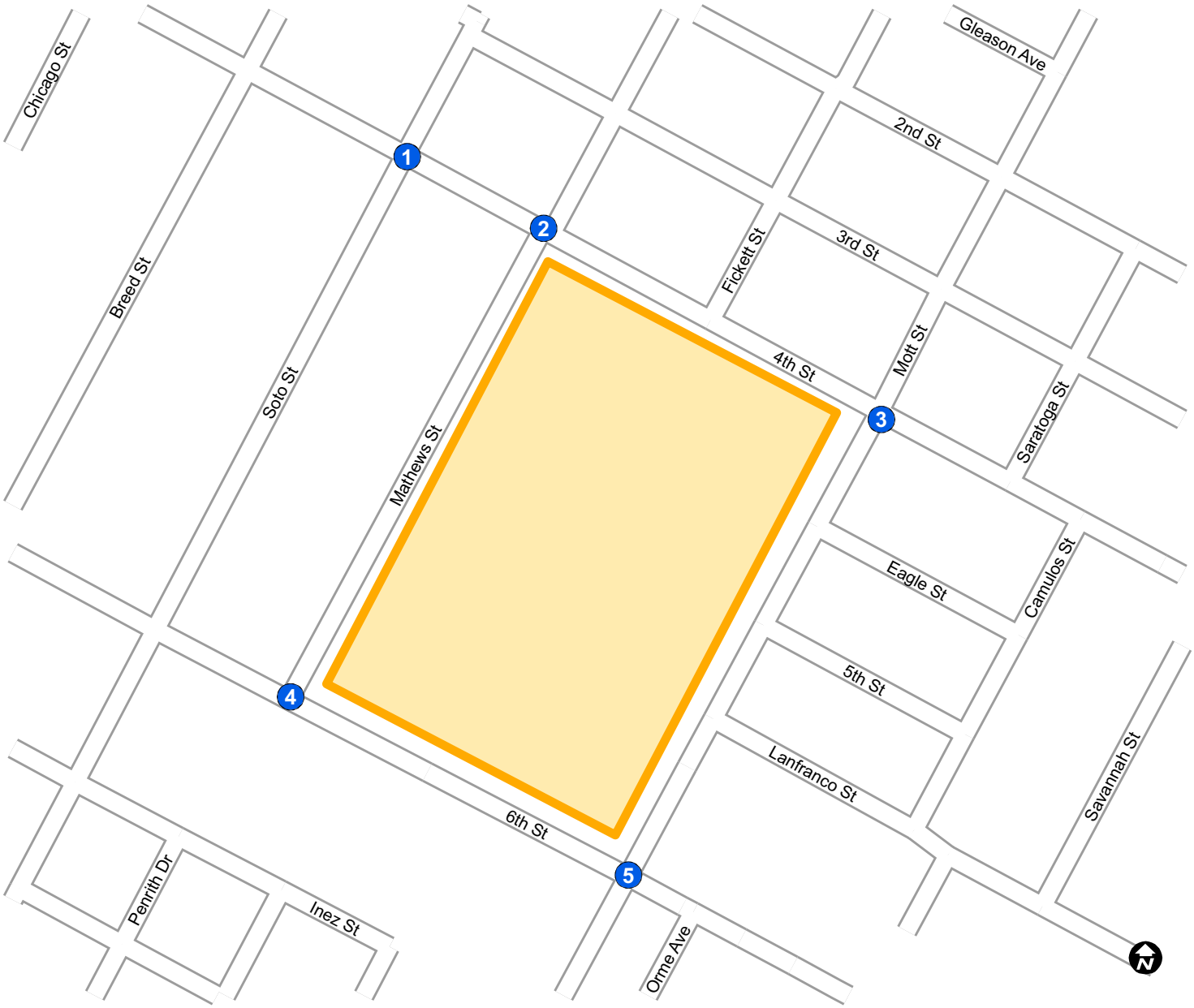
Study Intersection

xx Intersection Turn Volume



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Figure 15: Future with Construction Period - PM Peak Hour Traffic Volumes

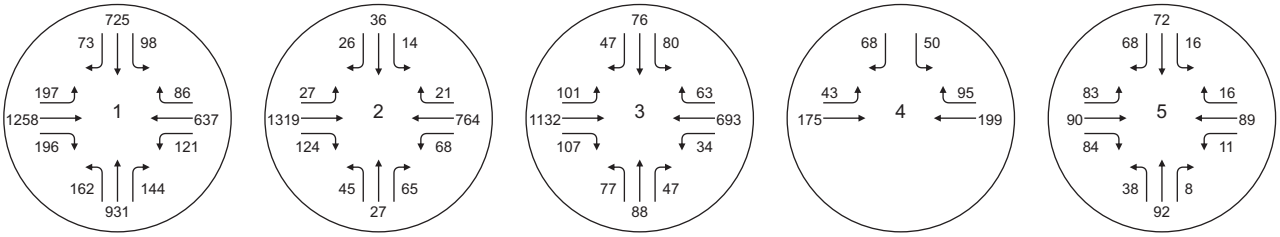


LEGEND

Project Site

Study Intersection

xx Intersection Turn Volume



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6. Site Access Review

This section provides a review of existing school access, which will remain mostly unchanged after Project construction is completed.

Project Access Details

The school does not have a designated/signed pick-up/drop-off area. Such activities take place on an informal basis along the curb frontages of the block containing the school campus. Such operations will not change in any significant manner after completion of the Project. No particular operations issues with this access have been identified.

The intersections at the north end of the existing school site – Mathews Street/4th Street and Mott Street/4th Street – are both signalized intersections with pedestrian crosswalks on all corners. Sidewalks extend from these intersections around the school campus and into the adjacent neighborhoods. Major sidewalk gaps do not exist in the immediate vicinity of the school site.

The intersections at the south end of the existing school site – Mathews Street/6th Street and Mott Street/6th Street are all-way stop-sign controlled intersections with striped crosswalks. A mid-block stop-sign controlled crosswalk also exists between these two intersections on 6th Street.

Based on the presence of controlled pedestrian crossing locations on all sides of the campus, the presence of sidewalks at the perimeter of the campus, and the extension of these sidewalks into adjacent neighborhoods, there are no identified existing pedestrian access issues that require remedy.

Access Mitigation Conclusions

There are not any identified significant impacts for pedestrian access or general safety issues for the proposed school access configuration, based on the review of the conceptual site plan and existing access. No formal mitigation measures in these areas are therefore recommended.

No particular operations issues with existing vehicle pick-up/drop-off operations have been identified.

7. Congestion Management Plan Conformance

This section demonstrates the ways in which this traffic study was prepared to be in conformance with the procedures mandated by the County of Los Angeles Congestion Management Program.

The Congestion Management Program (CMP) was created statewide because of Proposition 111 and was implemented locally by the Los Angeles County Metropolitan Transportation Authority (Metro). The CMP for Los Angeles County requires that the traffic impact of individual development projects of potentially regional significance be analyzed. A specific system of arterial roadways plus all freeways comprises the CMP system. Per CMP Transportation Impact Analysis (TIA) Guidelines, a traffic impact analysis is conducted where:

- At CMP arterial monitoring intersections, including freeway on-ramps or off-ramps, where the proposed project will add 50 or more vehicle trips during either AM or PM weekday peak hours.

- At CMP mainline freeway-monitoring locations, where the project will add 150 or more trips, in either direction, during the either the AM or PM weekday peak hours.

The nearest CMP arterial monitoring intersection to the Project site is located at Whittier Boulevard at Atlantic Boulevard (CMP ID#104, 3.30-miles from the Project site).

The nearest CMP mainline freeway-monitoring location to the project site is on the US-101 freeway near Soto Street (to the north of the Project site).

As the construction-period trip generation of the Project would be a temporary condition, and as there would be a lack of new trip generation generated at the school campus once the Project is complete, and further analysis is therefore not necessary.

APPENDIX A
Traffic Counts

City Of Los Angeles
Department Of Transportation
MANUAL TRAFFIC COUNT SUMMARY

STREET:

North/South Soto Street

East/West 4th Street

Day: Thursday **Date:** June 2, 2016 **Weather:** CLEAR

Hours: 7-10AM 3-6PM **Staff:** CUI

School Day: YES **District:** Central I/S CODE 9378

	N/B	S/B	E/B	W/B
DUAL-WHEELED	90	52	48	21
BIKES	24	25	25	35
BUSES	84	110	47	82

	N/B	TIME	S/B	TIME	E/B	TIME	W/B	TIME
AM PK 15 MIN	198	7.45	316	7.15	161	7.30	368	7.30
PM PK 15 MIN	300	3.15	279	3.15	407	5.30	218	5.45
AM PK HOUR	729	7.15	1105	7.15	552	7.15	1372	7.00
PM PK HOUR	1097	5.00	995	3.15	1498	5.00	763	3.00

NORTHBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	101	556	66	723
8-9	98	444	61	603
9-10	123	403	45	571
3-4	166	819	89	1074
4-5	168	731	102	1001
5-6	148	816	133	1097
TOTAL	804	3769	496	5069

SOUTHBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	137	819	117	1073
8-9	96	755	148	999
9-10	83	588	123	794
3-4	118	770	106	994
4-5	92	600	70	762
5-6	87	616	71	774
TOTAL	613	4148	635	5396

TOTAL	**XING S/L**		**XING N/L**	
N-S	Ped	Sch	Ped	Sch
1796	274	0	239	5
1602	172	0	135	0
1365	135	0	107	0
2068	525	24	241	19
1763	109	35	90	31
1871	125	32	55	13
10465	1340	91	867	68

EASTBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	63	369	79	511
8-9	85	297	68	450
9-10	80	254	97	431
3-4	173	783	149	1105
4-5	176	954	176	1306
5-6	193	1126	179	1498
TOTAL	770	3783	748	5301

WESTBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	113	1172	87	1372
8-9	112	1087	86	1285
9-10	105	705	56	866
3-4	109	532	122	763
4-5	127	402	91	620
5-6	115	512	75	702
TOTAL	681	4410	517	5608

TOTAL	**XING W/L**		**XING E/L**	
E-W	Ped	Sch	Ped	Sch
1883	186	9	141	12
1735	128	0	116	0
1297	109	0	48	0
1868	258	0	290	4
1926	99	20	61	25
2200	74	10	58	12
10909	854	39	714	53

(Rev Oct 06)

Counts Unlimited
PO Box 1178
Corona, CA 92878
(951) 268-6268

City of Los Angeles
N/S: Soto Street
E/W: 4th Street
Weather: Clear

File Name : LACSO4TAM
Site Code : 04116347
Start Date : 6/2/2016
Page No : 1

Groups Printed- Passenger Vehicles - Dual Wheeled - Buses

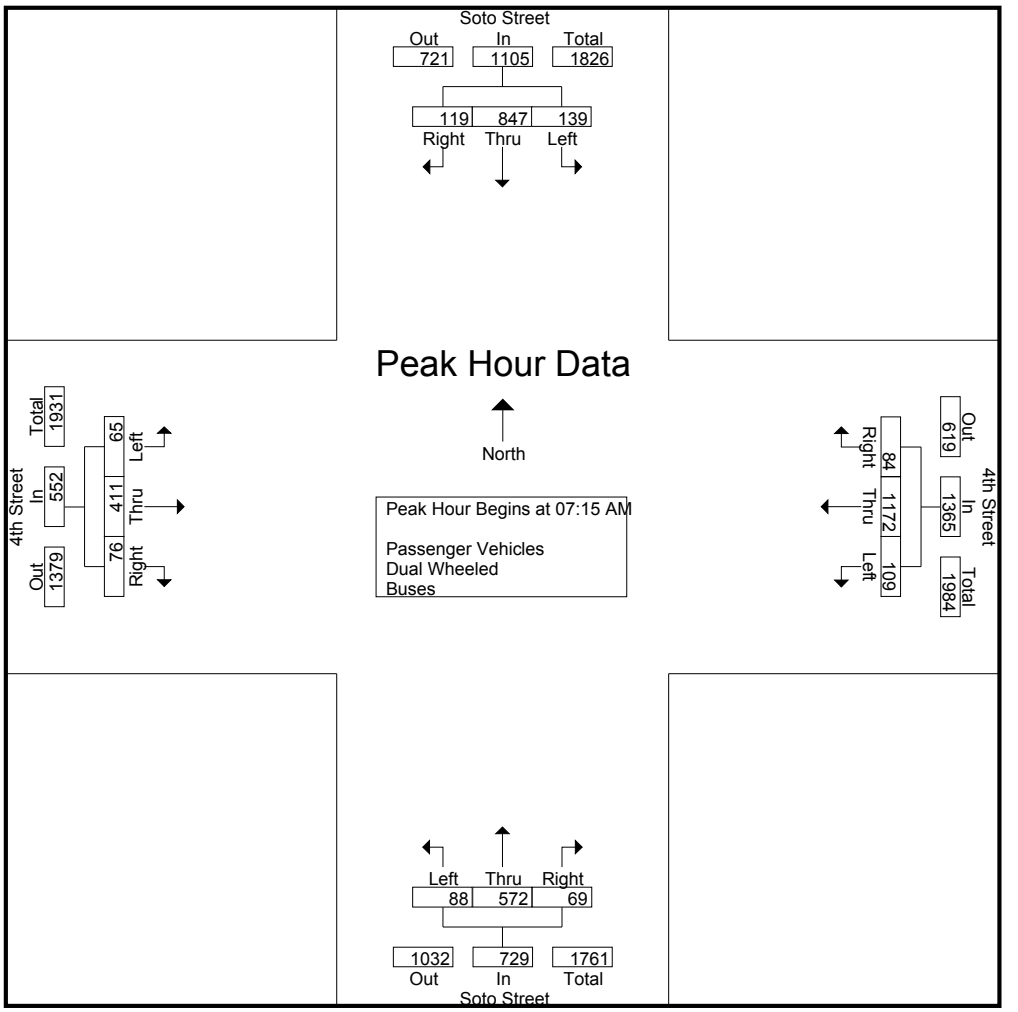
	Soto Street Southbound				4th Street Westbound				Soto Street Northbound				4th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	19	145	24	188	31	293	18	342	31	121	12	164	16	69	18	103	797
07:15 AM	44	240	32	316	23	307	21	351	28	138	16	182	15	86	19	120	969
07:30 AM	41	205	31	277	33	311	24	368	23	139	17	179	9	129	23	161	985
07:45 AM	33	229	30	292	26	261	24	311	19	158	21	198	23	85	19	127	928
Total	137	819	117	1073	113	1172	87	1372	101	556	66	723	63	369	79	511	3679
08:00 AM	21	173	26	220	27	293	15	335	18	137	15	170	18	111	15	144	869
08:15 AM	26	198	37	261	25	246	19	290	22	109	17	148	28	74	16	118	817
08:30 AM	29	178	24	231	28	264	28	320	27	97	17	141	15	58	15	88	780
08:45 AM	20	206	61	287	32	284	24	340	31	101	12	144	24	54	22	100	871
Total	96	755	148	999	112	1087	86	1285	98	444	61	603	85	297	68	450	3337
09:00 AM	16	175	38	229	30	227	14	271	31	111	17	159	13	55	24	92	751
09:15 AM	17	153	28	198	21	192	5	218	25	95	12	132	12	57	22	91	639
09:30 AM	26	124	26	176	27	145	19	191	26	103	9	138	18	67	24	109	614
09:45 AM	24	136	31	191	27	141	18	186	41	94	7	142	37	75	27	139	658
Total	83	588	123	794	105	705	56	866	123	403	45	571	80	254	97	431	2662
Grand Total	316	2162	388	2866	330	2964	229	3523	322	1403	172	1897	228	920	244	1392	9678
Apprch %	11	75.4	13.5		9.4	84.1	6.5		17	74	9.1		16.4	66.1	17.5		
Total %	3.3	22.3	4	29.6	3.4	30.6	2.4	36.4	3.3	14.5	1.8	19.6	2.4	9.5	2.5	14.4	
Passenger Vehicles	301	2102	384	2787	330	2925	213	3468	293	1342	166	1801	224	896	233	1353	9409
% Passenger Vehicles	95.3	97.2	99	97.2	100	98.7	93	98.4	91	95.7	96.5	94.9	98.2	97.4	95.5	97.2	97.2
Dual Wheeled	4	22	3	29	0	15	1	16	27	26	3	56	3	6	8	17	118
% Dual Wheeled	1.3	1	0.8	1	0	0.5	0.4	0.5	8.4	1.9	1.7	3	1.3	0.7	3.3	1.2	1.2
Buses	11	38	1	50	0	24	15	39	2	35	3	40	1	18	3	22	151
% Buses	3.5	1.8	0.3	1.7	0	0.8	6.6	1.1	0.6	2.5	1.7	2.1	0.4	2	1.2	1.6	1.6

	Soto Street Southbound				4th Street Westbound				Soto Street Northbound				4th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 09:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	**44**	**240**	**32**	**316**	23	307	21	351	**28**	138	16	182	15	86	19	120	969
07:30 AM	41	205	31	277	**33**	**311**	**24**	**368**	23	139	17	179	9	**129**	**23**	**161**	**985**
07:45 AM	33	229	30	292	26	261	24	311	19	**158**	**21**	**198**	**23**	85	19	127	928
08:00 AM	21	173	26	220	27	293	15	335	18	137	15	170	18	111	15	144	869
Total Volume	139	847	119	1105	109	1172	84	1365	88	572	69	729	65	411	76	552	3751
% App. Total	12.6	76.7	10.8		8	85.9	6.2		12.1	78.5	9.5		11.8	74.5	13.8		
PHF	.790	.882	.930	.874	.826	.942	.875	.927	.786	.905	.821	.920	.707	.797	.826	.857	.952

Counts Unlimited
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City of Los Angeles
N/S: Soto Street
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Site Code : 04116347
Start Date : 6/2/2016
Page No : 2



Peak Hour Analysis From 07:00 AM to 09:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM				07:00 AM				07:15 AM				07:15 AM			
+0 mins.	**44**	**240**	**32**	**316**	31	293	18	342	**28**	138	16	182	15	86	19	120
+15 mins.	41	205	31	277	23	307	21	351	23	139	17	179	9	**129**	**23**	**161**
+30 mins.	33	229	30	292	**33**	**311**	**24**	**368**	19	**158**	**21**	**198**	**23**	85	19	127
+45 mins.	21	173	26	220	26	261	24	311	18	137	15	170	18	111	15	144
Total Volume	139	847	119	1105	113	1172	87	1372	88	572	69	729	65	411	76	552
% App. Total	12.6	76.7	10.8		8.2	85.4	6.3		12.1	78.5	9.5		11.8	74.5	13.8	
PHF	.790	.882	.930	.874	.856	.942	.906	.932	.786	.905	.821	.920	.707	.797	.826	.857

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N/S: Soto Street
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Groups Printed- Passenger Vehicles

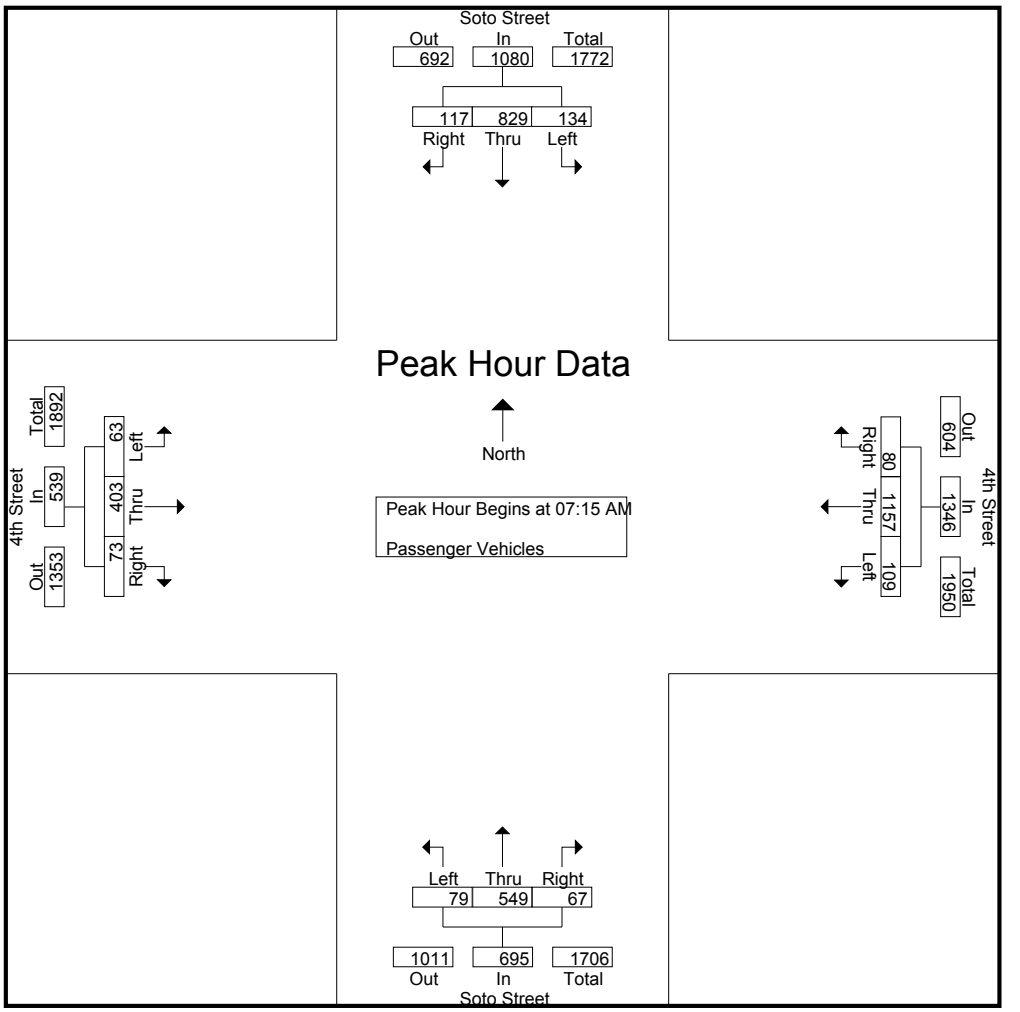
	Soto Street Southbound				4th Street Westbound				Soto Street Northbound				4th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	18	140	24	182	31	288	17	336	26	112	11	149	15	66	17	98	765
07:15 AM	42	235	30	307	23	303	19	345	26	130	16	172	15	85	18	118	942
07:30 AM	40	200	31	271	33	305	24	362	22	135	16	173	8	125	22	155	961
07:45 AM	32	226	30	288	26	259	23	308	19	152	21	192	23	83	18	124	912
Total	132	801	115	1048	113	1155	83	1351	93	529	64	686	61	359	75	495	3580
08:00 AM	20	168	26	214	27	290	14	331	12	132	14	158	17	110	15	142	845
08:15 AM	25	193	37	255	25	244	18	287	20	105	17	142	28	71	15	114	798
08:30 AM	27	176	24	227	28	260	26	314	23	91	16	130	15	57	15	87	758
08:45 AM	20	201	61	282	32	279	21	332	30	99	12	141	24	52	22	98	853
Total	92	738	148	978	112	1073	79	1264	85	427	59	571	84	290	67	441	3254
09:00 AM	14	163	36	213	30	223	13	266	25	106	16	147	13	54	23	90	716
09:15 AM	16	147	28	191	21	189	4	214	25	90	12	127	12	55	17	84	616
09:30 AM	26	122	26	174	27	145	17	189	24	101	8	133	18	65	24	107	603
09:45 AM	21	131	31	183	27	140	17	184	41	89	7	137	36	73	27	136	640
Total	77	563	121	761	105	697	51	853	115	386	43	544	79	247	91	417	2575
Grand Total	301	2102	384	2787	330	2925	213	3468	293	1342	166	1801	224	896	233	1353	9409
Apprch %	10.8	75.4	13.8		9.5	84.3	6.1		16.3	74.5	9.2		16.6	66.2	17.2		
Total %	3.2	22.3	4.1	29.6	3.5	31.1	2.3	36.9	3.1	14.3	1.8	19.1	2.4	9.5	2.5	14.4	

	Soto Street Southbound				4th Street Westbound				Soto Street Northbound				4th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	**42**	**235**	30	**307**	23	303	19	345	**26**	130	16	172	15	85	18	118	942
07:30 AM	40	200	**31**	271	**33**	**305**	**24**	**362**	22	135	16	173	8	**125**	**22**	**155**	**961**
07:45 AM	32	226	30	288	26	259	23	308	19	**152**	**21**	**192**	**23**	83	18	124	912
08:00 AM	20	168	26	214	27	290	14	331	12	132	14	158	17	110	15	142	845
Total Volume	134	829	117	1080	109	1157	80	1346	79	549	67	695	63	403	73	539	3660
% App. Total	12.4	76.8	10.8		8.1	86	5.9		11.4	79	9.6		11.7	74.8	13.5		
PHF	.798	.882	.944	.879	.826	.948	.833	.930	.760	.903	.798	.905	.685	.806	.830	.869	.952

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Weather: Clear

File Name : LACSO4TAM
Site Code : 04116347
Start Date : 6/2/2016
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Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:15 AM				07:15 AM			
+0 mins.	**42**	**235**	30	**307**	23	303	19	345	**26**	130	16	172	15	85	18	118
+15 mins.	40	200	**31**	271	**33**	**305**	**24**	**362**	22	135	16	173	8	**125**	**22**	**155**
+30 mins.	32	226	30	288	26	259	23	308	19	**152**	**21**	**192**	**23**	83	18	124
+45 mins.	20	168	26	214	27	290	14	331	12	132	14	158	17	110	15	142
Total Volume	134	829	117	1080	109	1157	80	1346	79	549	67	695	63	403	73	539
% App. Total	12.4	76.8	10.8		8.1	86	5.9		11.4	79	9.6		11.7	74.8	13.5	
PHF	.798	.882	.944	.879	.826	.948	.833	.930	.760	.903	.798	.905	.685	.806	.830	.869

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File Name : LACSO4TAM
Site Code : 04116347
Start Date : 6/2/2016
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Groups Printed- Dual Wheeled

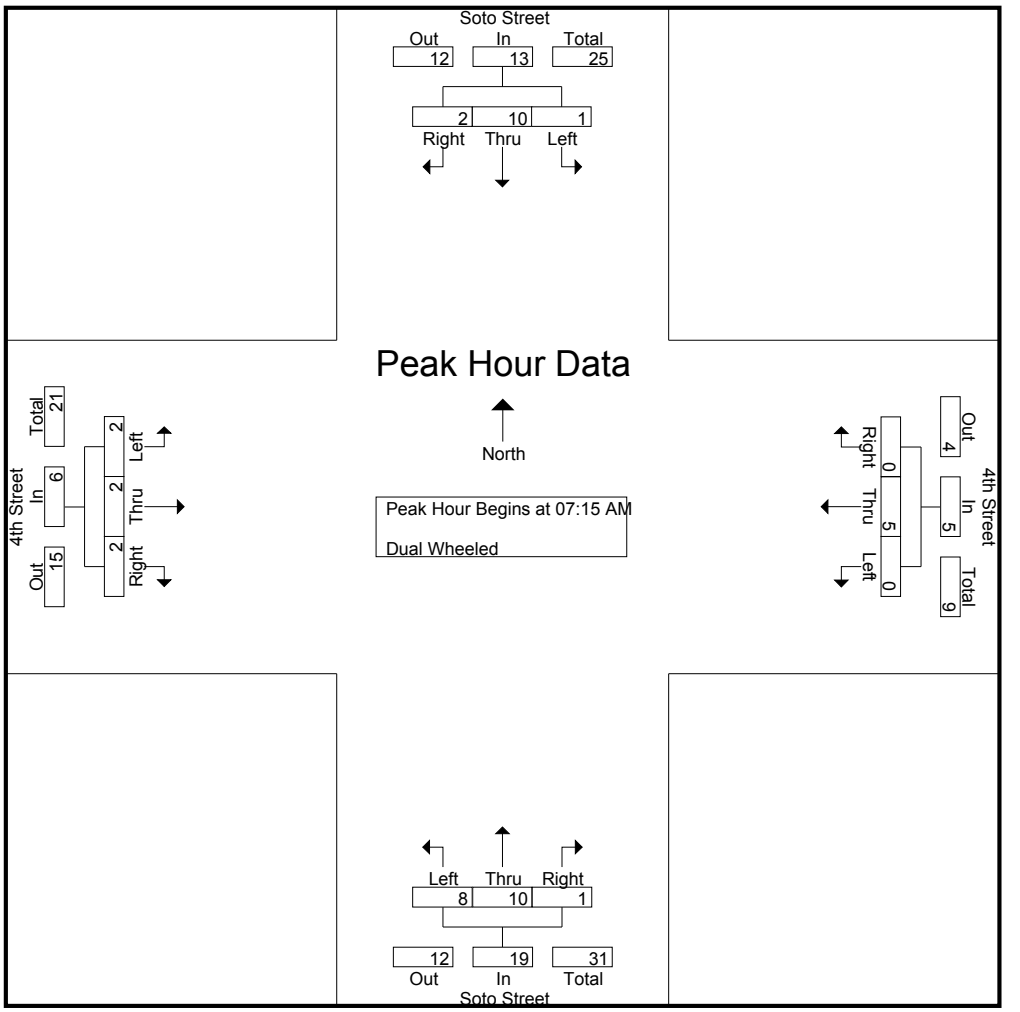
	Soto Street Southbound				4th Street Westbound				Soto Street Northbound				4th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	0	0	0	0	3	0	3	5	3	0	8	1	1	0	2	13
07:15 AM	1	2	2	5	0	1	0	1	1	2	0	3	0	0	0	0	9
07:30 AM	0	3	0	3	0	2	0	2	1	3	1	5	1	2	1	4	14
07:45 AM	0	2	0	2	0	1	0	1	0	3	0	3	0	0	1	1	7
Total	1	7	2	10	0	7	0	7	7	11	1	19	2	3	2	7	43
08:00 AM	0	3	0	3	0	1	0	1	6	2	0	8	1	0	0	1	13
08:15 AM	0	0	0	0	0	1	0	1	1	2	0	3	0	0	1	1	5
08:30 AM	1	1	0	2	0	2	0	2	4	3	1	8	0	1	0	1	13
08:45 AM	0	1	0	1	0	3	1	4	1	0	0	1	0	0	0	0	6
Total	1	5	0	6	0	7	1	8	12	7	1	20	1	1	1	3	37
09:00 AM	1	6	1	8	0	0	0	0	6	2	0	8	0	0	1	1	17
09:15 AM	0	3	0	3	0	1	0	1	0	2	0	2	0	2	4	6	12
09:30 AM	0	0	0	0	0	0	0	0	2	1	1	4	0	0	0	0	4
09:45 AM	1	1	0	2	0	0	0	0	0	3	0	3	0	0	0	0	5
Total	2	10	1	13	0	1	0	1	8	8	1	17	0	2	5	7	38
Grand Total	4	22	3	29	0	15	1	16	27	26	3	56	3	6	8	17	118
Apprch %	13.8	75.9	10.3		0	93.8	6.2		48.2	46.4	5.4		17.6	35.3	47.1		
Total %	3.4	18.6	2.5	24.6	0	12.7	0.8	13.6	22.9	22	2.5	47.5	2.5	5.1	6.8	14.4	

	Soto Street Southbound				4th Street Westbound				Soto Street Northbound				4th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	**1**	2	**2**	**5**	0	1	0	1	1	2	0	3	0	0	0	0	9
07:30 AM	0	**3**	0	3	0	**2**	0	**2**	1	**3**	**1**	5	**1**	**2**	**1**	**4**	**14**
07:45 AM	0	2	0	2	0	1	0	1	0	3	0	3	0	0	1	1	7
08:00 AM	0	3	0	3	0	1	0	1	**6**	2	0	**8**	1	0	0	1	13
Total Volume	1	10	2	13	0	5	0	5	8	10	1	19	2	2	2	6	43
% App. Total	7.7	76.9	15.4		0	100	0		42.1	52.6	5.3		33.3	33.3	33.3		
PHF	.250	.833	.250	.650	.000	.625	.000	.625	.333	.833	.250	.594	.500	.250	.500	.375	.768

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Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:15 AM				07:15 AM			
+0 mins.	**1**	2	**2**	**5**	0	1	0	1	1	2	0	3	0	0	0	0
+15 mins.	0	**3**	0	3	0	**2**	0	**2**	1	**3**	**1**	5	**1**	**2**	**1**	**4**
+30 mins.	0	2	0	2	0	1	0	1	0	3	0	3	0	0	1	1
+45 mins.	0	3	0	3	0	1	0	1	**6**	2	0	**8**	1	0	0	1
Total Volume	1	10	2	13	0	5	0	5	8	10	1	19	2	2	2	6
% App. Total	7.7	76.9	15.4		0	100	0		42.1	52.6	5.3		33.3	33.3	33.3	
PHF	.250	.833	.250	.650	.000	.625	.000	.625	.333	.833	.250	.594	.500	.250	.500	.375

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File Name : LACSO4TAM
Site Code : 04116347
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Groups Printed- Buses

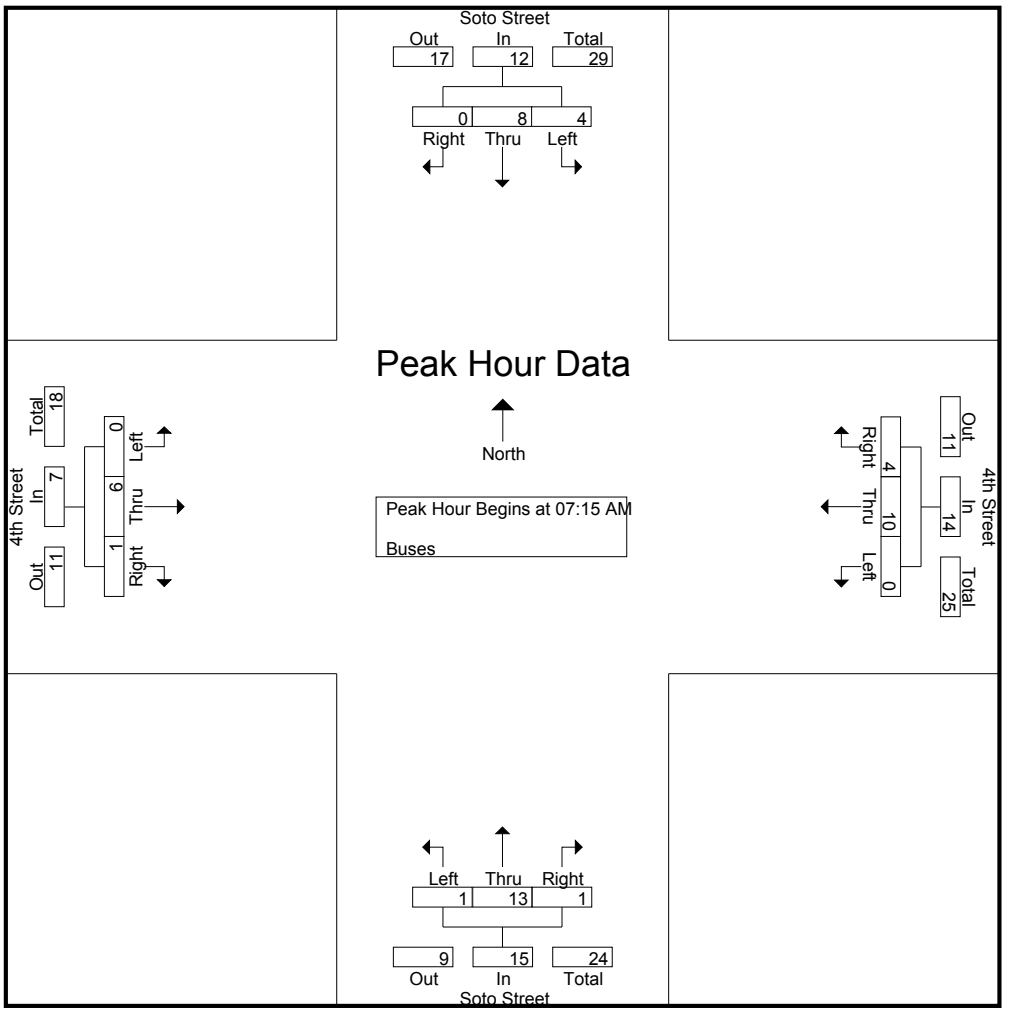
	Soto Street Southbound				4th Street Westbound				Soto Street Northbound				4th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	1	5	0	6	0	2	1	3	0	6	1	7	0	2	1	3	19
07:15 AM	1	3	0	4	0	3	2	5	1	6	0	7	0	1	1	2	18
07:30 AM	1	2	0	3	0	4	0	4	0	1	0	1	0	2	0	2	10
07:45 AM	1	1	0	2	0	1	1	2	0	3	0	3	0	2	0	2	9
Total	4	11	0	15	0	10	4	14	1	16	1	18	0	7	2	9	56
08:00 AM	1	2	0	3	0	2	1	3	0	3	1	4	0	1	0	1	11
08:15 AM	1	5	0	6	0	1	1	2	1	2	0	3	0	3	0	3	14
08:30 AM	1	1	0	2	0	2	2	4	0	3	0	3	0	0	0	0	9
08:45 AM	0	4	0	4	0	2	2	4	0	2	0	2	0	2	0	2	12
Total	3	12	0	15	0	7	6	13	1	10	1	12	0	6	0	6	46
09:00 AM	1	6	1	8	0	4	1	5	0	3	1	4	0	1	0	1	18
09:15 AM	1	3	0	4	0	2	1	3	0	3	0	3	0	0	1	1	11
09:30 AM	0	2	0	2	0	0	2	2	0	1	0	1	0	2	0	2	7
09:45 AM	2	4	0	6	0	1	1	2	0	2	0	2	1	2	0	3	13
Total	4	15	1	20	0	7	5	12	0	9	1	10	1	5	1	7	49
Grand Total	11	38	1	50	0	24	15	39	2	35	3	40	1	18	3	22	151
Apprch %	22	76	2		0	61.5	38.5		5	87.5	7.5		4.5	81.8	13.6		
Total %	7.3	25.2	0.7	33.1	0	15.9	9.9	25.8	1.3	23.2	2	26.5	0.7	11.9	2	14.6	

	Soto Street Southbound				4th Street Westbound				Soto Street Northbound				4th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	**1**	**3**	0	**4**	0	3	**2**	**5**	**1**	**6**	0	**7**	0	1	**1**	**2**	**18**
07:30 AM	1	2	0	3	0	**4**	0	4	0	1	0	1	0	**2**	0	2	10
07:45 AM	1	1	0	2	0	1	1	2	0	3	0	3	0	2	0	2	9
08:00 AM	1	2	0	3	0	2	1	3	0	3	**1**	4	0	1	0	1	11
Total Volume	4	8	0	12	0	10	4	14	1	13	1	15	0	6	1	7	48
% App. Total	33.3	66.7	0		0	71.4	28.6		6.7	86.7	6.7		0	85.7	14.3		
PHF	1.00	.667	.000	.750	.000	.625	.500	.700	.250	.542	.250	.536	.000	.750	.250	.875	.667

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Site Code : 04116347
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Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:15 AM				07:15 AM			
+0 mins.	**1**	**3**	0	**4**	0	3	**2**	**5**	**1**	**6**	0	**7**	0	1	**1**	**2**
+15 mins.	1	2	0	3	0	**4**	0	4	0	1	0	1	0	**2**	0	2
+30 mins.	1	1	0	2	0	1	1	2	0	3	0	3	0	2	0	2
+45 mins.	1	2	0	3	0	2	1	3	0	3	**1**	4	0	1	0	1
Total Volume	4	8	0	12	0	10	4	14	1	13	1	15	0	6	1	7
% App. Total	33.3	66.7	0		0	71.4	28.6		6.7	86.7	6.7		0	85.7	14.3	
PHF	1.000	.667	.000	.750	.000	.625	.500	.700	.250	.542	.250	.536	.000	.750	.250	.875

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File Name : LACSO4TPM
Site Code : 04116347
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Groups Printed- Passenger Vehicles - Dual Wheeled - Buses

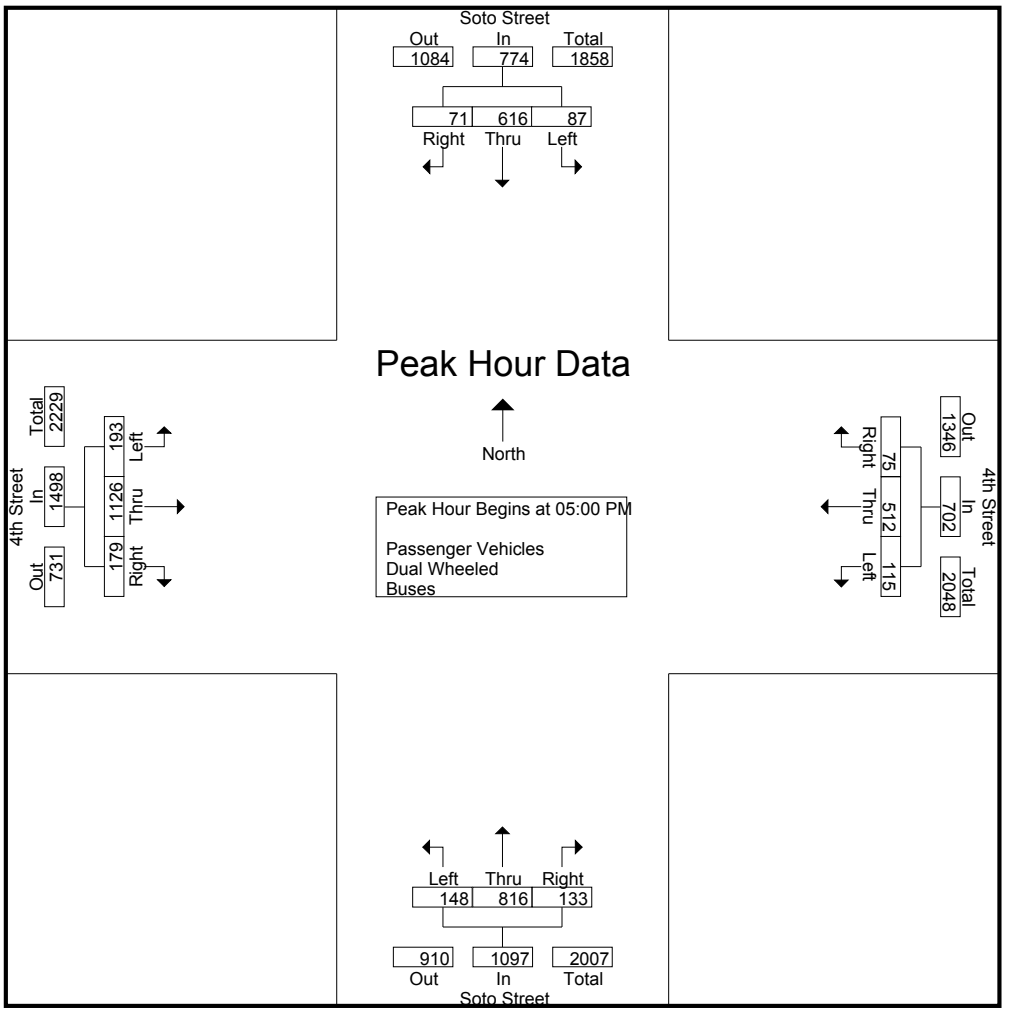
	Soto Street Southbound				4th Street Westbound				Soto Street Northbound				4th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
03:00 PM	20	155	18	193	21	149	39	209	40	193	30	263	51	190	43	284	949
03:15 PM	35	215	29	279	22	148	31	201	48	228	24	300	45	187	34	266	1046
03:30 PM	37	196	28	261	28	117	28	173	41	175	17	233	30	196	50	276	943
03:45 PM	26	204	31	261	38	118	24	180	37	223	18	278	47	210	22	279	998
Total	118	770	106	994	109	532	122	763	166	819	89	1074	173	783	149	1105	3936
04:00 PM	25	150	19	194	46	122	22	190	32	171	36	239	46	196	48	290	913
04:15 PM	23	144	21	188	21	80	22	123	36	193	15	244	39	212	33	284	839
04:30 PM	24	141	15	180	27	93	26	146	43	175	22	240	45	292	37	374	940
04:45 PM	20	165	15	200	33	107	21	161	57	192	29	278	46	254	58	358	997
Total	92	600	70	762	127	402	91	620	168	731	102	1001	176	954	176	1306	3689
05:00 PM	23	129	18	170	32	126	19	177	43	188	33	264	43	273	48	364	975
05:15 PM	24	159	20	203	31	113	12	156	33	234	30	297	36	241	47	324	980
05:30 PM	22	164	17	203	20	111	20	151	34	177	40	251	49	313	45	407	1012
05:45 PM	18	164	16	198	32	162	24	218	38	217	30	285	65	299	39	403	1104
Total	87	616	71	774	115	512	75	702	148	816	133	1097	193	1126	179	1498	4071
Grand Total	297	1986	247	2530	351	1446	288	2085	482	2366	324	3172	542	2863	504	3909	11696
Apprch %	11.7	78.5	9.8		16.8	69.4	13.8		15.2	74.6	10.2		13.9	73.2	12.9		
Total %	2.5	17	2.1	21.6	3	12.4	2.5	17.8	4.1	20.2	2.8	27.1	4.6	24.5	4.3	33.4	
Passenger Vehicles	281	1927	239	2447	346	1416	275	2037	471	2304	319	3094	534	2829	490	3853	11431
% Passenger Vehicles	94.6	97	96.8	96.7	98.6	97.9	95.5	97.7	97.7	97.4	98.5	97.5	98.5	98.8	97.2	98.6	97.7
Dual Wheeled	3	17	3	23	1	4	0	5	8	23	3	34	5	15	11	31	93
% Dual Wheeled	1	0.9	1.2	0.9	0.3	0.3	0	0.2	1.7	1	0.9	1.1	0.9	0.5	2.2	0.8	0.8
Buses	13	42	5	60	4	26	13	43	3	39	2	44	3	19	3	25	172
% Buses	4.4	2.1	2	2.4	1.1	1.8	4.5	2.1	0.6	1.6	0.6	1.4	0.6	0.7	0.6	0.6	1.5

	Soto Street Southbound				4th Street Westbound				Soto Street Northbound				4th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 03:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	23	129	18	170	**32**	126	19	177	**43**	188	33	264	43	273	**48**	364	975
05:15 PM	**24**	159	**20**	**203**	31	113	12	156	33	**234**	30	**297**	36	241	47	324	980
05:30 PM	22	**164**	17	203	20	111	20	151	34	177	**40**	251	49	**313**	45	**407**	1012
05:45 PM	18	164	16	198	32	**162**	**24**	**218**	38	217	30	285	**65**	299	39	403	**1104**
Total Volume	87	616	71	774	115	512	75	702	148	816	133	1097	193	1126	179	1498	4071
% App. Total	11.2	79.6	9.2		16.4	72.9	10.7		13.5	74.4	12.1		12.9	75.2	11.9		
PHF	.906	.939	.888	.953	.898	.790	.781	.805	.860	.872	.831	.923	.742	.899	.932	.920	.922

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Site Code : 04116347
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Peak Hour Analysis From 03:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	03:15 PM				03:00 PM				05:00 PM				05:00 PM			
+0 mins.	35	**215**	29	**279**	21	**149**	**39**	**209**	**43**	188	33	264	43	273	**48**	364
+15 mins.	**37**	196	28	261	22	148	31	201	33	**234**	30	**297**	36	241	47	324
+30 mins.	26	204	**31**	261	28	117	28	173	34	177	**40**	251	49	**313**	45	**407**
+45 mins.	25	150	19	194	**38**	118	24	180	38	217	30	285	**65**	299	39	403
Total Volume	123	765	107	995	109	532	122	763	148	816	133	1097	193	1126	179	1498
% App. Total	12.4	76.9	10.8		14.3	69.7	16		13.5	74.4	12.1		12.9	75.2	11.9	
PHF	.831	.890	.863	.892	.717	.893	.782	.913	.860	.872	.831	.923	.742	.899	.932	.920

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Groups Printed- Passenger Vehicles

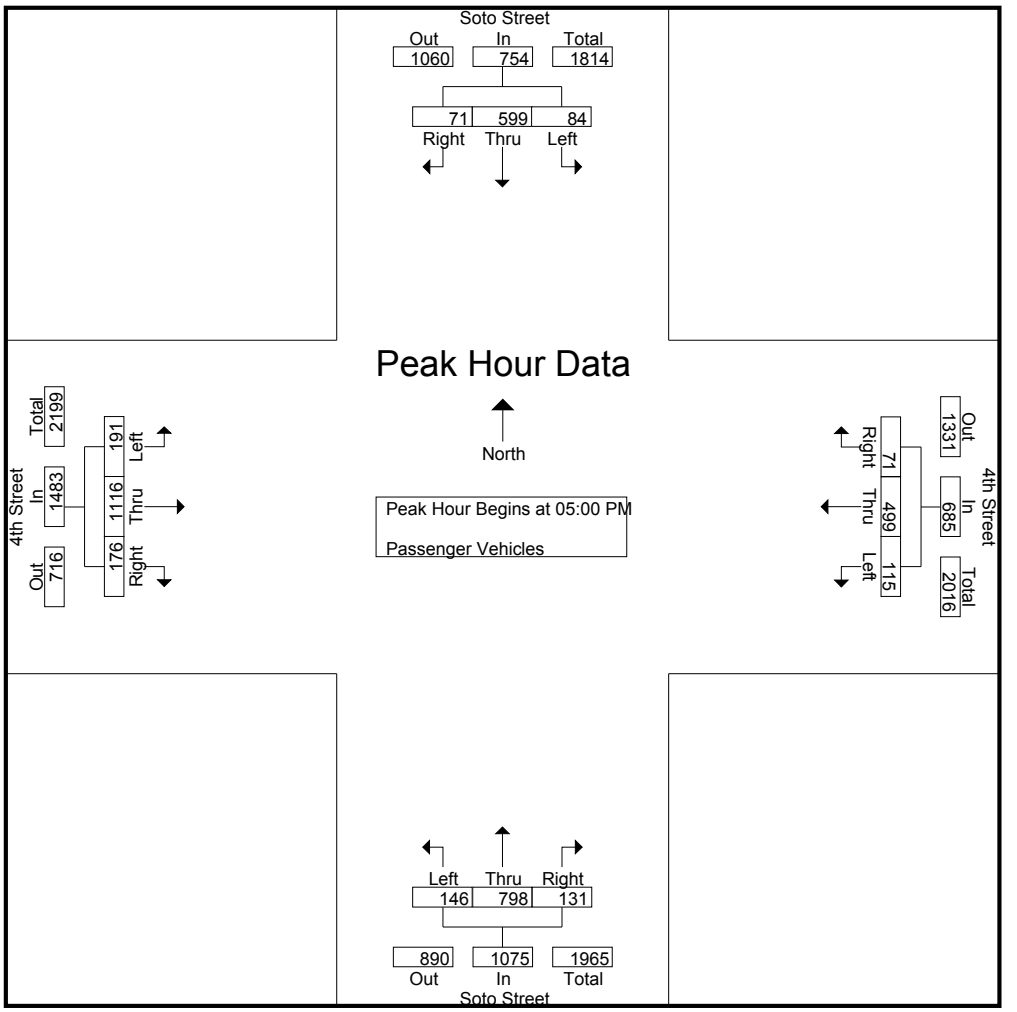
	Soto Street Southbound				4th Street Westbound				Soto Street Northbound				4th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
03:00 PM	19	151	18	188	21	147	38	206	40	185	28	253	50	187	39	276	923
03:15 PM	34	212	28	274	21	146	30	197	46	220	24	290	45	184	34	263	1024
03:30 PM	36	189	25	250	28	116	27	171	38	174	17	229	30	192	49	271	921
03:45 PM	24	197	31	252	38	117	23	178	37	218	17	272	46	209	21	276	978
Total	113	749	102	964	108	526	118	752	161	797	86	1044	171	772	143	1086	3846
04:00 PM	24	146	18	188	44	120	20	184	31	168	36	235	46	192	47	285	892
04:15 PM	21	138	18	177	20	77	21	118	35	188	15	238	38	209	30	277	810
04:30 PM	20	134	15	169	27	90	25	142	42	172	22	236	44	289	37	370	917
04:45 PM	19	161	15	195	32	104	20	156	56	181	29	266	44	251	57	352	969
Total	84	579	66	729	123	391	86	600	164	709	102	975	172	941	171	1284	3588
05:00 PM	21	124	18	163	32	123	19	174	42	184	31	257	43	273	48	364	958
05:15 PM	24	156	20	200	31	108	10	149	33	226	30	289	36	239	45	320	958
05:30 PM	21	161	17	199	20	109	19	148	34	171	40	245	47	308	44	399	991
05:45 PM	18	158	16	192	32	159	23	214	37	217	30	284	65	296	39	400	1090
Total	84	599	71	754	115	499	71	685	146	798	131	1075	191	1116	176	1483	3997
Grand Total	281	1927	239	2447	346	1416	275	2037	471	2304	319	3094	534	2829	490	3853	11431
Apprch %	11.5	78.7	9.8		17	69.5	13.5		15.2	74.5	10.3		13.9	73.4	12.7		
Total %	2.5	16.9	2.1	21.4	3	12.4	2.4	17.8	4.1	20.2	2.8	27.1	4.7	24.7	4.3	33.7	

	Soto Street Southbound				4th Street Westbound				Soto Street Northbound				4th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	21	124	18	163	**32**	123	19	174	**42**	184	31	257	43	273	**48**	364	958
05:15 PM	**24**	156	**20**	**200**	31	108	10	149	33	**226**	30	**289**	36	239	45	320	958
05:30 PM	21	**161**	17	199	20	109	19	148	34	171	**40**	245	47	**308**	44	399	991
05:45 PM	18	158	16	192	32	**159**	**23**	**214**	37	217	30	284	**65**	296	39	**400**	**1090**
Total Volume	84	599	71	754	115	499	71	685	146	798	131	1075	191	1116	176	1483	3997
% App. Total	11.1	79.4	9.4		16.8	72.8	10.4		13.6	74.2	12.2		12.9	75.3	11.9		
PHF	.875	.930	.888	.943	.898	.785	.772	.800	.869	.883	.819	.930	.735	.906	.917	.927	.917

Counts Unlimited
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City of Los Angeles
N/S: Soto Street
E/W: 4th Street
Weather: Clear

File Name : LACSO4TPM
Site Code : 04116347
Start Date : 6/2/2016
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Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	05:00 PM				05:00 PM				05:00 PM				05:00 PM			
+0 mins.	21	124	18	163	**32**	123	19	174	**42**	184	31	257	43	273	**48**	364
+15 mins.	**24**	156	**20**	**200**	31	108	10	149	33	**226**	30	**289**	36	239	45	320
+30 mins.	21	**161**	17	199	20	109	19	148	34	171	**40**	245	47	**308**	44	399
+45 mins.	18	158	16	192	32	**159**	**23**	**214**	37	217	30	284	**65**	296	39	**400**
Total Volume	84	599	71	754	115	499	71	685	146	798	131	1075	191	1116	176	1483
% App. Total	11.1	79.4	9.4		16.8	72.8	10.4		13.6	74.2	12.2		12.9	75.3	11.9	
PHF	.875	.930	.888	.943	.898	.785	.772	.800	.869	.883	.819	.930	.735	.906	.917	.927

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File Name : LACSO4TPM
Site Code : 04116347
Start Date : 6/2/2016
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Groups Printed- Dual Wheeled

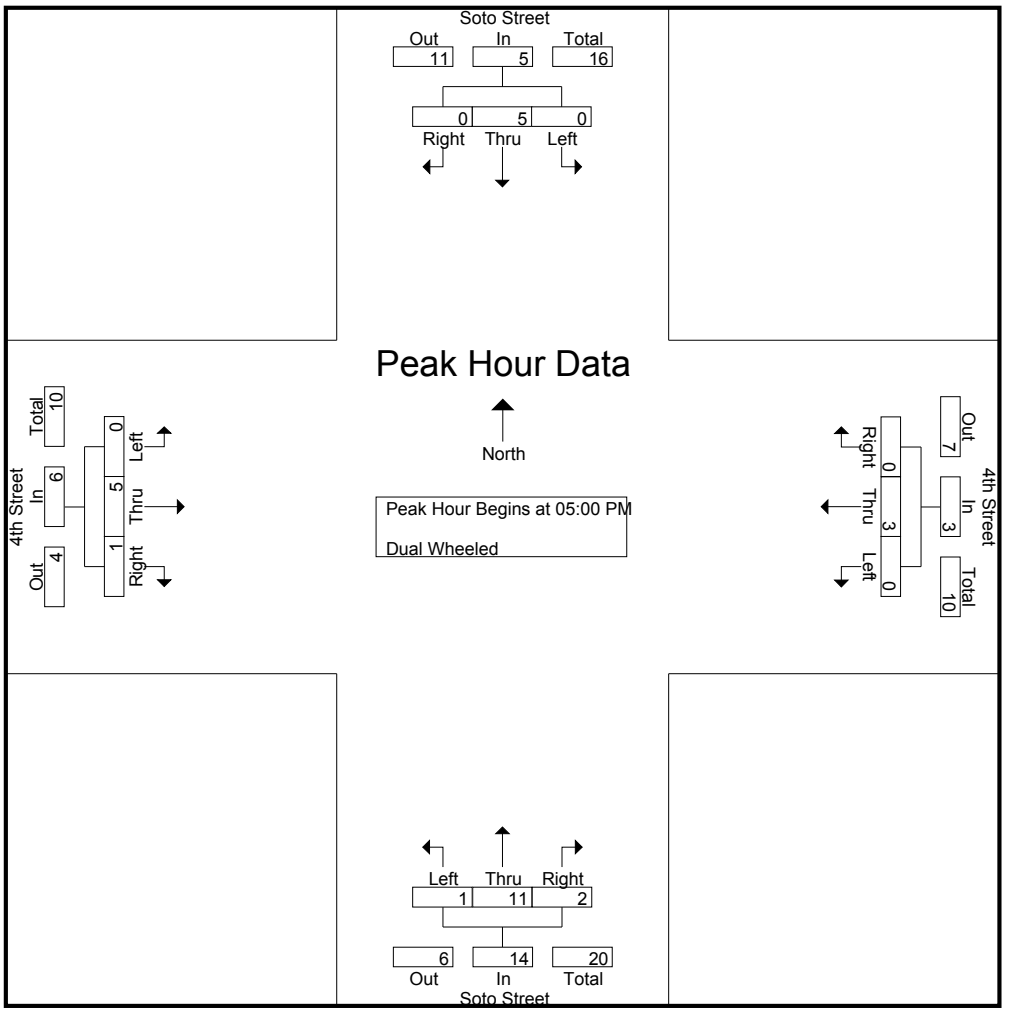
	Soto Street Southbound				4th Street Westbound				Soto Street Northbound				4th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
03:00 PM	0	0	0	0	0	0	0	0	0	0	1	1	0	1	4	5	6
03:15 PM	0	1	0	1	0	0	0	0	2	1	0	3	0	0	0	0	4
03:30 PM	0	2	0	2	0	0	0	0	2	0	0	2	0	1	1	2	6
03:45 PM	0	1	0	1	0	0	0	0	0	0	0	0	1	1	1	3	4
Total	0	4	0	4	0	0	0	0	4	1	1	6	1	3	6	10	20
04:00 PM	0	1	1	2	1	0	0	1	1	1	0	2	0	2	0	2	7
04:15 PM	1	5	2	8	0	0	0	0	1	3	0	4	1	1	3	5	17
04:30 PM	2	1	0	3	0	1	0	1	1	1	0	2	1	2	0	3	9
04:45 PM	0	1	0	1	0	0	0	0	0	6	0	6	2	2	1	5	12
Total	3	8	3	14	1	1	0	2	3	11	0	14	4	7	4	15	45
05:00 PM	0	2	0	2	0	1	0	1	1	2	2	5	0	0	0	0	8
05:15 PM	0	0	0	0	0	1	0	1	0	7	0	7	0	1	0	1	9
05:30 PM	0	2	0	2	0	0	0	0	0	2	0	2	0	2	1	3	7
05:45 PM	0	1	0	1	0	1	0	1	0	0	0	0	0	2	0	2	4
Total	0	5	0	5	0	3	0	3	1	11	2	14	0	5	1	6	28
Grand Total	3	17	3	23	1	4	0	5	8	23	3	34	5	15	11	31	93
Apprch %	13	73.9	13		20	80	0		23.5	67.6	8.8		16.1	48.4	35.5		
Total %	3.2	18.3	3.2	24.7	1.1	4.3	0	5.4	8.6	24.7	3.2	36.6	5.4	16.1	11.8	33.3	

	Soto Street Southbound				4th Street Westbound				Soto Street Northbound				4th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	0	**2**	0	**2**	0	**1**	0	**1**	**1**	2	**2**	5	0	0	0	0	8
05:15 PM	0	0	0	0	0	1	0	1	0	**7**	0	**7**	0	1	0	1	**9**
05:30 PM	0	2	0	2	0	0	0	0	0	2	0	2	0	**2**	**1**	**3**	7
05:45 PM	0	1	0	1	0	1	0	1	0	0	0	0	0	2	0	2	4
Total Volume	0	5	0	5	0	3	0	3	1	11	2	14	0	5	1	6	28
% App. Total	0	100	0		0	100	0		7.1	78.6	14.3		0	83.3	16.7		
PHF	.000	.625	.000	.625	.000	.750	.000	.750	.250	.393	.250	.500	.000	.625	.250	.500	.778

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City of Los Angeles
N/S: Soto Street
E/W: 4th Street
Weather: Clear

File Name : LACSO4TPM
Site Code : 04116347
Start Date : 6/2/2016
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Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	05:00 PM				05:00 PM				05:00 PM				05:00 PM			
+0 mins.	0	**2**	0	**2**	0	**1**	0	**1**	**1**	2	**2**	5	0	0	0	0
+15 mins.	0	0	0	0	0	1	0	1	0	**7**	0	**7**	0	1	0	1
+30 mins.	0	2	0	2	0	0	0	0	0	2	0	2	0	**2**	**1**	**3**
+45 mins.	0	1	0	1	0	1	0	1	0	0	0	0	0	2	0	2
Total Volume	0	5	0	5	0	3	0	3	1	11	2	14	0	5	1	6
% App. Total	0	100	0		0	100	0		7.1	78.6	14.3		0	83.3	16.7	
PHF	.000	.625	.000	.625	.000	.750	.000	.750	.250	.393	.250	.500	.000	.625	.250	.500

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Groups Printed- Buses

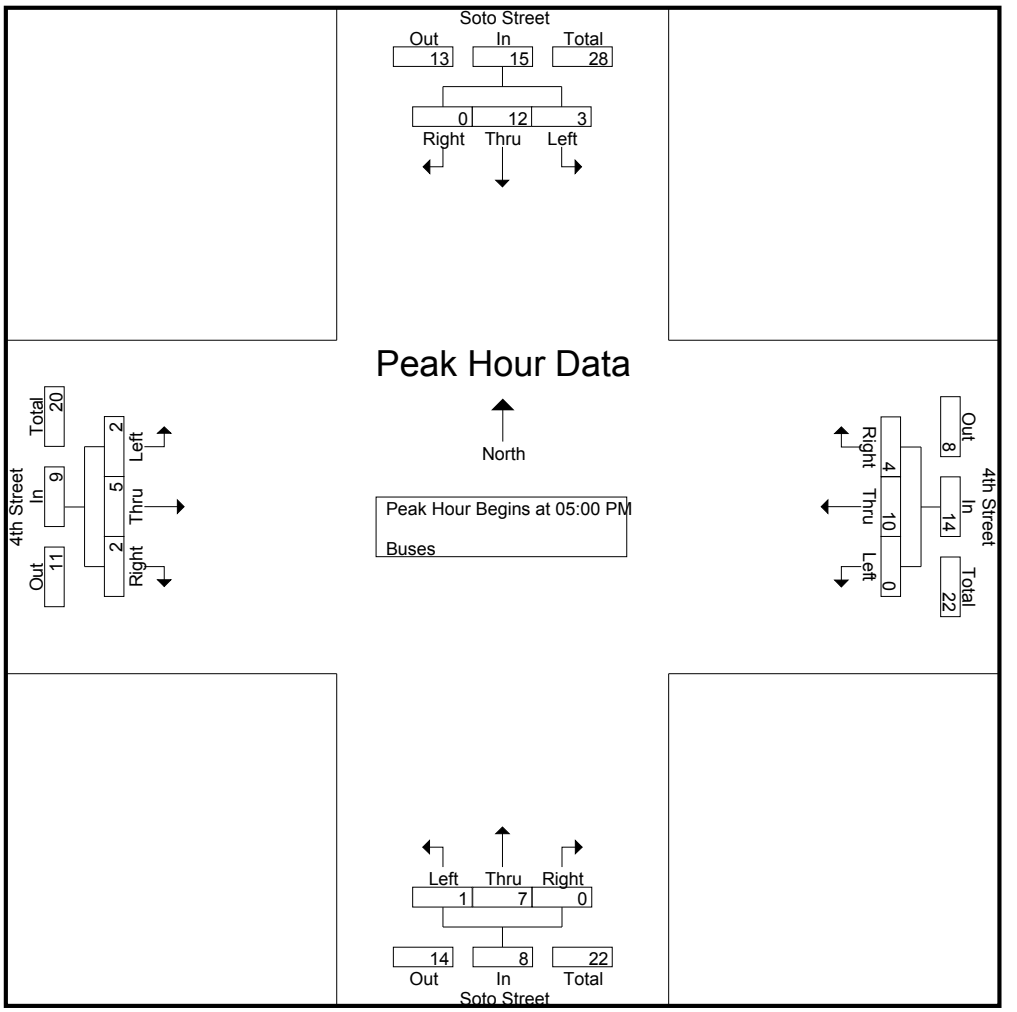
	Soto Street Southbound				4th Street Westbound				Soto Street Northbound				4th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
03:00 PM	1	4	0	5	0	2	1	3	0	8	1	9	1	2	0	3	20
03:15 PM	1	2	1	4	1	2	1	4	0	7	0	7	0	3	0	3	18
03:30 PM	1	5	3	9	0	1	1	2	1	1	0	2	0	3	0	3	16
03:45 PM	2	6	0	8	0	1	1	2	0	5	1	6	0	0	0	0	16
Total	5	17	4	26	1	6	4	11	1	21	2	24	1	8	0	9	70
04:00 PM	1	3	0	4	1	2	2	5	0	2	0	2	0	2	1	3	14
04:15 PM	1	1	1	3	1	3	1	5	0	2	0	2	0	2	0	2	12
04:30 PM	2	6	0	8	0	2	1	3	0	2	0	2	0	1	0	1	14
04:45 PM	1	3	0	4	1	3	1	5	1	5	0	6	0	1	0	1	16
Total	5	13	1	19	3	10	5	18	1	11	0	12	0	6	1	7	56
05:00 PM	2	3	0	5	0	2	0	2	0	2	0	2	0	0	0	0	9
05:15 PM	0	3	0	3	0	4	2	6	0	1	0	1	0	1	2	3	13
05:30 PM	1	1	0	2	0	2	1	3	0	4	0	4	2	3	0	5	14
05:45 PM	0	5	0	5	0	2	1	3	1	0	0	1	0	1	0	1	10
Total	3	12	0	15	0	10	4	14	1	7	0	8	2	5	2	9	46
Grand Total	13	42	5	60	4	26	13	43	3	39	2	44	3	19	3	25	172
Apprch %	21.7	70	8.3		9.3	60.5	30.2		6.8	88.6	4.5		12	76	12		
Total %	7.6	24.4	2.9	34.9	2.3	15.1	7.6	25	1.7	22.7	1.2	25.6	1.7	11	1.7	14.5	

	Soto Street Southbound				4th Street Westbound				Soto Street Northbound				4th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	**2**	3	0	**5**	0	2	0	2	0	2	0	2	0	0	0	0	9
05:15 PM	0	3	0	3	0	**4**	**2**	**6**	0	1	0	1	0	1	**2**	3	13
05:30 PM	1	1	0	2	0	2	1	3	0	**4**	0	**4**	**2**	**3**	0	**5**	**14**
05:45 PM	0	**5**	0	5	0	2	1	3	**1**	0	0	1	0	1	0	1	10
Total Volume	3	12	0	15	0	10	4	14	1	7	0	8	2	5	2	9	46
% App. Total	20	80	0		0	71.4	28.6		12.5	87.5	0		22.2	55.6	22.2		
PHF	.375	.600	.000	.750	.000	.625	.500	.583	.250	.438	.000	.500	.250	.417	.250	.450	.821

Counts Unlimited
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City of Los Angeles
N/S: Soto Street
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Weather: Clear

File Name : LACSO4TPM
Site Code : 04116347
Start Date : 6/2/2016
Page No : 2



Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	05:00 PM				05:00 PM				05:00 PM				05:00 PM			
+0 mins.	**2**	3	0	**5**	0	2	0	2	0	2	0	2	0	0	0	0
+15 mins.	0	3	0	3	0	**4**	**2**	**6**	0	1	0	1	0	1	**2**	3
+30 mins.	1	1	0	2	0	2	1	3	0	**4**	0	**4**	**2**	**3**	0	**5**
+45 mins.	0	**5**	0	5	0	2	1	3	**1**	0	0	1	0	1	0	1
Total Volume	3	12	0	15	0	10	4	14	1	7	0	8	2	5	2	9
% App. Total	20	80	0		0	71.4	28.6		12.5	87.5	0		22.2	55.6	22.2	
PHF	.375	.600	.000	.750	.000	.625	.500	.583	.250	.438	.000	.500	.250	.417	.250	.450

City Of Los Angeles
Department Of Transportation
MANUAL TRAFFIC COUNT SUMMARY

STREET:

North/South Mathews Street

East/West 4th Street

Day: Thursday **Date:** June 2, 2016 **Weather:** CLEAR

Hours: 7-10AM 3-6PM **Staff:** CUI

School Day: YES **District:** Central I/S CODE 0

	N/B	S/B	E/B	W/B
DUAL-WHEELED	0	3	42	53
BIKES	4	10	32	32
BUSES	11	3	72	73

	N/B	TIME	S/B	TIME	E/B	TIME	W/B	TIME
AM PK 15 MIN	53	7.45	44	7.30	174	7.30	384	7.30
PM PK 15 MIN	62	3.00	23	5.45	365	5.30	219	5.45
AM PK HOUR	162	7.00	134	7.15	577	7.15	1421	7.15
PM PK HOUR	205	3.00	76	5.00	1317	5.00	717	5.00

NORTHBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	42	50	70	162
8-9	17	16	41	74
9-10	10	6	20	36
3-4	69	42	94	205
4-5	43	12	57	112
5-6	39	27	63	129
TOTAL	220	153	345	718

SOUTHBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	9	77	45	131
8-9	8	33	32	73
9-10	4	3	17	24
3-4	10	23	35	68
4-5	8	14	28	50
5-6	14	36	26	76
TOTAL	53	186	183	422

TOTAL	**XING S/L**		**XING N/L**	
N-S	Ped	Sch	Ped	Sch
293	21	211	11	62
147	21	32	16	18
60	27	10	27	7
273	53	374	18	39
162	47	62	31	18
205	62	49	44	8
1140	231	738	147	152

EASTBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	18	396	123	537
8-9	17	364	39	420
9-10	14	306	19	339
3-4	18	867	59	944
4-5	43	1001	83	1127
5-6	27	1174	116	1317
TOTAL	137	4108	439	4684

WESTBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	106	1288	23	1417
8-9	38	1215	17	1270
9-10	14	811	8	833
3-4	48	612	22	682
4-5	44	532	24	600
5-6	66	630	21	717
TOTAL	316	5088	115	5519

TOTAL	**XING W/L**		**XING E/L**	
E-W	Ped	Sch	Ped	Sch
1954	4	52	11	198
1690	6	14	17	67
1172	19	2	18	9
1626	7	52	16	140
1727	20	1	16	18
2034	21	11	35	11
10203	77	132	113	443

(Rev Oct 06)

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City of Los Angeles
N/S: Mathews Street
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File Name : LACMA4TAM
Site Code : 04116347
Start Date : 6/2/2016
Page No : 1

Groups Printed- Passenger Vehicles - Dual Wheeled - Buses

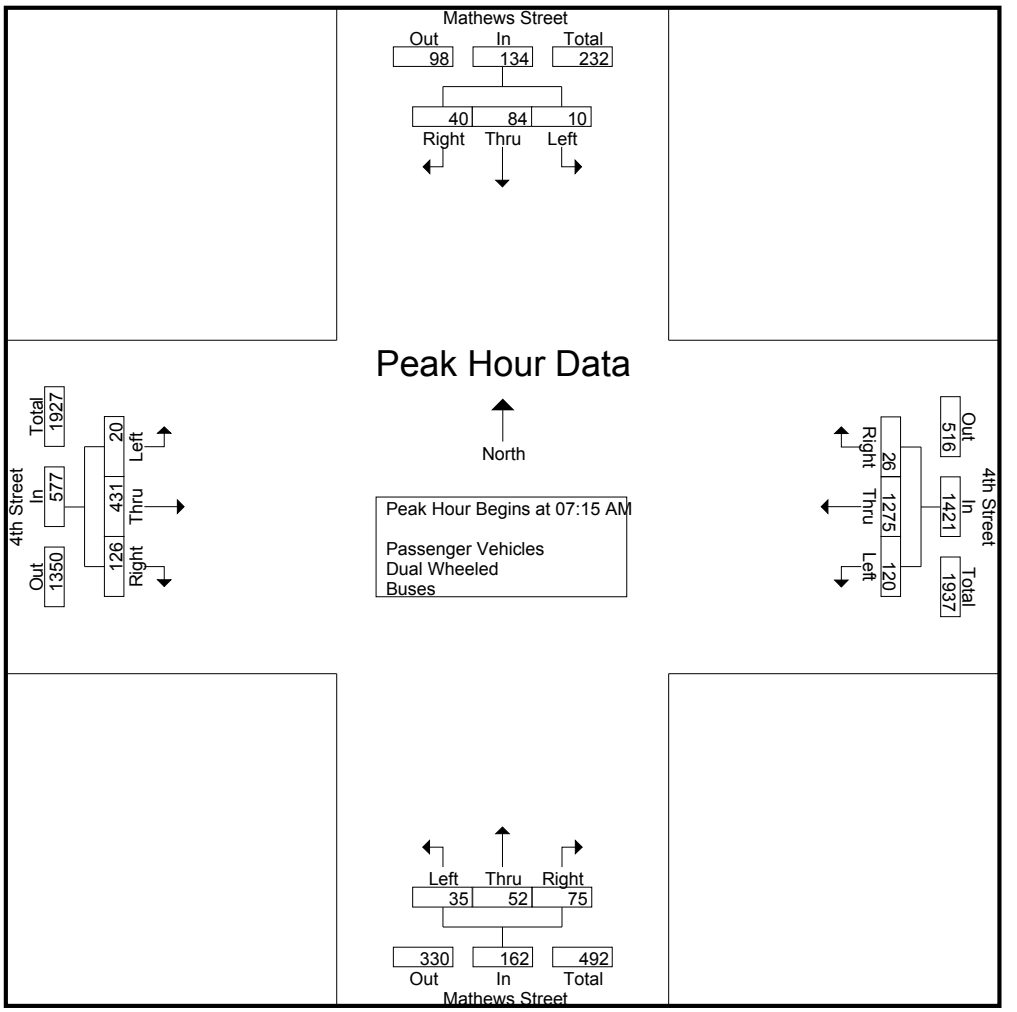
	Mathews Street Southbound				4th Street Westbound				Mathews Street Northbound				4th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	6	13	19	10	332	4	346	9	3	8	20	2	81	13	96	481
07:15 AM	3	25	7	35	31	321	3	355	16	8	18	42	6	90	41	137	569
07:30 AM	3	26	15	44	32	345	7	384	6	22	19	47	3	126	45	174	649
07:45 AM	3	20	10	33	33	290	9	332	11	17	25	53	7	99	24	130	548
Total	9	77	45	131	106	1288	23	1417	42	50	70	162	18	396	123	537	2247
08:00 AM	1	13	8	22	24	319	7	350	2	5	13	20	4	116	16	136	528
08:15 AM	1	11	10	22	7	268	3	278	12	9	14	35	3	98	12	113	448
08:30 AM	2	7	4	13	3	310	1	314	2	0	10	12	6	82	7	95	434
08:45 AM	4	2	10	16	4	318	6	328	1	2	4	7	4	68	4	76	427
Total	8	33	32	73	38	1215	17	1270	17	16	41	74	17	364	39	420	1837
09:00 AM	1	2	4	7	1	260	3	264	1	1	7	9	2	75	4	81	361
09:15 AM	3	0	6	9	5	203	1	209	2	3	5	10	2	68	5	75	303
09:30 AM	0	1	6	7	3	176	2	181	2	1	1	4	3	86	3	92	284
09:45 AM	0	0	1	1	5	172	2	179	5	1	7	13	7	77	7	91	284
Total	4	3	17	24	14	811	8	833	10	6	20	36	14	306	19	339	1232
Grand Total	21	113	94	228	158	3314	48	3520	69	72	131	272	49	1066	181	1296	5316
Apprch %	9.2	49.6	41.2		4.5	94.1	1.4		25.4	26.5	48.2		3.8	82.3	14		
Total %	0.4	2.1	1.8	4.3	3	62.3	0.9	66.2	1.3	1.4	2.5	5.1	0.9	20.1	3.4	24.4	
Passenger Vehicles	21	112	92	225	158	3241	46	3445	68	72	130	270	49	1018	179	1246	5186
% Passenger Vehicles	100	99.1	97.9	98.7	100	97.8	95.8	97.9	98.6	100	99.2	99.3	100	95.5	98.9	96.1	97.6
Dual Wheeled	0	0	2	2	0	33	1	34	0	0	0	0	0	14	1	15	51
% Dual Wheeled	0	0	2.1	0.9	0	1	2.1	1	0	0	0	0	0	1.3	0.6	1.2	1
Buses	0	1	0	1	0	40	1	41	1	0	1	2	0	34	1	35	79
% Buses	0	0.9	0	0.4	0	1.2	2.1	1.2	1.4	0	0.8	0.7	0	3.2	0.6	2.7	1.5

	Mathews Street Southbound				4th Street Westbound				Mathews Street Northbound				4th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 09:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	**3**	25	7	35	31	321	3	355	**16**	8	18	42	6	90	41	137	569
07:30 AM	3	**26**	**15**	**44**	32	**345**	7	**384**	6	**22**	19	47	3	**126**	**45**	**174**	**649**
07:45 AM	3	20	10	33	**33**	290	**9**	332	11	17	**25**	**53**	**7**	99	24	130	548
08:00 AM	1	13	8	22	24	319	7	350	2	5	13	20	4	116	16	136	528
Total Volume	10	84	40	134	120	1275	26	1421	35	52	75	162	20	431	126	577	2294
% App. Total	7.5	62.7	29.9		8.4	89.7	1.8		21.6	32.1	46.3		3.5	74.7	21.8		
PHF	.833	.808	.667	.761	.909	.924	.722	.925	.547	.591	.750	.764	.714	.855	.700	.829	.884

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Peak Hour Analysis From 07:00 AM to 09:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:00 AM				07:15 AM			
+0 mins.	**3**	25	7	35	31	321	3	355	9	3	8	20	6	90	41	137
+15 mins.	3	**26**	**15**	**44**	32	**345**	7	**384**	**16**	8	18	42	3	**126**	**45**	**174**
+30 mins.	3	20	10	33	**33**	290	**9**	332	6	**22**	19	47	**7**	99	24	130
+45 mins.	1	13	8	22	24	319	7	350	11	17	**25**	**53**	4	116	16	136
Total Volume	10	84	40	134	120	1275	26	1421	42	50	70	162	20	431	126	577
% App. Total	7.5	62.7	29.9		8.4	89.7	1.8		25.9	30.9	43.2		3.5	74.7	21.8	
PHF	.833	.808	.667	.761	.909	.924	.722	.925	.656	.568	.700	.764	.714	.855	.700	.829

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City of Los Angeles
N/S: Mathews Street
E/W: 4th Street
Weather: Clear

File Name : LACMA4TAM
Site Code : 04116347
Start Date : 6/2/2016
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Groups Printed- Passenger Vehicles

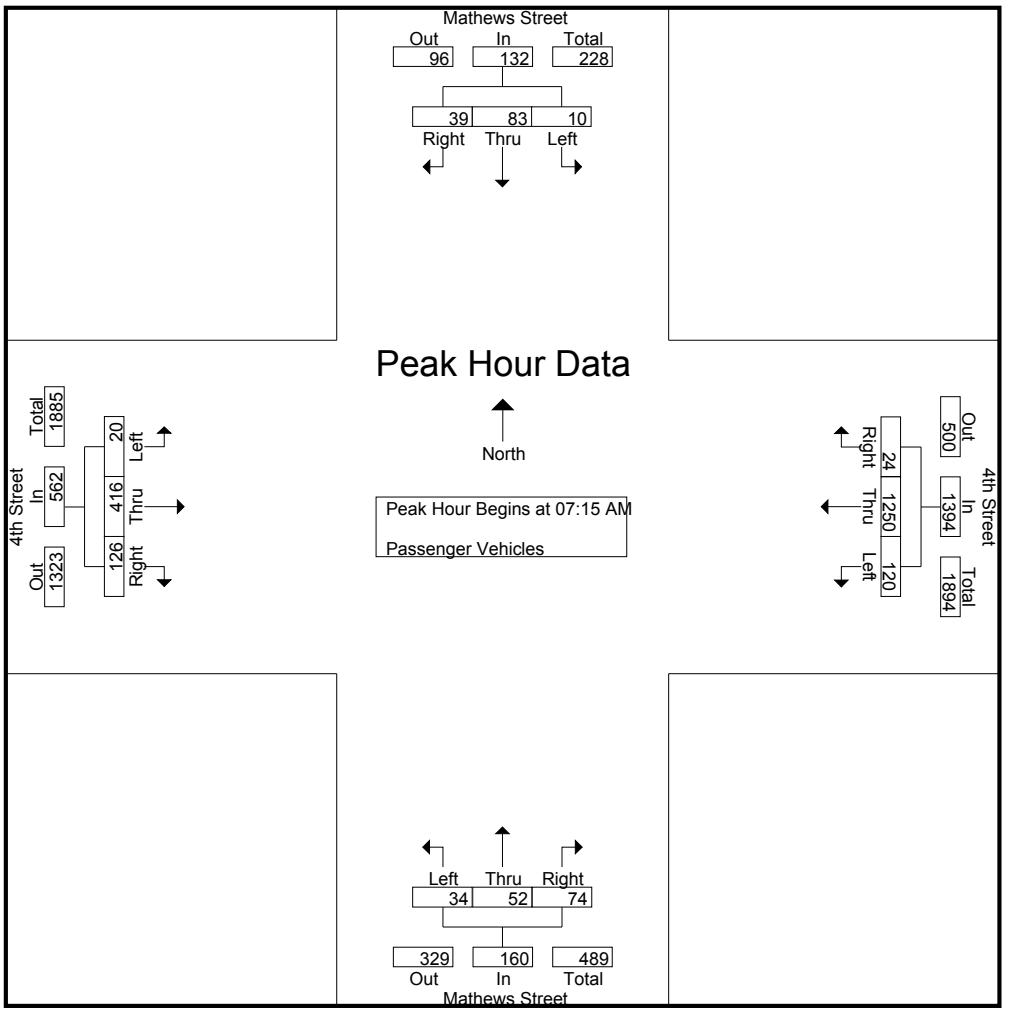
	Mathews Street Southbound				4th Street Westbound				Mathews Street Northbound				4th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	6	13	19	10	326	4	340	9	3	8	20	2	77	13	92	471
07:15 AM	3	25	7	35	31	313	3	347	15	8	17	40	6	87	41	134	556
07:30 AM	3	26	15	44	32	337	6	375	6	22	19	47	3	121	45	169	635
07:45 AM	3	20	10	33	33	285	8	326	11	17	25	53	7	96	24	127	539
Total	9	77	45	131	106	1261	21	1388	41	50	69	160	18	381	123	522	2201
08:00 AM	1	12	7	20	24	315	7	346	2	5	13	20	4	112	16	132	518
08:15 AM	1	11	10	22	7	265	3	275	12	9	14	35	3	93	11	107	439
08:30 AM	2	7	4	13	3	298	1	302	2	0	10	12	6	79	7	92	419
08:45 AM	4	2	10	16	4	309	6	319	1	2	4	7	4	63	4	71	413
Total	8	32	31	71	38	1187	17	1242	17	16	41	74	17	347	38	402	1789
09:00 AM	1	2	3	6	1	253	3	257	1	1	7	9	2	70	4	76	348
09:15 AM	3	0	6	9	5	198	1	204	2	3	5	10	2	65	4	71	294
09:30 AM	0	1	6	7	3	173	2	178	2	1	1	4	3	82	3	88	277
09:45 AM	0	0	1	1	5	169	2	176	5	1	7	13	7	73	7	87	277
Total	4	3	16	23	14	793	8	815	10	6	20	36	14	290	18	322	1196
Grand Total	21	112	92	225	158	3241	46	3445	68	72	130	270	49	1018	179	1246	5186
Apprch %	9.3	49.8	40.9		4.6	94.1	1.3		25.2	26.7	48.1		3.9	81.7	14.4		
Total %	0.4	2.2	1.8	4.3	3	62.5	0.9	66.4	1.3	1.4	2.5	5.2	0.9	19.6	3.5	24	

	Mathews Street Southbound				4th Street Westbound				Mathews Street Northbound				4th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	**3**	25	7	35	31	313	3	347	**15**	8	17	40	6	87	41	134	556
07:30 AM	3	**26**	**15**	**44**	32	**337**	6	**375**	6	**22**	19	47	3	**121**	**45**	**169**	**635**
07:45 AM	3	20	10	33	**33**	285	**8**	326	11	17	**25**	**53**	**7**	96	24	127	539
08:00 AM	1	12	7	20	24	315	7	346	2	5	13	20	4	112	16	132	518
Total Volume	10	83	39	132	120	1250	24	1394	34	52	74	160	20	416	126	562	2248
% App. Total	7.6	62.9	29.5		8.6	89.7	1.7		21.2	32.5	46.2		3.6	74	22.4		
PHF	.833	.798	.650	.750	.909	.927	.750	.929	.567	.591	.740	.755	.714	.860	.700	.831	.885

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Page No : 2



Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:15 AM				07:15 AM			
+0 mins.	**3**	25	7	35	31	313	3	347	**15**	8	17	40	6	87	41	134
+15 mins.	3	**26**	**15**	**44**	32	**337**	6	**375**	6	**22**	19	47	3	**121**	**45**	**169**
+30 mins.	3	20	10	33	**33**	285	**8**	326	11	17	**25**	**53**	**7**	96	24	127
+45 mins.	1	12	7	20	24	315	7	346	2	5	13	20	4	112	16	132
Total Volume	10	83	39	132	120	1250	24	1394	34	52	74	160	20	416	126	562
% App. Total	7.6	62.9	29.5		8.6	89.7	1.7		21.2	32.5	46.2		3.6	74	22.4	
PHF	.833	.798	.650	.750	.909	.927	.750	.929	.567	.591	.740	.755	.714	.860	.700	.831

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Site Code : 04116347
Start Date : 6/2/2016
Page No : 1

Groups Printed- Dual Wheeled

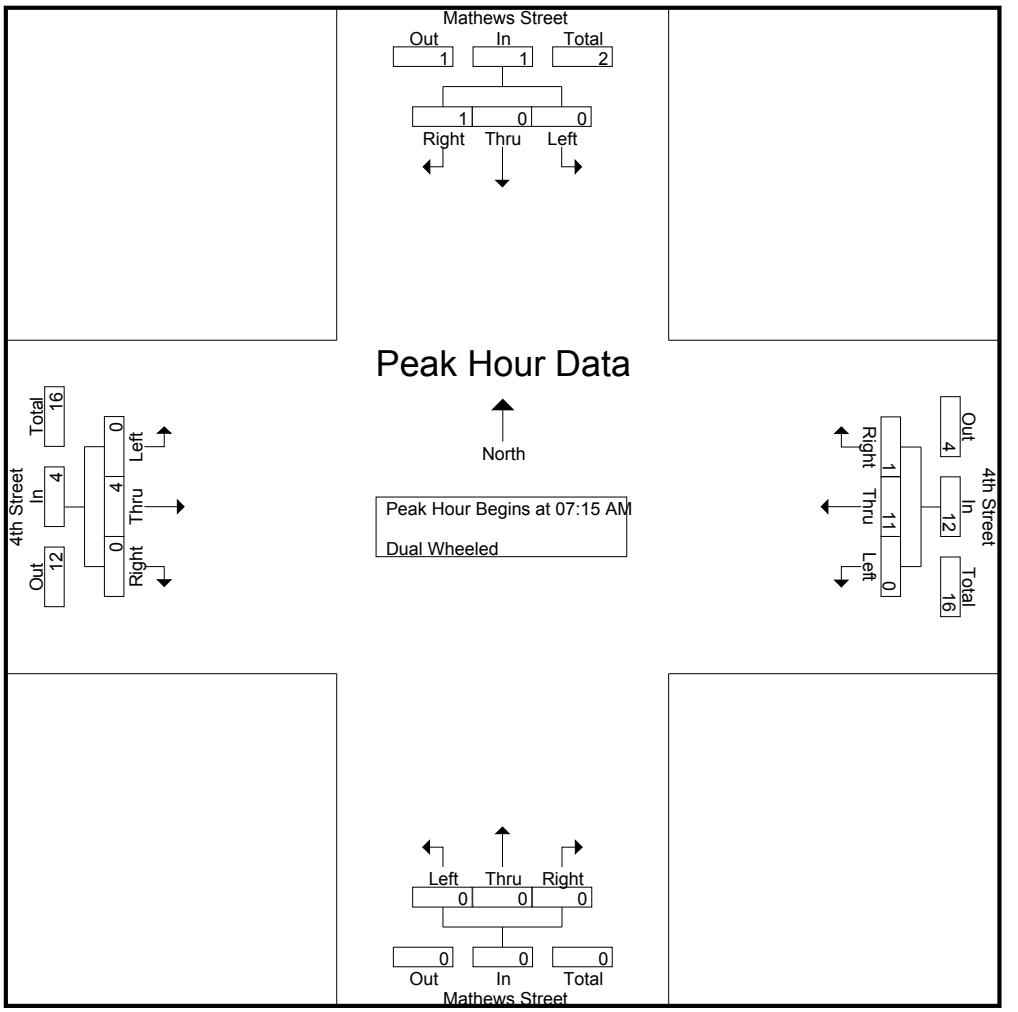
	Mathews Street Southbound				4th Street Westbound				Mathews Street Northbound				4th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	0	0	0	0	4	0	4	0	0	0	0	0	0	0	0	4
07:15 AM	0	0	0	0	0	3	0	3	0	0	0	0	0	1	0	1	4
07:30 AM	0	0	0	0	0	4	0	4	0	0	0	0	0	2	0	2	6
07:45 AM	0	0	0	0	0	2	1	3	0	0	0	0	0	0	0	0	3
Total	0	0	0	0	0	13	1	14	0	0	0	0	0	3	0	3	17
08:00 AM	0	0	1	1	0	2	0	2	0	0	0	0	0	1	0	1	4
08:15 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	1	1	2	3
08:30 AM	0	0	0	0	0	8	0	8	0	0	0	0	0	2	0	2	10
08:45 AM	0	0	0	0	0	4	0	4	0	0	0	0	0	0	0	0	4
Total	0	0	1	1	0	15	0	15	0	0	0	0	0	4	1	5	21
09:00 AM	0	0	1	1	0	1	0	1	0	0	0	0	0	2	0	2	4
09:15 AM	0	0	0	0	0	2	0	2	0	0	0	0	0	2	0	2	4
09:30 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	2	0	2	3
09:45 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	2
Total	0	0	1	1	0	5	0	5	0	0	0	0	0	7	0	7	13
Grand Total	0	0	2	2	0	33	1	34	0	0	0	0	0	14	1	15	51
Apprch %	0	0	100		0	97.1	2.9		0	0	0		0	93.3	6.7		
Total %	0	0	3.9	3.9	0	64.7	2	66.7	0	0	0	0	0	27.5	2	29.4	

	Mathews Street Southbound				4th Street Westbound				Mathews Street Northbound				4th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	0	0	0	0	0	3	0	3	0	0	0	0	0	1	0	1	4
07:30 AM	0	0	0	0	0	**4**	0	**4**	0	0	0	0	0	**2**	0	**2**	**6**
07:45 AM	0	0	0	0	0	2	**1**	3	0	0	0	0	0	0	0	0	3
08:00 AM	0	0	**1**	**1**	0	2	0	2	0	0	0	0	0	1	0	1	4
Total Volume	0	0	1	1	0	11	1	12	0	0	0	0	0	4	0	4	17
% App. Total	0	0	100		0	91.7	8.3		0	0	0		0	100	0		
PHF	.000	.000	.250	.250	.000	.688	.250	.750	.000	.000	.000	.000	.000	.500	.000	.500	.708

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Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:15 AM				07:15 AM			
+0 mins.	0	0	0	0	0	3	0	3	0	0	0	0	0	1	0	1
+15 mins.	0	0	0	0	0	**4**	0	**4**	0	0	0	0	0	**2**	0	**2**
+30 mins.	0	0	0	0	0	2	**1**	3	0	0	0	0	0	0	0	0
+45 mins.	0	0	**1**	**1**	0	2	0	2	0	0	0	0	0	1	0	1
Total Volume	0	0	1	1	0	11	1	12	0	0	0	0	0	4	0	4
% App. Total	0	0	100		0	91.7	8.3		0	0	0		0	100	0	
PHF	.000	.000	.250	.250	.000	.688	.250	.750	.000	.000	.000	.000	.000	.500	.000	.500

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Weather: Clear

File Name : LACMA4TAM
Site Code : 04116347
Start Date : 6/2/2016
Page No : 1

Groups Printed- Buses

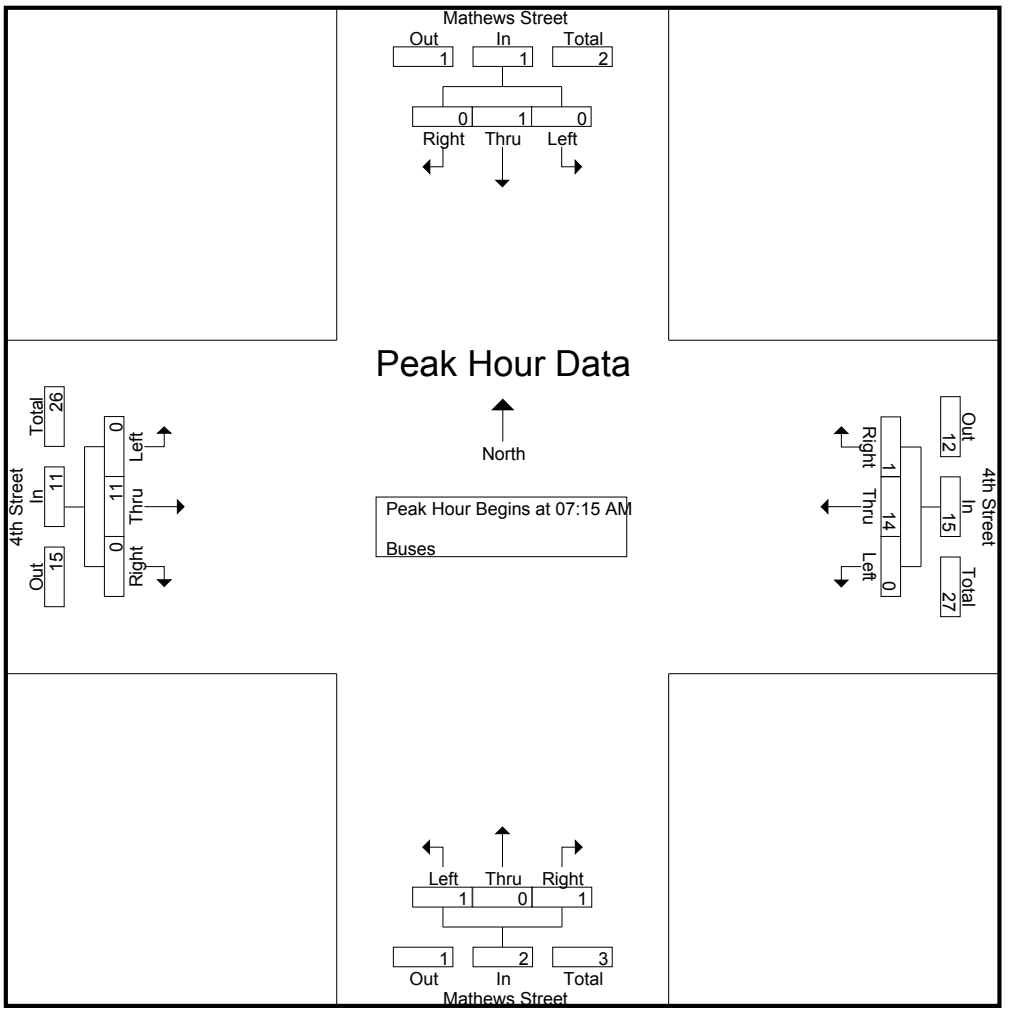
	Mathews Street Southbound				4th Street Westbound				Mathews Street Northbound				4th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	0	0	0	0	2	0	2	0	0	0	0	0	4	0	4	6
07:15 AM	0	0	0	0	0	5	0	5	1	0	1	2	0	2	0	2	9
07:30 AM	0	0	0	0	0	4	1	5	0	0	0	0	0	3	0	3	8
07:45 AM	0	0	0	0	0	3	0	3	0	0	0	0	0	3	0	3	6
Total	0	0	0	0	0	14	1	15	1	0	1	2	0	12	0	12	29
08:00 AM	0	1	0	1	0	2	0	2	0	0	0	0	0	3	0	3	6
08:15 AM	0	0	0	0	0	2	0	2	0	0	0	0	0	4	0	4	6
08:30 AM	0	0	0	0	0	4	0	4	0	0	0	0	0	1	0	1	5
08:45 AM	0	0	0	0	0	5	0	5	0	0	0	0	0	5	0	5	10
Total	0	1	0	1	0	13	0	13	0	0	0	0	0	13	0	13	27
09:00 AM	0	0	0	0	0	6	0	6	0	0	0	0	0	3	0	3	9
09:15 AM	0	0	0	0	0	3	0	3	0	0	0	0	0	1	1	2	5
09:30 AM	0	0	0	0	0	2	0	2	0	0	0	0	0	2	0	2	4
09:45 AM	0	0	0	0	0	2	0	2	0	0	0	0	0	3	0	3	5
Total	0	0	0	0	0	13	0	13	0	0	0	0	0	9	1	10	23
Grand Total	0	1	0	1	0	40	1	41	1	0	1	2	0	34	1	35	79
Apprch %	0	100	0		0	97.6	2.4		50	0	50		0	97.1	2.9		
Total %	0	1.3	0	1.3	0	50.6	1.3	51.9	1.3	0	1.3	2.5	0	43	1.3	44.3	

	Mathews Street Southbound				4th Street Westbound				Mathews Street Northbound				4th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	0	0	0	0	0	**5**	0	**5**	**1**	0	**1**	**2**	0	2	0	2	**9**
07:30 AM	0	0	0	0	0	4	**1**	5	0	0	0	0	0	**3**	0	**3**	8
07:45 AM	0	0	0	0	0	3	0	3	0	0	0	0	0	3	0	3	6
08:00 AM	0	**1**	0	**1**	0	2	0	2	0	0	0	0	0	3	0	3	6
Total Volume	0	1	0	1	0	14	1	15	1	0	1	2	0	11	0	11	29
% App. Total	0	100	0		0	93.3	6.7		50	0	50		0	100	0		
PHF	.000	.250	.000	.250	.000	.700	.250	.750	.250	.000	.250	.250	.000	.917	.000	.917	.806

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Start Date : 6/2/2016
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Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:15 AM				07:15 AM			
+0 mins.	0	0	0	0	0	**5**	0	**5**	**1**	0	**1**	**2**	0	2	0	2
+15 mins.	0	0	0	0	0	4	**1**	5	0	0	0	0	0	**3**	0	**3**
+30 mins.	0	0	0	0	0	3	0	3	0	0	0	0	0	3	0	3
+45 mins.	0	**1**	0	**1**	0	2	0	2	0	0	0	0	0	3	0	3
Total Volume	0	1	0	1	0	14	1	15	1	0	1	2	0	11	0	11
% App. Total	0	100	0		0	93.3	6.7		50	0	50		0	100	0	
PHF	.000	.250	.000	.250	.000	.700	.250	.750	.250	.000	.250	.250	.000	.917	.000	.917

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File Name : LACMA4TPM
Site Code : 04116347
Start Date : 6/2/2016
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Groups Printed- Passenger Vehicles - Dual Wheeled - Buses

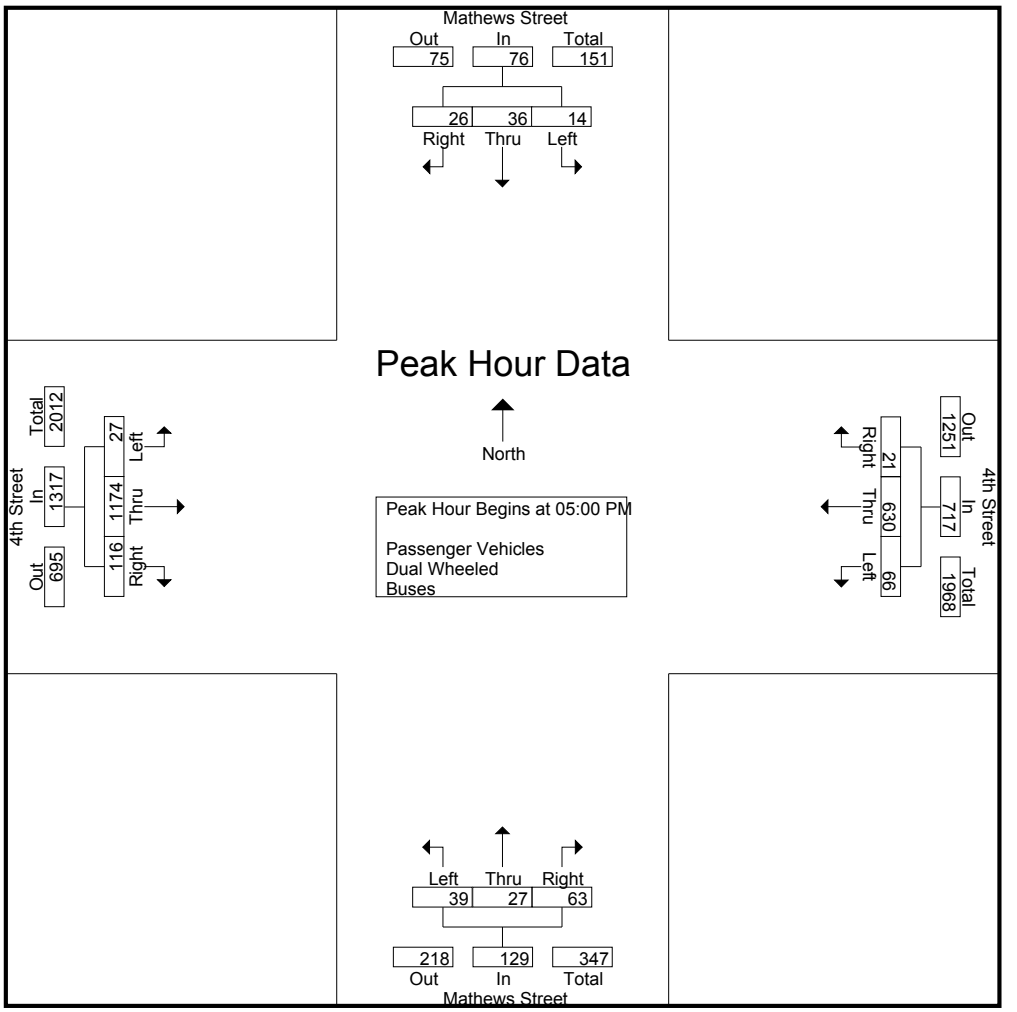
	Mathews Street Southbound				4th Street Westbound				Mathews Street Northbound				4th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
03:00 PM	0	10	12	22	8	164	8	180	25	12	25	62	6	208	14	228	492
03:15 PM	3	7	9	19	7	161	5	173	18	16	27	61	6	215	12	233	486
03:30 PM	4	4	4	12	14	138	6	158	14	10	17	41	2	224	14	240	451
03:45 PM	3	2	10	15	19	149	3	171	12	4	25	41	4	220	19	243	470
Total	10	23	35	68	48	612	22	682	69	42	94	205	18	867	59	944	1899
04:00 PM	3	3	8	14	9	155	5	169	12	4	18	34	9	224	16	249	466
04:15 PM	2	4	8	14	10	110	5	125	12	3	14	29	9	223	19	251	419
04:30 PM	1	0	3	4	13	137	6	156	9	1	15	25	17	289	24	330	515
04:45 PM	2	7	9	18	12	130	8	150	10	4	10	24	8	265	24	297	489
Total	8	14	28	50	44	532	24	600	43	12	57	112	43	1001	83	1127	1889
05:00 PM	4	9	6	19	15	150	5	170	15	6	11	32	5	297	29	331	552
05:15 PM	4	7	4	15	21	139	7	167	10	8	23	41	6	258	23	287	510
05:30 PM	4	11	4	19	15	143	3	161	4	6	14	24	8	319	38	365	569
05:45 PM	2	9	12	23	15	198	6	219	10	7	15	32	8	300	26	334	608
Total	14	36	26	76	66	630	21	717	39	27	63	129	27	1174	116	1317	2239
Grand Total	32	73	89	194	158	1774	67	1999	151	81	214	446	88	3042	258	3388	6027
Apprch %	16.5	37.6	45.9		7.9	88.7	3.4		33.9	18.2	48		2.6	89.8	7.6		
Total %	0.5	1.2	1.5	3.2	2.6	29.4	1.1	33.2	2.5	1.3	3.6	7.4	1.5	50.5	4.3	56.2	
Passenger Vehicles	32	72	87	191	154	1728	66	1948	143	81	213	437	85	2981	258	3324	5900
% Passenger Vehicles	100	98.6	97.8	98.5	97.5	97.4	98.5	97.4	94.7	100	99.5	98	96.6	98	100	98.1	97.9
Dual Wheeled	0	0	1	1	2	17	0	19	0	0	0	0	3	24	0	27	47
% Dual Wheeled	0	0	1.1	0.5	1.3	1	0	1	0	0	0	0	3.4	0.8	0	0.8	0.8
Buses	0	1	1	2	2	29	1	32	8	0	1	9	0	37	0	37	80
% Buses	0	1.4	1.1	1	1.3	1.6	1.5	1.6	5.3	0	0.5	2	0	1.2	0	1.1	1.3

	Mathews Street Southbound				4th Street Westbound				Mathews Street Northbound				4th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 03:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	**4**	9	6	19	15	150	5	170	**15**	6	11	32	5	297	29	331	552
05:15 PM	4	7	4	15	**21**	139	**7**	167	10	**8**	**23**	**41**	6	258	23	287	510
05:30 PM	4	**11**	4	19	15	143	3	161	4	6	14	24	**8**	**319**	**38**	**365**	569
05:45 PM	2	9	**12**	**23**	15	**198**	6	**219**	10	7	15	32	8	300	26	334	**608**
Total Volume	14	36	26	76	66	630	21	717	39	27	63	129	27	1174	116	1317	2239
% App. Total	18.4	47.4	34.2		9.2	87.9	2.9		30.2	20.9	48.8		2.1	89.1	8.8		
PHF	.875	.818	.542	.826	.786	.795	.750	.818	.650	.844	.685	.787	.844	.920	.763	.902	.921

Counts Unlimited
PO Box 1178
Corona, CA 92878
(951) 268-6268

City of Los Angeles
N/S: Mathews Street
E/W: 4th Street
Weather: Clear

File Name : LACMA4TPM
Site Code : 04116347
Start Date : 6/2/2016
Page No : 2



Peak Hour Analysis From 03:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	05:00 PM				05:00 PM				03:00 PM				05:00 PM			
+0 mins.	**4**	9	6	19	15	150	5	170	**25**	12	25	**62**	5	297	29	331
+15 mins.	4	7	4	15	**21**	139	**7**	167	18	**16**	**27**	61	6	258	23	287
+30 mins.	4	**11**	4	19	15	143	3	161	14	10	17	41	**8**	**319**	**38**	**365**
+45 mins.	2	9	**12**	**23**	15	**198**	6	**219**	12	4	25	41	8	300	26	334
Total Volume	14	36	26	76	66	630	21	717	69	42	94	205	27	1174	116	1317
% App. Total	18.4	47.4	34.2		9.2	87.9	2.9		33.7	20.5	45.9		2.1	89.1	8.8	
PHF	.875	.818	.542	.826	.786	.795	.750	.818	.690	.656	.870	.827	.844	.920	.763	.902

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Page No : 1

Groups Printed- Passenger Vehicles

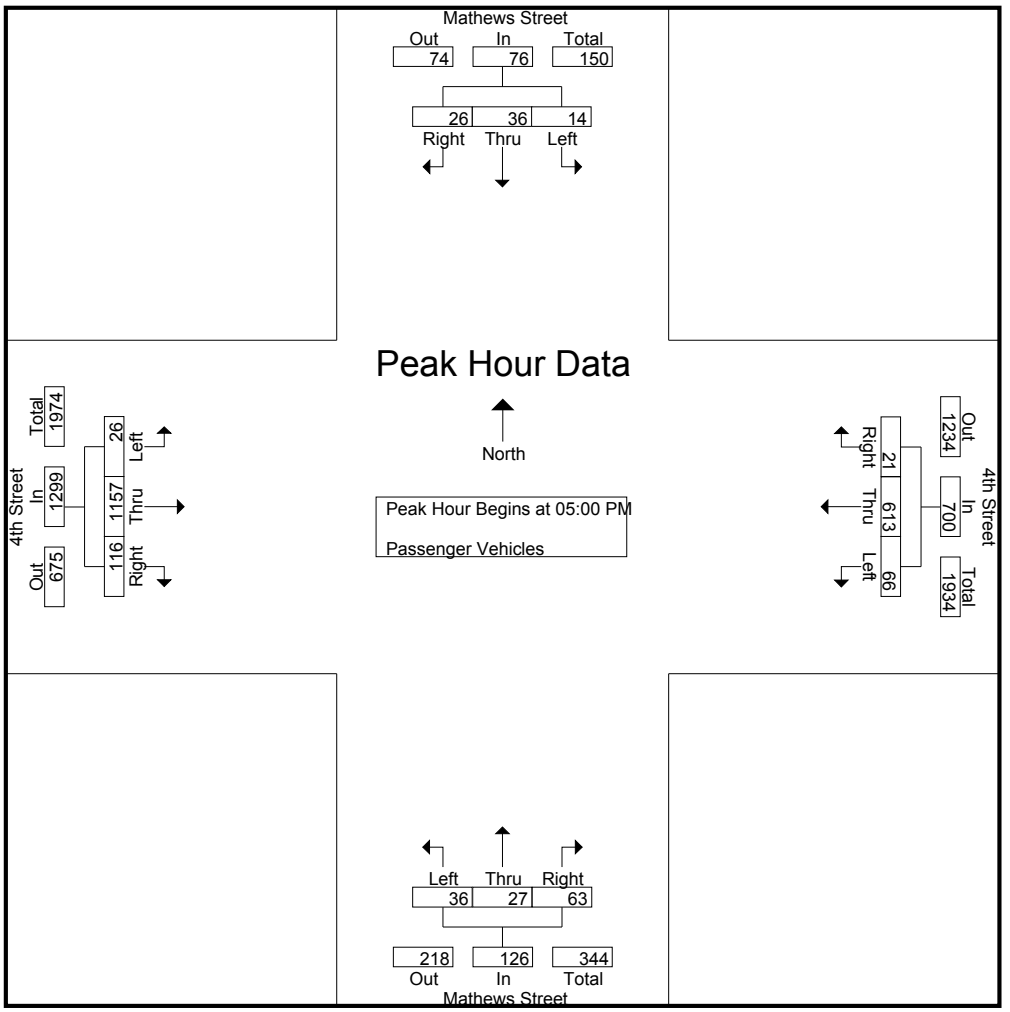
	Mathews Street Southbound				4th Street Westbound				Mathews Street Northbound				4th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
03:00 PM	0	10	11	21	8	161	7	176	25	12	25	62	5	202	14	221	480
03:15 PM	3	7	9	19	7	156	5	168	18	16	26	60	6	210	12	228	475
03:30 PM	4	4	4	12	12	137	6	155	14	10	17	41	2	218	14	234	442
03:45 PM	3	2	9	14	18	144	3	165	11	4	25	40	4	217	19	240	459
Total	10	23	33	66	45	598	21	664	68	42	93	203	17	847	59	923	1856
04:00 PM	3	2	8	13	9	151	5	165	11	4	18	33	9	215	16	240	451
04:15 PM	2	4	8	14	10	107	5	122	11	3	14	28	9	219	19	247	411
04:30 PM	1	0	3	4	13	133	6	152	8	1	15	24	16	282	24	322	502
04:45 PM	2	7	9	18	11	126	8	145	9	4	10	23	8	261	24	293	479
Total	8	13	28	49	43	517	24	584	39	12	57	108	42	977	83	1102	1843
05:00 PM	4	9	6	19	15	143	5	163	15	6	11	32	5	292	29	326	540
05:15 PM	4	7	4	15	21	135	7	163	8	8	23	39	6	254	23	283	500
05:30 PM	4	11	4	19	15	140	3	158	4	6	14	24	7	314	38	359	560
05:45 PM	2	9	12	23	15	195	6	216	9	7	15	31	8	297	26	331	601
Total	14	36	26	76	66	613	21	700	36	27	63	126	26	1157	116	1299	2201
Grand Total	32	72	87	191	154	1728	66	1948	143	81	213	437	85	2981	258	3324	5900
Apprch %	16.8	37.7	45.5		7.9	88.7	3.4		32.7	18.5	48.7		2.6	89.7	7.8		
Total %	0.5	1.2	1.5	3.2	2.6	29.3	1.1	33	2.4	1.4	3.6	7.4	1.4	50.5	4.4	56.3	

	Mathews Street Southbound				4th Street Westbound				Mathews Street Northbound				4th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	**4**	9	6	19	15	143	5	163	**15**	6	11	32	5	292	29	326	540
05:15 PM	4	7	4	15	**21**	135	**7**	163	8	**8**	**23**	**39**	6	254	23	283	500
05:30 PM	4	**11**	4	19	15	140	3	158	4	6	14	24	7	**314**	**38**	**359**	560
05:45 PM	2	9	**12**	**23**	15	**195**	6	**216**	9	7	15	31	**8**	297	26	331	**601**
Total Volume	14	36	26	76	66	613	21	700	36	27	63	126	26	1157	116	1299	2201
% App. Total	18.4	47.4	34.2		9.4	87.6	3		28.6	21.4	50		2	89.1	8.9		
PHF	.875	.818	.542	.826	.786	.786	.750	.810	.600	.844	.685	.808	.813	.921	.763	.905	.916

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City of Los Angeles
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Site Code : 04116347
Start Date : 6/2/2016
Page No : 2



Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	05:00 PM				05:00 PM				05:00 PM				05:00 PM			
+0 mins.	**4**	9	6	19	15	143	5	163	**15**	6	11	32	5	292	29	326
+15 mins.	4	7	4	15	**21**	135	**7**	163	8	**8**	**23**	**39**	6	254	23	283
+30 mins.	4	**11**	4	19	15	140	3	158	4	6	14	24	7	**314**	**38**	**359**
+45 mins.	2	9	**12**	**23**	15	**195**	6	**216**	9	7	15	31	**8**	297	26	331
Total Volume	14	36	26	76	66	613	21	700	36	27	63	126	26	1157	116	1299
% App. Total	18.4	47.4	34.2		9.4	87.6	3		28.6	21.4	50		2	89.1	8.9	
PHF	.875	.818	.542	.826	.786	.786	.750	.810	.600	.844	.685	.808	.813	.921	.763	.905

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Start Date : 6/2/2016
Page No : 1

Groups Printed- Dual Wheeled

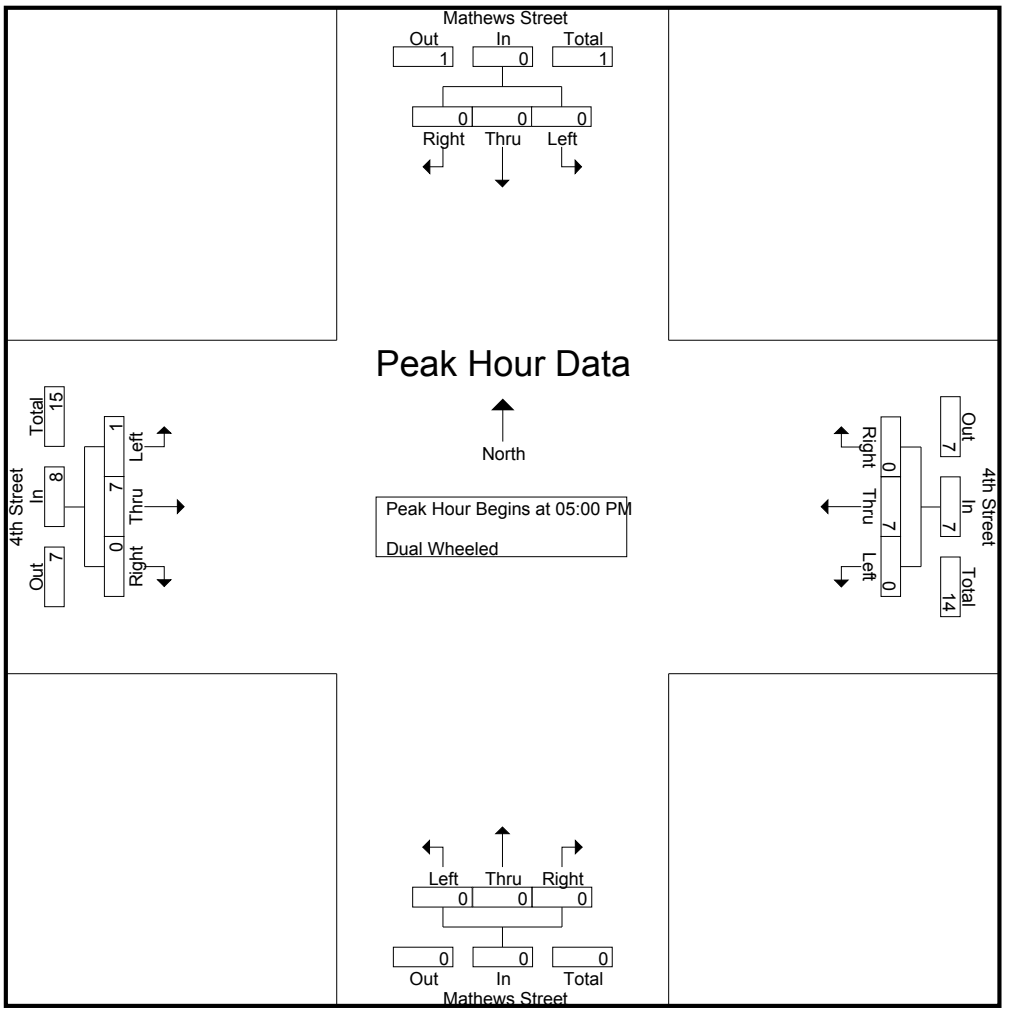
	Mathews Street Southbound				4th Street Westbound				Mathews Street Northbound				4th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
03:00 PM	0	0	0	0	0	1	0	1	0	0	0	0	1	2	0	3	4
03:15 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	1	0	1	3
03:30 PM	0	0	0	0	1	0	0	1	0	0	0	0	0	2	0	2	3
03:45 PM	0	0	1	1	1	2	0	3	0	0	0	0	0	2	0	2	6
Total	0	0	1	1	2	5	0	7	0	0	0	0	1	7	0	8	16
04:00 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	4	0	4	6
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
04:30 PM	0	0	0	0	0	1	0	1	0	0	0	0	1	4	0	5	6
04:45 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	1	0	1	3
Total	0	0	0	0	0	5	0	5	0	0	0	0	1	10	0	11	16
05:00 PM	0	0	0	0	0	5	0	5	0	0	0	0	0	2	0	2	7
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
05:30 PM	0	0	0	0	0	1	0	1	0	0	0	0	1	2	0	3	4
05:45 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	2	0	2	3
Total	0	0	0	0	0	7	0	7	0	0	0	0	1	7	0	8	15
Grand Total	0	0	1	1	2	17	0	19	0	0	0	0	3	24	0	27	47
Apprch %	0	0	100		10.5	89.5	0		0	0	0		11.1	88.9	0		
Total %	0	0	2.1	2.1	4.3	36.2	0	40.4	0	0	0	0	6.4	51.1	0	57.4	

	Mathews Street Southbound				4th Street Westbound				Mathews Street Northbound				4th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	0	0	0	0	0	**5**	0	**5**	0	0	0	0	0	**2**	0	2	**7**
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
05:30 PM	0	0	0	0	0	1	0	1	0	0	0	0	**1**	2	0	**3**	4
05:45 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	2	0	2	3
Total Volume	0	0	0	0	0	7	0	7	0	0	0	0	1	7	0	8	15
% App. Total	0	0	0		0	100	0		0	0	0		12.5	87.5	0		
PHF	.000	.000	.000	.000	.000	.350	.000	.350	.000	.000	.000	.000	.250	.875	.000	.667	.536

Counts Unlimited
PO Box 1178
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City of Los Angeles
N/S: Mathews Street
E/W: 4th Street
Weather: Clear

File Name : LACMA4TPM
Site Code : 04116347
Start Date : 6/2/2016
Page No : 2



Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	05:00 PM				05:00 PM				05:00 PM				05:00 PM			
+0 mins.	0	0	0	0	0	**5**	0	**5**	0	0	0	0	0	**2**	0	2
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
+30 mins.	0	0	0	0	0	1	0	1	0	0	0	0	**1**	2	0	**3**
+45 mins.	0	0	0	0	0	1	0	1	0	0	0	0	0	2	0	2
Total Volume	0	0	0	0	0	7	0	7	0	0	0	0	1	7	0	8
% App. Total	0	0	0		0	100	0		0	0	0		12.5	87.5	0	
PHF	.000	.000	.000	.000	.000	.350	.000	.350	.000	.000	.000	.000	.250	.875	.000	.667

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N/S: Mathews Street
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Groups Printed- Buses

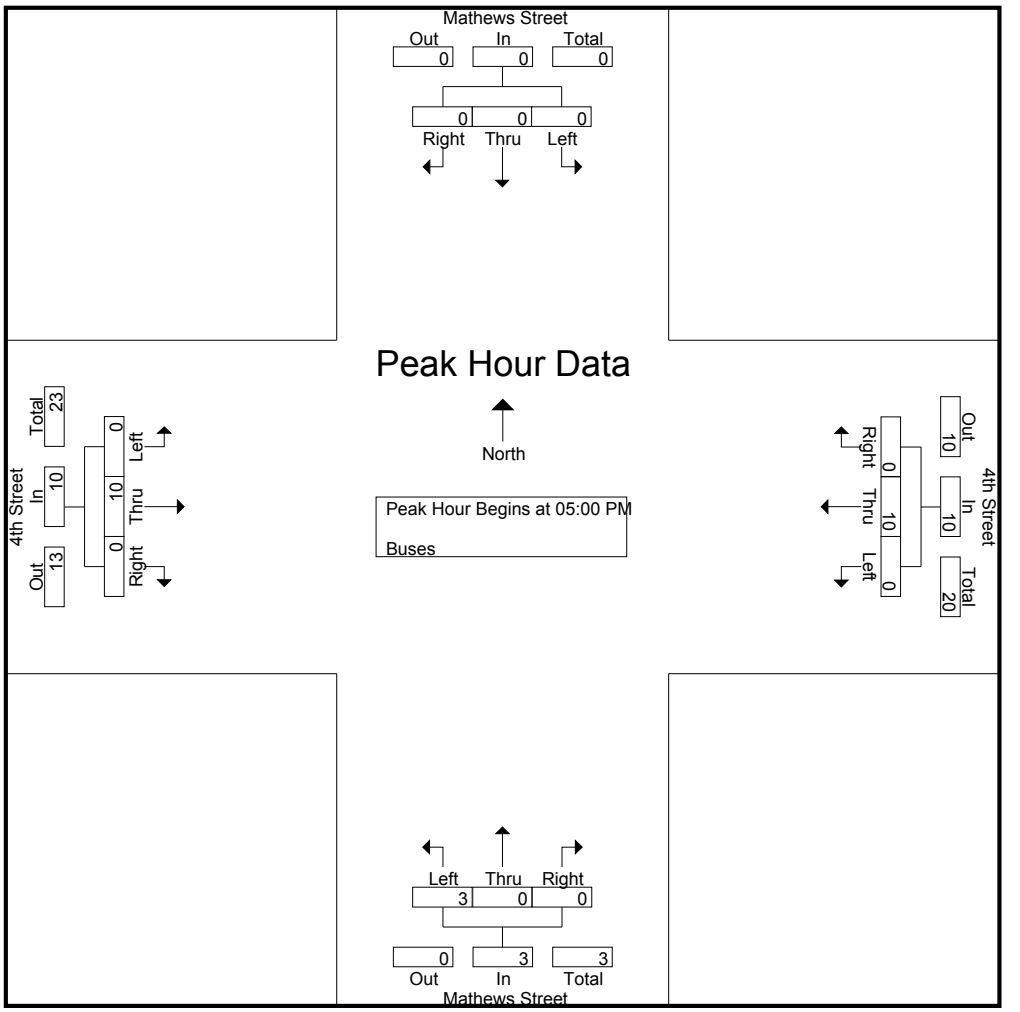
	Mathews Street Southbound				4th Street Westbound				Mathews Street Northbound				4th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
03:00 PM	0	0	1	1	0	2	1	3	0	0	0	0	0	4	0	4	8
03:15 PM	0	0	0	0	0	3	0	3	0	0	1	1	0	4	0	4	8
03:30 PM	0	0	0	0	1	1	0	2	0	0	0	0	0	4	0	4	6
03:45 PM	0	0	0	0	0	3	0	3	1	0	0	1	0	1	0	1	5
Total	0	0	1	1	1	9	1	11	1	0	1	2	0	13	0	13	27
04:00 PM	0	1	0	1	0	2	0	2	1	0	0	1	0	5	0	5	9
04:15 PM	0	0	0	0	0	3	0	3	1	0	0	1	0	3	0	3	7
04:30 PM	0	0	0	0	0	3	0	3	1	0	0	1	0	3	0	3	7
04:45 PM	0	0	0	0	1	2	0	3	1	0	0	1	0	3	0	3	7
Total	0	1	0	1	1	10	0	11	4	0	0	4	0	14	0	14	30
05:00 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	3	0	3	5
05:15 PM	0	0	0	0	0	4	0	4	2	0	0	2	0	3	0	3	9
05:30 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	3	0	3	5
05:45 PM	0	0	0	0	0	2	0	2	1	0	0	1	0	1	0	1	4
Total	0	0	0	0	0	10	0	10	3	0	0	3	0	10	0	10	23
Grand Total	0	1	1	2	2	29	1	32	8	0	1	9	0	37	0	37	80
Apprch %	0	50	50		6.2	90.6	3.1		88.9	0	11.1		0	100	0		
Total %	0	1.2	1.2	2.5	2.5	36.2	1.2	40	10	0	1.2	11.2	0	46.2	0	46.2	

	Mathews Street Southbound				4th Street Westbound				Mathews Street Northbound				4th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	**3**	0	**3**	5
05:15 PM	0	0	0	0	0	**4**	0	**4**	**2**	0	0	**2**	0	3	0	3	**9**
05:30 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	3	0	3	5
05:45 PM	0	0	0	0	0	2	0	2	1	0	0	1	0	1	0	1	4
Total Volume	0	0	0	0	0	10	0	10	3	0	0	3	0	10	0	10	23
% App. Total	0	0	0		0	100	0		100	0	0		0	100	0		
PHF	.000	.000	.000	.000	.000	.625	.000	.625	.375	.000	.000	.375	.000	.833	.000	.833	.639

Counts Unlimited
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City of Los Angeles
N/S: Mathews Street
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File Name : LACMA4TPM
Site Code : 04116347
Start Date : 6/2/2016
Page No : 2



Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	05:00 PM				05:00 PM				05:00 PM				05:00 PM			
+0 mins.	0	0	0	0	0	2	0	2	0	0	0	0	0	**3**	0	**3**
+15 mins.	0	0	0	0	0	**4**	0	**4**	**2**	0	0	**2**	0	3	0	3
+30 mins.	0	0	0	0	0	2	0	2	0	0	0	0	0	3	0	3
+45 mins.	0	0	0	0	0	2	0	2	1	0	0	1	0	1	0	1
Total Volume	0	0	0	0	0	10	0	10	3	0	0	3	0	10	0	10
% App. Total	0	0	0		0	100	0		100	0	0		0	100	0	
PHF	.000	.000	.000	.000	.000	.625	.000	.625	.375	.000	.000	.375	.000	.833	.000	.833

City Of Los Angeles
Department Of Transportation
MANUAL TRAFFIC COUNT SUMMARY

STREET:

North/South Mott Street

East/West 4th Street

Day: Thursday **Date:** June 2, 2016 **Weather:** CLEAR

Hours: 7-10AM 3-6PM **Staff:** CUI

School Day: YES **District:** Central I/S CODE 9574

	N/B	S/B	E/B	W/B
DUAL-WHEELED	6	11	50	47
BIKES	8	10	28	15
BUSES	4	3	74	76

	N/B	TIME	S/B	TIME	E/B	TIME	W/B	TIME
AM PK 15 MIN	77	7.45	75	7.30	139	7.30	359	7.30
PM PK 15 MIN	56	3.15	57	5.15	319	5.30	206	5.45
AM PK HOUR	215	7.15	227	7.15	475	7.30	1383	7.00
PM PK HOUR	177	3.00	204	4.45	1195	5.00	698	5.00

NORTHBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	54	104	37	195
8-9	38	52	22	112
9-10	25	22	14	61
3-4	39	95	43	177
4-5	39	75	38	152
5-6	34	86	47	167
TOTAL	229	434	201	864

SOUTHBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	40	131	51	222
8-9	34	36	52	122
9-10	34	37	44	115
3-4	49	64	58	171
4-5	48	66	66	180
5-6	78	74	47	199
TOTAL	283	408	318	1009

TOTAL	**XING S/L**		**XING N/L**	
N-S	Ped	Sch	Ped	Sch
417	14	63	24	89
234	19	8	26	4
176	18	3	20	0
348	81	193	47	12
332	46	32	37	5
366	77	13	45	0
1873	255	312	199	110

EASTBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	36	364	35	435
8-9	45	303	24	372
9-10	42	256	21	319
3-4	84	773	57	914
4-5	99	865	52	1016
5-6	99	1035	61	1195
TOTAL	405	3596	250	4251

WESTBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	64	1270	49	1383
8-9	19	1093	45	1157
9-10	10	736	26	772
3-4	31	502	66	599
4-5	25	452	75	552
5-6	34	603	61	698
TOTAL	183	4656	322	5161

TOTAL	**XING W/L**		**XING E/L**	
E-W	Ped	Sch	Ped	Sch
1818	17	135	16	53
1529	29	1	29	2
1091	11	0	13	0
1513	66	142	46	57
1568	44	18	12	9
1893	51	11	43	1
9412	218	307	159	122

(Rev Oct 06)

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City of Los Angeles
N/S: Mott Street
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File Name : LACMO4TAM
Site Code : 04116347
Start Date : 6/2/2016
Page No : 1

Groups Printed- Passenger Vehicles - Dual Wheeled - Buses

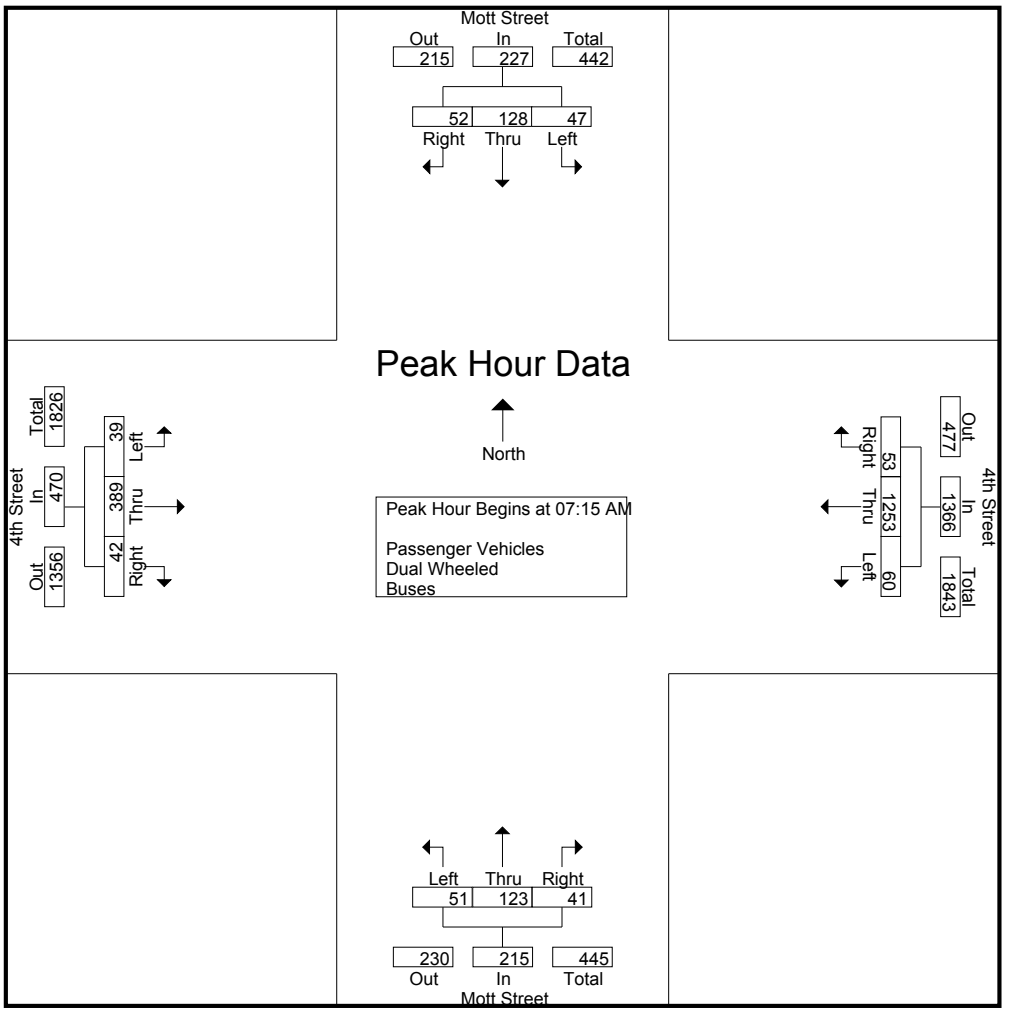
	Mott Street Southbound				4th Street Westbound				Mott Street Northbound				4th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	9	17	12	38	10	315	12	337	11	6	6	23	7	73	3	83	481
07:15 AM	7	35	7	49	21	319	12	352	12	28	7	47	10	67	9	86	534
07:30 AM	12	52	11	75	20	328	11	359	18	22	8	48	14	112	13	139	621
07:45 AM	12	27	21	60	13	308	14	335	13	48	16	77	5	112	10	127	599
Total	40	131	51	222	64	1270	49	1383	54	104	37	195	36	364	35	435	2235
08:00 AM	16	14	13	43	6	298	16	320	8	25	10	43	10	98	10	118	524
08:15 AM	6	12	13	31	7	239	14	260	15	10	2	27	9	74	8	91	409
08:30 AM	5	3	13	21	5	280	8	293	9	9	3	21	14	76	2	92	427
08:45 AM	7	7	13	27	1	276	7	284	6	8	7	21	12	55	4	71	403
Total	34	36	52	122	19	1093	45	1157	38	52	22	112	45	303	24	372	1763
09:00 AM	9	5	6	20	3	250	5	258	9	3	9	21	13	57	8	78	377
09:15 AM	9	10	19	38	4	166	7	177	9	6	2	17	7	62	5	74	306
09:30 AM	9	9	11	29	2	153	6	161	2	9	1	12	9	75	3	87	289
09:45 AM	7	13	8	28	1	167	8	176	5	4	2	11	13	62	5	80	295
Total	34	37	44	115	10	736	26	772	25	22	14	61	42	256	21	319	1267
Grand Total	108	204	147	459	93	3099	120	3312	117	178	73	368	123	923	80	1126	5265
Apprch %	23.5	44.4	32		2.8	93.6	3.6		31.8	48.4	19.8		10.9	82	7.1		
Total %	2.1	3.9	2.8	8.7	1.8	58.9	2.3	62.9	2.2	3.4	1.4	7	2.3	17.5	1.5	21.4	
Passenger Vehicles	107	201	145	453	93	3030	120	3243	115	176	71	362	123	874	77	1074	5132
% Passenger Vehicles	99.1	98.5	98.6	98.7	100	97.8	100	97.9	98.3	98.9	97.3	98.4	100	94.7	96.2	95.4	97.5
Dual Wheeled	1	1	2	4	0	26	0	26	1	2	0	3	0	14	3	17	50
% Dual Wheeled	0.9	0.5	1.4	0.9	0	0.8	0	0.8	0.9	1.1	0	0.8	0	1.5	3.8	1.5	0.9
Buses	0	2	0	2	0	43	0	43	1	0	2	3	0	35	0	35	83
% Buses	0	1	0	0.4	0	1.4	0	1.3	0.9	0	2.7	0.8	0	3.8	0	3.1	1.6

	Mott Street Southbound				4th Street Westbound				Mott Street Northbound				4th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 09:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	7	35	7	49	**21**	319	12	352	12	28	7	47	10	67	9	86	534
07:30 AM	12	**52**	11	**75**	20	**328**	11	**359**	**18**	22	8	48	**14**	**112**	**13**	**139**	**621**
07:45 AM	12	27	**21**	60	13	308	14	335	13	**48**	**16**	**77**	5	112	10	127	599
08:00 AM	**16**	14	13	43	6	298	**16**	320	8	25	10	43	10	98	10	118	524
Total Volume	47	128	52	227	60	1253	53	1366	51	123	41	215	39	389	42	470	2278
% App. Total	20.7	56.4	22.9		4.4	91.7	3.9		23.7	57.2	19.1		8.3	82.8	8.9		
PHF	.734	.615	.619	.757	.714	.955	.828	.951	.708	.641	.641	.698	.696	.868	.808	.845	.917

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Site Code : 04116347
Start Date : 6/2/2016
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Peak Hour Analysis From 07:00 AM to 09:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM				07:00 AM				07:15 AM				07:30 AM			
+0 mins.	7	35	7	49	10	315	12	337	12	28	7	47	**14**	**112**	**13**	**139**
+15 mins.	12	**52**	11	**75**	**21**	319	12	352	**18**	22	8	48	5	112	10	127
+30 mins.	12	27	**21**	60	20	**328**	11	**359**	13	**48**	**16**	**77**	10	98	10	118
+45 mins.	**16**	14	13	43	13	308	**14**	335	8	25	10	43	9	74	8	91
Total Volume	47	128	52	227	64	1270	49	1383	51	123	41	215	38	396	41	475
% App. Total	20.7	56.4	22.9		4.6	91.8	3.5		23.7	57.2	19.1		8	83.4	8.6	
PHF	.734	.615	.619	.757	.762	.968	.875	.963	.708	.641	.641	.698	.679	.884	.788	.854

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Groups Printed- Passenger Vehicles

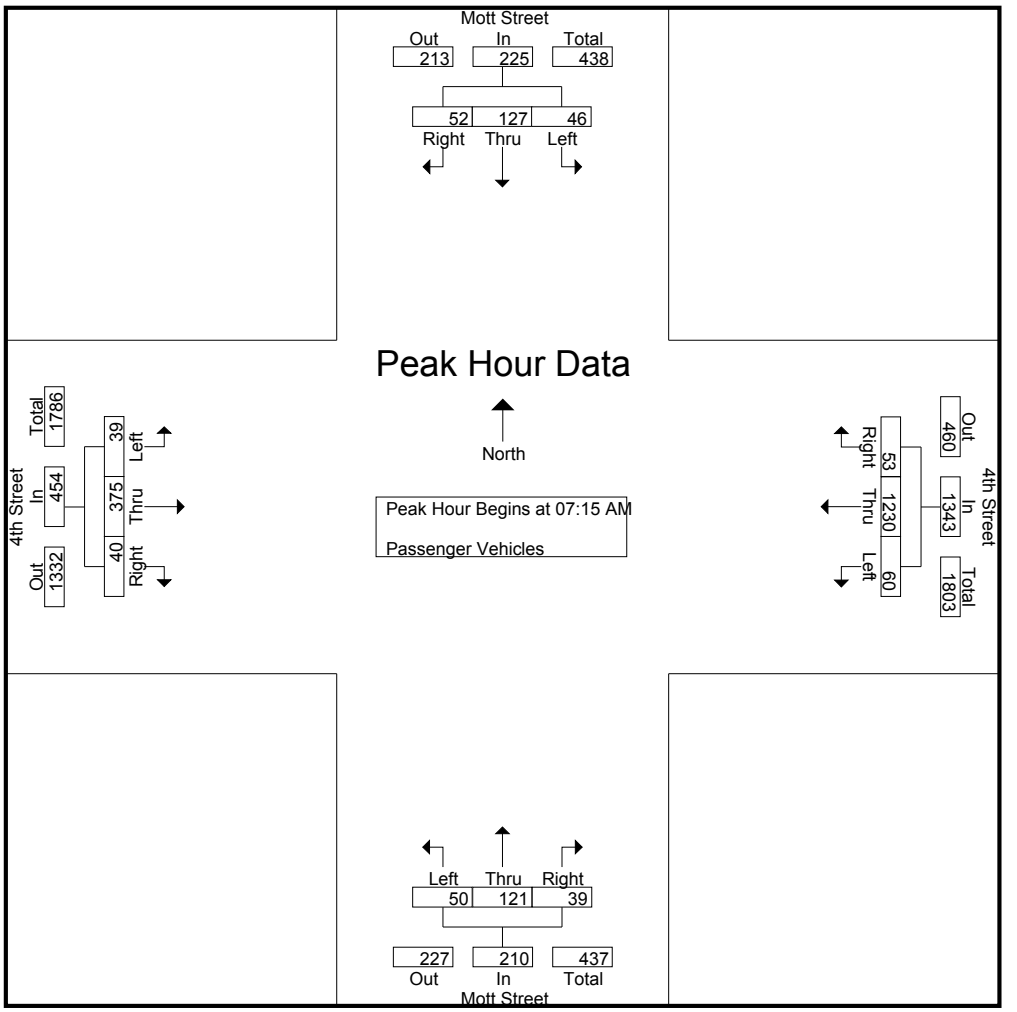
	Mott Street Southbound				4th Street Westbound				Mott Street Northbound				4th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	9	15	10	34	10	307	12	329	11	6	6	23	7	69	3	79	465
07:15 AM	7	35	7	49	21	312	12	345	11	28	6	45	10	63	8	81	520
07:30 AM	12	52	11	75	20	322	11	353	18	21	7	46	14	108	12	134	608
07:45 AM	11	27	21	59	13	302	14	329	13	48	16	77	5	109	10	124	589
Total	39	129	49	217	64	1243	49	1356	53	103	35	191	36	349	33	418	2182
08:00 AM	16	13	13	42	6	294	16	316	8	24	10	42	10	95	10	115	515
08:15 AM	6	12	13	31	7	235	14	256	15	10	2	27	9	68	8	85	399
08:30 AM	5	3	13	21	5	269	8	282	9	9	3	21	14	72	2	88	412
08:45 AM	7	7	13	27	1	268	7	276	6	8	7	21	12	50	4	66	390
Total	34	35	52	121	19	1066	45	1130	38	51	22	111	45	285	24	354	1716
09:00 AM	9	5	6	20	3	243	5	251	9	3	9	21	13	53	7	73	365
09:15 AM	9	10	19	38	4	163	7	174	8	6	2	16	7	59	5	71	299
09:30 AM	9	9	11	29	2	151	6	159	2	9	1	12	9	71	3	83	283
09:45 AM	7	13	8	28	1	164	8	173	5	4	2	11	13	57	5	75	287
Total	34	37	44	115	10	721	26	757	24	22	14	60	42	240	20	302	1234
Grand Total	107	201	145	453	93	3030	120	3243	115	176	71	362	123	874	77	1074	5132
Apprch %	23.6	44.4	32		2.9	93.4	3.7		31.8	48.6	19.6		11.5	81.4	7.2		
Total %	2.1	3.9	2.8	8.8	1.8	59	2.3	63.2	2.2	3.4	1.4	7.1	2.4	17	1.5	20.9	

	Mott Street Southbound				4th Street Westbound				Mott Street Northbound				4th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	7	35	7	49	**21**	312	12	345	11	28	6	45	10	63	8	81	520
07:30 AM	12	**52**	11	**75**	20	**322**	11	**353**	**18**	21	7	46	**14**	108	**12**	**134**	**608**
07:45 AM	11	27	**21**	59	13	302	14	329	13	**48**	**16**	**77**	5	**109**	10	124	589
08:00 AM	**16**	13	13	42	6	294	**16**	316	8	24	10	42	10	95	10	115	515
Total Volume	46	127	52	225	60	1230	53	1343	50	121	39	210	39	375	40	454	2232
% App. Total	20.4	56.4	23.1		4.5	91.6	3.9		23.8	57.6	18.6		8.6	82.6	8.8		
PHF	.719	.611	.619	.750	.714	.955	.828	.951	.694	.630	.609	.682	.696	.860	.833	.847	.918

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Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:15 AM				07:15 AM			
+0 mins.	7	35	7	49	**21**	312	12	345	11	28	6	45	10	63	8	81
+15 mins.	12	**52**	11	**75**	20	**322**	11	**353**	**18**	21	7	46	**14**	108	**12**	**134**
+30 mins.	11	27	**21**	59	13	302	14	329	13	**48**	**16**	**77**	5	**109**	10	124
+45 mins.	**16**	13	13	42	6	294	**16**	316	8	24	10	42	10	95	10	115
Total Volume	46	127	52	225	60	1230	53	1343	50	121	39	210	39	375	40	454
% App. Total	20.4	56.4	23.1		4.5	91.6	3.9		23.8	57.6	18.6		8.6	82.6	8.8	
PHF	.719	.611	.619	.750	.714	.955	.828	.951	.694	.630	.609	.682	.696	.860	.833	.847

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File Name : LACMO4TAM
Site Code : 04116347
Start Date : 6/2/2016
Page No : 1

Groups Printed- Dual Wheeled

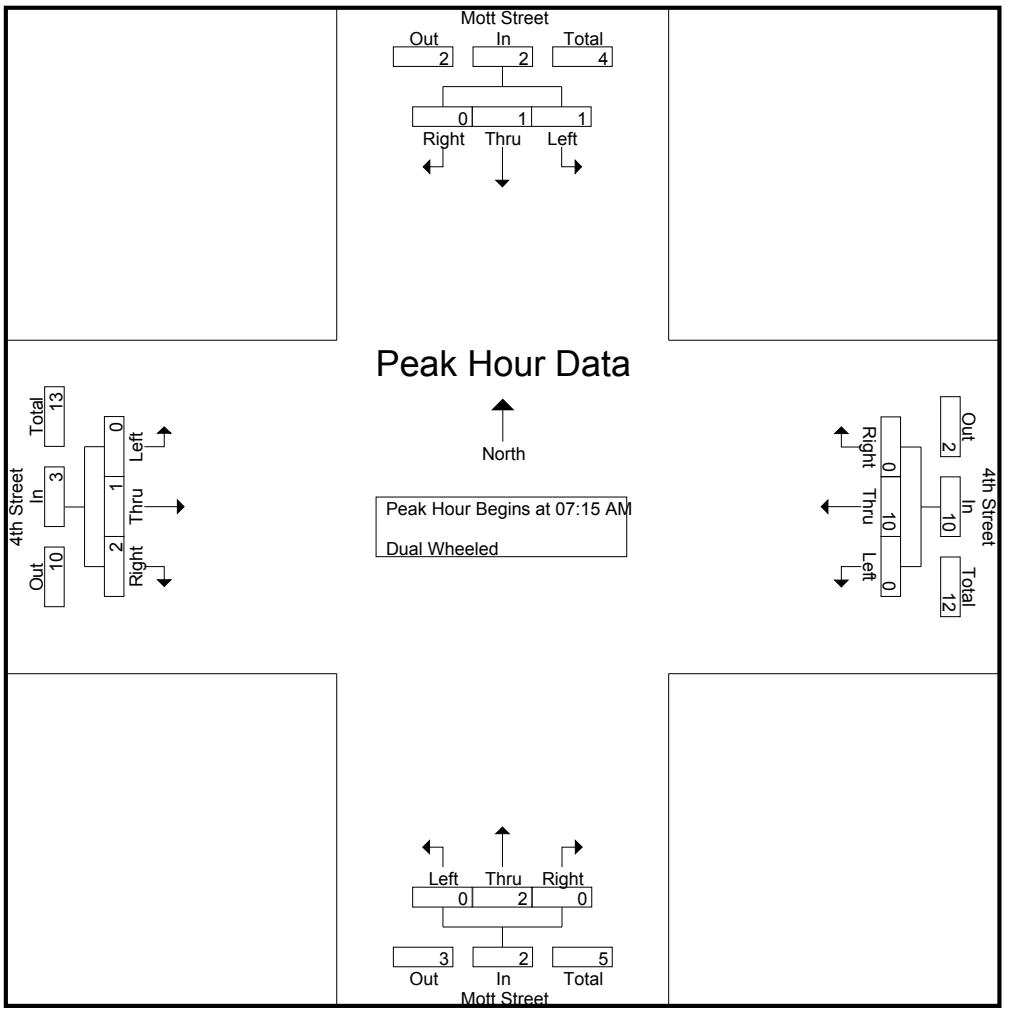
	Mott Street Southbound				4th Street Westbound				Mott Street Northbound				4th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	0	2	2	0	3	0	3	0	0	0	0	0	1	0	1	6
07:15 AM	0	0	0	0	0	3	0	3	0	0	0	0	0	0	1	1	4
07:30 AM	0	0	0	0	0	2	0	2	0	1	0	1	0	1	1	2	5
07:45 AM	1	0	0	1	0	3	0	3	0	0	0	0	0	0	0	0	4
Total	1	0	2	3	0	11	0	11	0	1	0	1	0	2	2	4	19
08:00 AM	0	1	0	1	0	2	0	2	0	1	0	1	0	0	0	0	4
08:15 AM	0	0	0	0	0	2	0	2	0	0	0	0	0	2	0	2	4
08:30 AM	0	0	0	0	0	6	0	6	0	0	0	0	0	3	0	3	9
08:45 AM	0	0	0	0	0	4	0	4	0	0	0	0	0	0	0	0	4
Total	0	1	0	1	0	14	0	14	0	1	0	1	0	5	0	5	21
09:00 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	1	1	2	3
09:15 AM	0	0	0	0	0	0	0	0	1	0	0	1	0	2	0	2	3
09:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	2
09:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	2
Total	0	0	0	0	0	1	0	1	1	0	0	1	0	7	1	8	10
Grand Total	1	1	2	4	0	26	0	26	1	2	0	3	0	14	3	17	50
Apprch %	25	25	50		0	100	0		33.3	66.7	0		0	82.4	17.6		
Total %	2	2	4	8	0	52	0	52	2	4	0	6	0	28	6	34	

	Mott Street Southbound				4th Street Westbound				Mott Street Northbound				4th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	0	0	0	0	0	**3**	0	**3**	0	0	0	0	0	0	**1**	1	4
07:30 AM	0	0	0	0	0	2	0	2	0	**1**	0	**1**	0	**1**	1	**2**	**5**
07:45 AM	**1**	0	0	**1**	0	3	0	3	0	0	0	0	0	0	0	0	4
08:00 AM	0	**1**	0	1	0	2	0	2	0	1	0	1	0	0	0	0	4
Total Volume	1	1	0	2	0	10	0	10	0	2	0	2	0	1	2	3	17
% App. Total	50	50	0		0	100	0		0	100	0		0	33.3	66.7		
PHF	.250	.250	.000	.500	.000	.833	.000	.833	.000	.500	.000	.500	.000	.250	.500	.375	.850

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Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:15 AM				07:15 AM			
+0 mins.	0	0	0	0	0	**3**	0	**3**	0	0	0	0	0	0	**1**	1
+15 mins.	0	0	0	0	0	2	0	2	0	**1**	0	**1**	0	**1**	1	**2**
+30 mins.	**1**	0	0	**1**	0	3	0	3	0	0	0	0	0	0	0	0
+45 mins.	0	**1**	0	1	0	2	0	2	0	1	0	1	0	0	0	0
Total Volume	1	1	0	2	0	10	0	10	0	2	0	2	0	1	2	3
% App. Total	50	50	0		0	100	0		0	100	0		0	33.3	66.7	
PHF	.250	.250	.000	.500	.000	.833	.000	.833	.000	.500	.000	.500	.000	.250	.500	.375

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File Name : LACMO4TAM
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Groups Printed- Buses

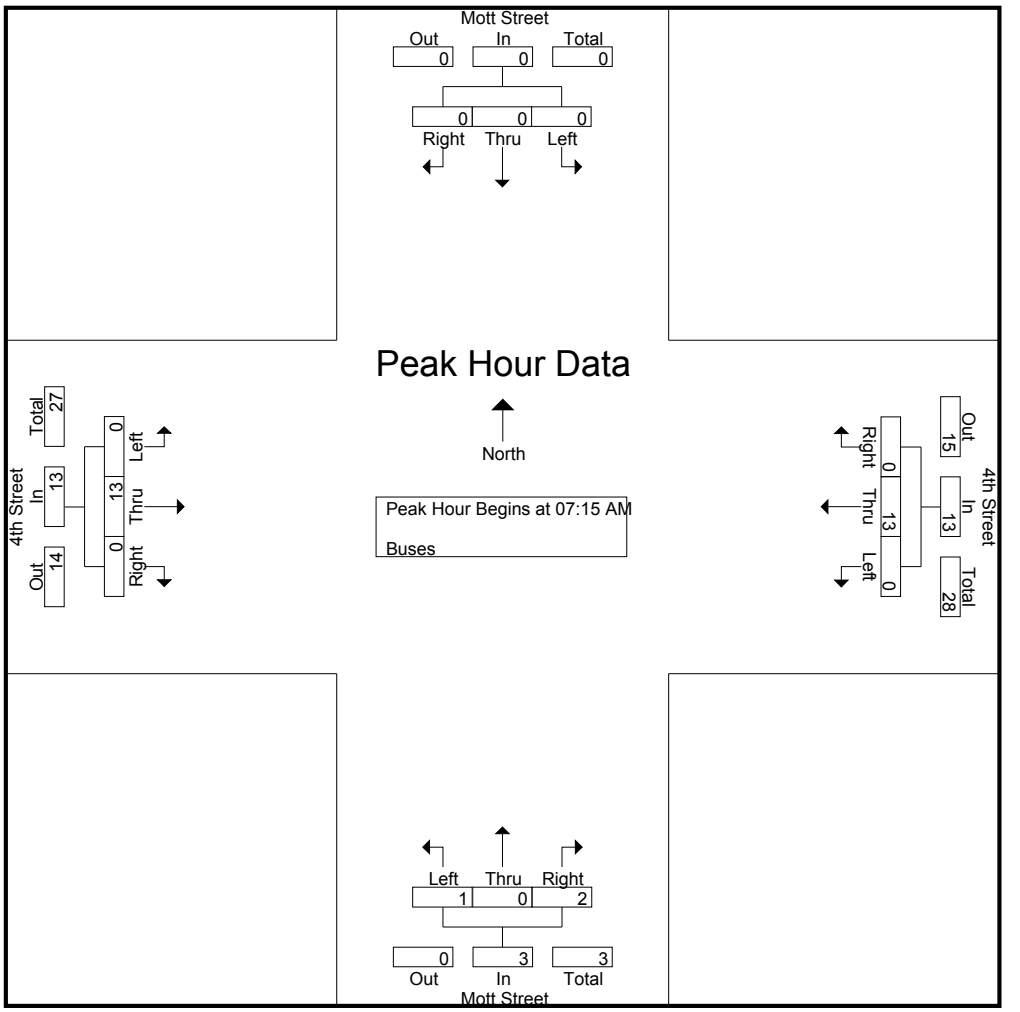
	Mott Street Southbound				4th Street Westbound				Mott Street Northbound				4th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	2	0	2	0	5	0	5	0	0	0	0	0	3	0	3	10
07:15 AM	0	0	0	0	0	4	0	4	1	0	1	2	0	4	0	4	10
07:30 AM	0	0	0	0	0	4	0	4	0	0	1	1	0	3	0	3	8
07:45 AM	0	0	0	0	0	3	0	3	0	0	0	0	0	3	0	3	6
Total	0	2	0	2	0	16	0	16	1	0	2	3	0	13	0	13	34
08:00 AM	0	0	0	0	0	2	0	2	0	0	0	0	0	3	0	3	5
08:15 AM	0	0	0	0	0	2	0	2	0	0	0	0	0	4	0	4	6
08:30 AM	0	0	0	0	0	5	0	5	0	0	0	0	0	1	0	1	6
08:45 AM	0	0	0	0	0	4	0	4	0	0	0	0	0	5	0	5	9
Total	0	0	0	0	0	13	0	13	0	0	0	0	0	13	0	13	26
09:00 AM	0	0	0	0	0	6	0	6	0	0	0	0	0	3	0	3	9
09:15 AM	0	0	0	0	0	3	0	3	0	0	0	0	0	1	0	1	4
09:30 AM	0	0	0	0	0	2	0	2	0	0	0	0	0	2	0	2	4
09:45 AM	0	0	0	0	0	3	0	3	0	0	0	0	0	3	0	3	6
Total	0	0	0	0	0	14	0	14	0	0	0	0	0	9	0	9	23
Grand Total	0	2	0	2	0	43	0	43	1	0	2	3	0	35	0	35	83
Apprch %	0	100	0		0	100	0		33.3	0	66.7		0	100	0		
Total %	0	2.4	0	2.4	0	51.8	0	51.8	1.2	0	2.4	3.6	0	42.2	0	42.2	

	Mott Street Southbound				4th Street Westbound				Mott Street Northbound				4th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	0	0	0	0	0	**4**	0	**4**	**1**	0	**1**	**2**	0	**4**	0	**4**	**10**
07:30 AM	0	0	0	0	0	4	0	4	0	0	1	1	0	3	0	3	8
07:45 AM	0	0	0	0	0	3	0	3	0	0	0	0	0	3	0	3	6
08:00 AM	0	0	0	0	0	2	0	2	0	0	0	0	0	3	0	3	5
Total Volume	0	0	0	0	0	13	0	13	1	0	2	3	0	13	0	13	29
% App. Total	0	0	0		0	100	0		33.3	0	66.7		0	100	0		
PHF	.000	.000	.000	.000	.000	.813	.000	.813	.250	.000	.500	.375	.000	.813	.000	.813	.725

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Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:15 AM				07:15 AM			
+0 mins.	0	0	0	0	0	**4**	0	**4**	**1**	0	**1**	**2**	0	**4**	0	**4**
+15 mins.	0	0	0	0	0	4	0	4	0	0	1	1	0	3	0	3
+30 mins.	0	0	0	0	0	3	0	3	0	0	0	0	0	3	0	3
+45 mins.	0	0	0	0	0	2	0	2	0	0	0	0	0	3	0	3
Total Volume	0	0	0	0	0	13	0	13	1	0	2	3	0	13	0	13
% App. Total	0	0	0		0	100	0		33.3	0	66.7		0	100	0	
PHF	.000	.000	.000	.000	.000	.813	.000	.813	.250	.000	.500	.375	.000	.813	.000	.813

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Groups Printed- Passenger Vehicles - Dual Wheeled - Buses

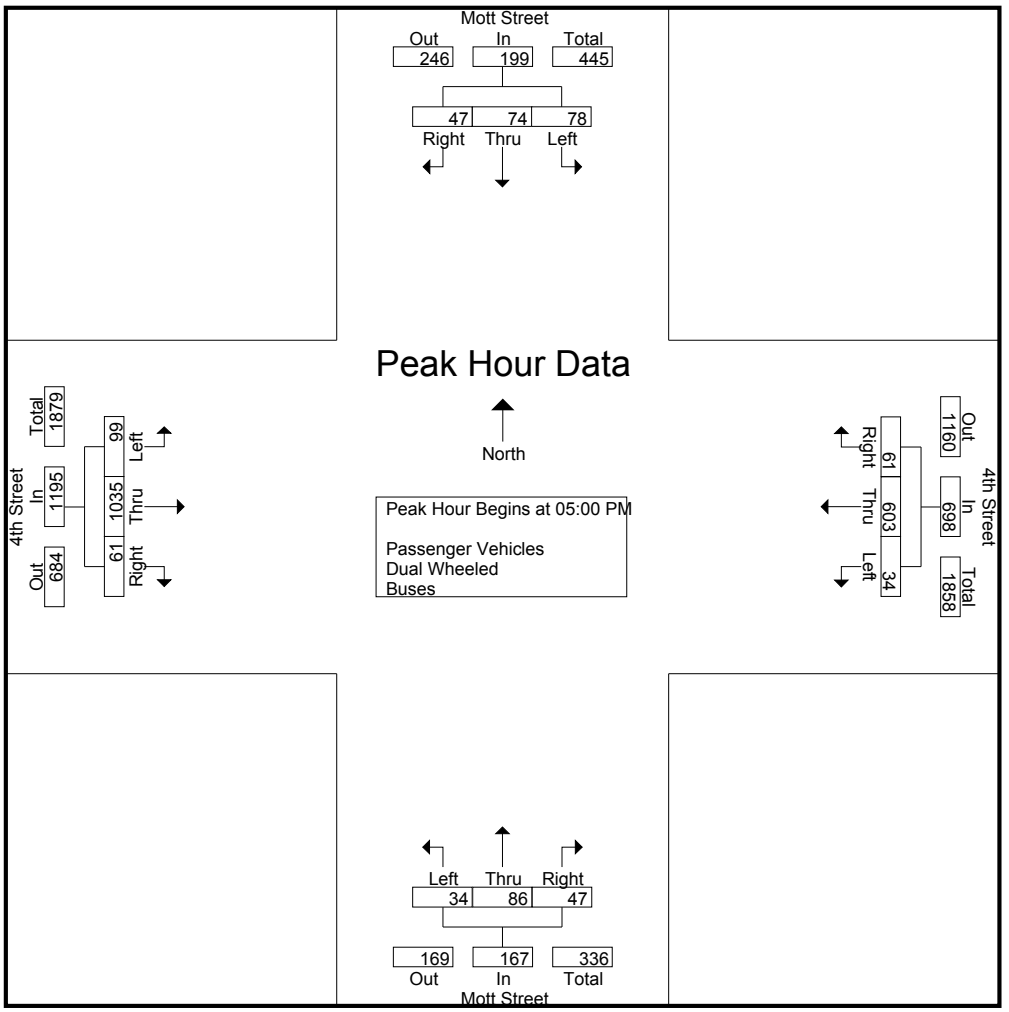
	Mott Street Southbound				4th Street Westbound				Mott Street Northbound				4th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
03:00 PM	7	25	16	48	13	125	13	151	14	27	8	49	21	177	12	210	458
03:15 PM	15	12	11	38	7	134	16	157	8	34	14	56	22	207	25	254	505
03:30 PM	12	14	17	43	3	117	25	145	8	12	14	34	18	197	8	223	445
03:45 PM	15	13	14	42	8	126	12	146	9	22	7	38	23	192	12	227	453
Total	49	64	58	171	31	502	66	599	39	95	43	177	84	773	57	914	1861
04:00 PM	9	18	17	44	9	114	23	146	11	25	8	44	29	183	11	223	457
04:15 PM	13	13	12	38	4	103	26	133	7	19	10	36	21	202	14	237	444
04:30 PM	11	17	14	42	5	129	17	151	12	15	9	36	21	246	15	282	511
04:45 PM	15	18	23	56	7	106	9	122	9	16	11	36	28	234	12	274	488
Total	48	66	66	180	25	452	75	552	39	75	38	152	99	865	52	1016	1900
05:00 PM	18	18	7	43	8	132	12	152	8	25	4	37	23	248	10	281	513
05:15 PM	24	15	18	57	6	144	18	168	9	11	13	33	27	251	12	290	548
05:30 PM	20	21	7	48	11	144	17	172	7	27	12	46	26	272	21	319	585
05:45 PM	16	20	15	51	9	183	14	206	10	23	18	51	23	264	18	305	613
Total	78	74	47	199	34	603	61	698	34	86	47	167	99	1035	61	1195	2259
Grand Total	175	204	171	550	90	1557	202	1849	112	256	128	496	282	2673	170	3125	6020
Apprch %	31.8	37.1	31.1		4.9	84.2	10.9		22.6	51.6	25.8		9	85.5	5.4		
Total %	2.9	3.4	2.8	9.1	1.5	25.9	3.4	30.7	1.9	4.3	2.1	8.2	4.7	44.4	2.8	51.9	
Passenger Vehicles	174	200	168	542	88	1505	202	1795	112	254	126	492	278	2606	169	3053	5882
% Passenger Vehicles	99.4	98	98.2	98.5	97.8	96.7	100	97.1	100	99.2	98.4	99.2	98.6	97.5	99.4	97.7	97.7
Dual Wheeled	1	3	3	7	2	19	0	21	0	2	1	3	4	29	0	33	64
% Dual Wheeled	0.6	1.5	1.8	1.3	2.2	1.2	0	1.1	0	0.8	0.8	0.6	1.4	1.1	0	1.1	1.1
Buses	0	1	0	1	0	33	0	33	0	0	1	1	0	38	1	39	74
% Buses	0	0.5	0	0.2	0	2.1	0	1.8	0	0	0.8	0.2	0	1.4	0.6	1.2	1.2

	Mott Street Southbound				4th Street Westbound				Mott Street Northbound				4th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 03:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	18	18	7	43	8	132	12	152	8	25	4	37	23	248	10	281	513
05:15 PM	**24**	15	**18**	**57**	6	144	**18**	168	9	11	13	33	**27**	251	12	290	548
05:30 PM	20	**21**	7	48	**11**	144	17	172	7	**27**	12	46	26	**272**	**21**	**319**	585
05:45 PM	16	20	15	51	9	**183**	14	**206**	**10**	23	**18**	**51**	23	264	18	305	**613**
Total Volume	78	74	47	199	34	603	61	698	34	86	47	167	99	1035	61	1195	2259
% App. Total	39.2	37.2	23.6		4.9	86.4	8.7		20.4	51.5	28.1		8.3	86.6	5.1		
PHF	.813	.881	.653	.873	.773	.824	.847	.847	.850	.796	.653	.819	.917	.951	.726	.937	.921

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City of Los Angeles
N/S: Mott Street
E/W: 4th Street
Weather: Clear

File Name : LACMO4TPM
Site Code : 04116347
Start Date : 6/2/2016
Page No : 2



Peak Hour Analysis From 03:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:45 PM				05:00 PM				03:00 PM				05:00 PM			
+0 mins.	15	18	**23**	56	8	132	12	152	**14**	27	8	49	23	248	10	281
+15 mins.	18	18	7	43	6	144	**18**	168	8	**34**	**14**	**56**	**27**	251	12	290
+30 mins.	**24**	15	18	**57**	**11**	144	17	172	8	12	14	34	26	**272**	**21**	**319**
+45 mins.	20	**21**	7	48	9	**183**	14	**206**	9	22	7	38	23	264	18	305
Total Volume	77	72	55	204	34	603	61	698	39	95	43	177	99	1035	61	1195
% App. Total	37.7	35.3	27		4.9	86.4	8.7		22	53.7	24.3		8.3	86.6	5.1	
PHF	.802	.857	.598	.895	.773	.824	.847	.847	.696	.699	.768	.790	.917	.951	.726	.937

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File Name : LACMO4TPM
Site Code : 04116347
Start Date : 6/2/2016
Page No : 1

Groups Printed- Passenger Vehicles

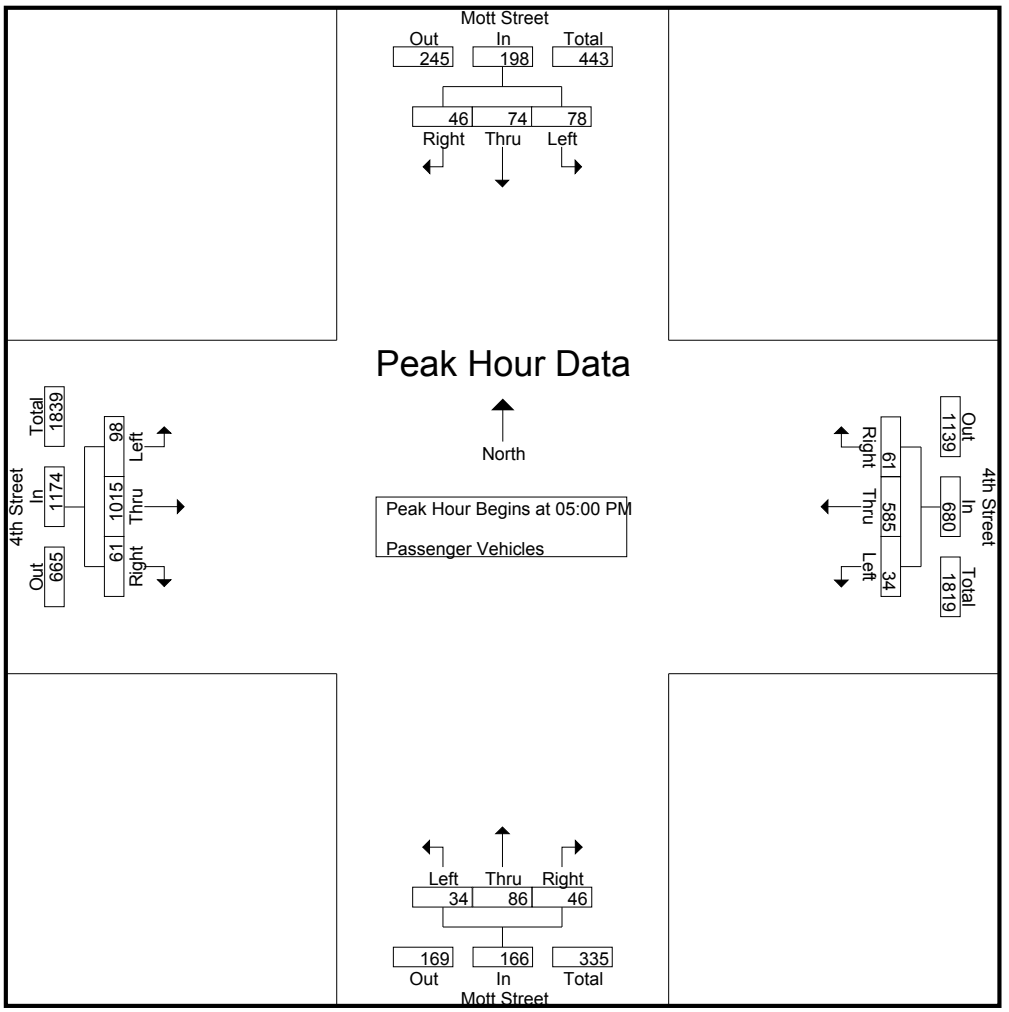
	Mott Street Southbound				4th Street Westbound				Mott Street Northbound				4th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
03:00 PM	7	22	16	45	12	122	13	147	14	25	8	47	21	171	12	204	443
03:15 PM	15	12	11	38	6	128	16	150	8	34	13	55	22	203	24	249	492
03:30 PM	11	14	17	42	3	113	25	141	8	12	14	34	17	193	8	218	435
03:45 PM	15	12	14	41	8	121	12	141	9	22	7	38	23	188	12	223	443
Total	48	60	58	166	29	484	66	579	39	93	42	174	83	755	56	894	1813
04:00 PM	9	18	15	42	9	111	23	143	11	25	8	44	29	171	11	211	440
04:15 PM	13	13	12	38	4	99	26	129	7	19	10	36	21	198	14	233	436
04:30 PM	11	17	14	42	5	124	17	146	12	15	9	36	21	238	15	274	498
04:45 PM	15	18	23	56	7	102	9	118	9	16	11	36	26	229	12	267	477
Total	48	66	64	178	25	436	75	536	39	75	38	152	97	836	52	985	1851
05:00 PM	18	18	6	42	8	126	12	146	8	25	4	37	22	244	10	276	501
05:15 PM	24	15	18	57	6	139	18	163	9	11	13	33	27	247	12	286	539
05:30 PM	20	21	7	48	11	141	17	169	7	27	12	46	26	264	21	311	574
05:45 PM	16	20	15	51	9	179	14	202	10	23	17	50	23	260	18	301	604
Total	78	74	46	198	34	585	61	680	34	86	46	166	98	1015	61	1174	2218
Grand Total	174	200	168	542	88	1505	202	1795	112	254	126	492	278	2606	169	3053	5882
Apprch %	32.1	36.9	31		4.9	83.8	11.3		22.8	51.6	25.6		9.1	85.4	5.5		
Total %	3	3.4	2.9	9.2	1.5	25.6	3.4	30.5	1.9	4.3	2.1	8.4	4.7	44.3	2.9	51.9	

	Mott Street Southbound				4th Street Westbound				Mott Street Northbound				4th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	18	18	6	42	8	126	12	146	8	25	4	37	22	244	10	276	501
05:15 PM	**24**	15	**18**	**57**	6	139	**18**	163	9	11	13	33	**27**	247	12	286	539
05:30 PM	20	**21**	7	48	**11**	141	17	169	7	**27**	12	46	26	**264**	**21**	**311**	574
05:45 PM	16	20	15	51	9	**179**	14	**202**	**10**	23	**17**	**50**	23	260	18	301	**604**
Total Volume	78	74	46	198	34	585	61	680	34	86	46	166	98	1015	61	1174	2218
% App. Total	39.4	37.4	23.2		5	86	9		20.5	51.8	27.7		8.3	86.5	5.2		
PHF	.813	.881	.639	.868	.773	.817	.847	.842	.850	.796	.676	.830	.907	.961	.726	.944	.918

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Weather: Clear

File Name : LACMO4TPM
Site Code : 04116347
Start Date : 6/2/2016
Page No : 2



Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	05:00 PM				05:00 PM				05:00 PM				05:00 PM			
+0 mins.	18	18	6	42	8	126	12	146	8	25	4	37	22	244	10	276
+15 mins.	**24**	15	**18**	**57**	6	139	**18**	163	9	11	13	33	**27**	247	12	286
+30 mins.	20	**21**	7	48	**11**	141	17	169	7	**27**	12	46	26	**264**	**21**	**311**
+45 mins.	16	20	15	51	9	**179**	14	**202**	**10**	23	**17**	**50**	23	260	18	301
Total Volume	78	74	46	198	34	585	61	680	34	86	46	166	98	1015	61	1174
% App. Total	39.4	37.4	23.2		5	86	9		20.5	51.8	27.7		8.3	86.5	5.2	
PHF	.813	.881	.639	.868	.773	.817	.847	.842	.850	.796	.676	.830	.907	.961	.726	.944

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N/S: Mott Street
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Weather: Clear

File Name : LACMO4TPM
Site Code : 04116347
Start Date : 6/2/2016

Groups Printed- Dual Wheeled

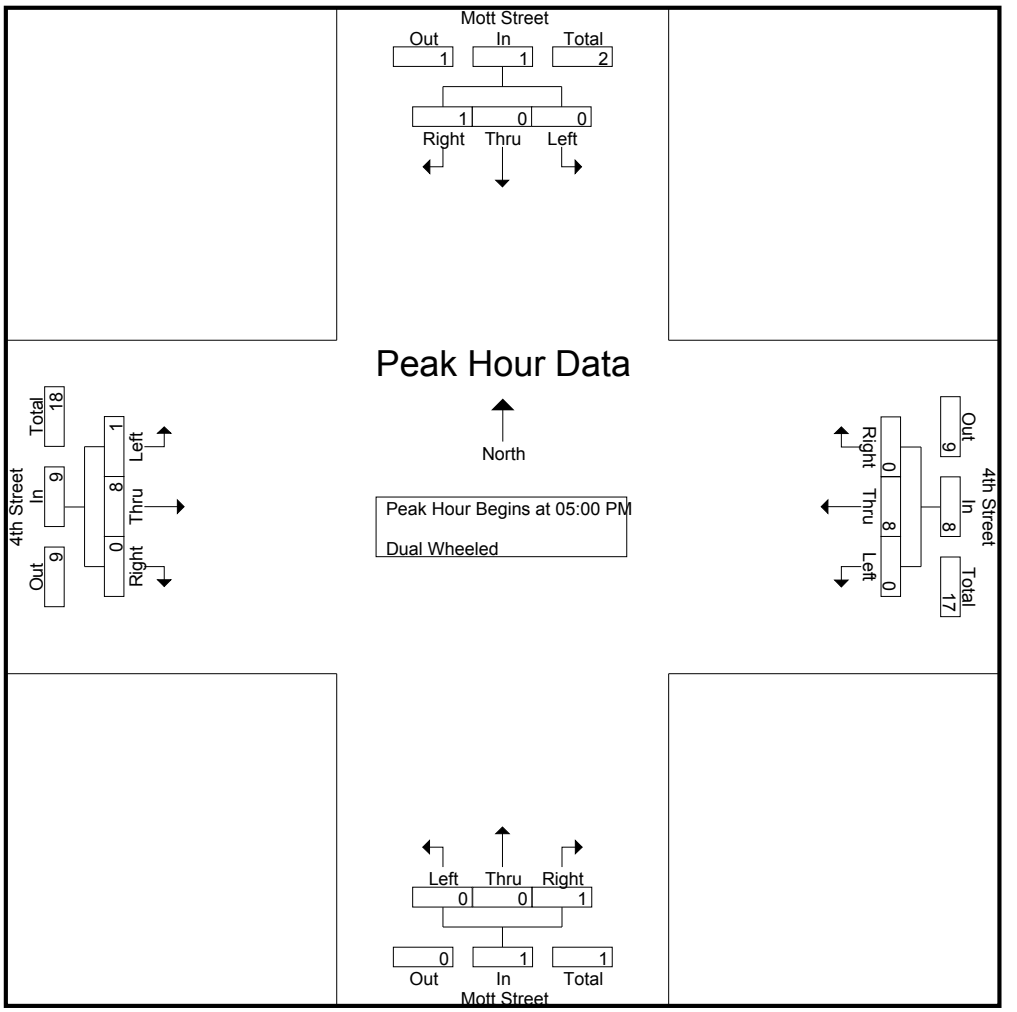
	Mott Street Southbound				4th Street Westbound				Mott Street Northbound				4th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
03:00 PM	0	3	0	3	1	1	0	2	0	2	0	2	0	2	0	2	9
03:15 PM	0	0	0	0	1	2	0	3	0	0	0	0	0	1	0	1	4
03:30 PM	1	0	0	1	0	1	0	1	0	0	0	0	1	1	0	2	4
03:45 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	2	0	2	4
Total	1	3	0	4	2	6	0	8	0	2	0	2	1	6	0	7	21
04:00 PM	0	0	2	2	0	1	0	1	0	0	0	0	0	7	0	7	10
04:15 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	2	0	2	3
04:30 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	4	0	4	5
04:45 PM	0	0	0	0	0	2	0	2	0	0	0	0	2	2	0	4	6
Total	0	0	2	2	0	5	0	5	0	0	0	0	2	15	0	17	24
05:00 PM	0	0	1	1	0	4	0	4	0	0	0	0	1	1	0	2	7
05:15 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	2
05:30 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	3	0	3	4
05:45 PM	0	0	0	0	0	2	0	2	0	0	1	1	0	3	0	3	6
Total	0	0	1	1	0	8	0	8	0	0	1	1	1	8	0	9	19
Grand Total	1	3	3	7	2	19	0	21	0	2	1	3	4	29	0	33	64
Apprch %	14.3	42.9	42.9		9.5	90.5	0		0	66.7	33.3		12.1	87.9	0		
Total %	1.6	4.7	4.7	10.9	3.1	29.7	0	32.8	0	3.1	1.6	4.7	6.2	45.3	0	51.6	

	Mott Street Southbound				4th Street Westbound				Mott Street Northbound				4th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	0	0	**1**	**1**	0	**4**	0	**4**	0	0	0	0	**1**	1	0	2	**7**
05:15 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	2
05:30 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	**3**	0	**3**	4
05:45 PM	0	0	0	0	0	2	0	2	0	0	**1**	**1**	0	3	0	3	6
Total Volume	0	0	1	1	0	8	0	8	0	0	1	1	1	8	0	9	19
% App. Total	0	0	100		0	100	0		0	0	100		11.1	88.9	0		
PHF	.000	.000	.250	.250	.000	.500	.000	.500	.000	.000	.250	.250	.250	.667	.000	.750	.679

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City of Los Angeles
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Weather: Clear

File Name : LACMO4TPM
Site Code : 04116347
Start Date : 6/2/2016
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Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	05:00 PM				05:00 PM				05:00 PM				05:00 PM			
+0 mins.	0	0	**1**	**1**	0	**4**	0	**4**	0	0	0	0	**1**	1	0	2
+15 mins.	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1
+30 mins.	0	0	0	0	0	1	0	1	0	0	0	0	0	**3**	0	**3**
+45 mins.	0	0	0	0	0	2	0	2	0	0	**1**	**1**	0	3	0	3
Total Volume	0	0	1	1	0	8	0	8	0	0	1	1	1	8	0	9
% App. Total	0	0	100		0	100	0		0	0	100		11.1	88.9	0	
PHF	.000	.000	.250	.250	.000	.500	.000	.500	.000	.000	.250	.250	.250	.667	.000	.750

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File Name : LACMO4TPM
Site Code : 04116347
Start Date : 6/2/2016
Page No : 1

Groups Printed- Buses

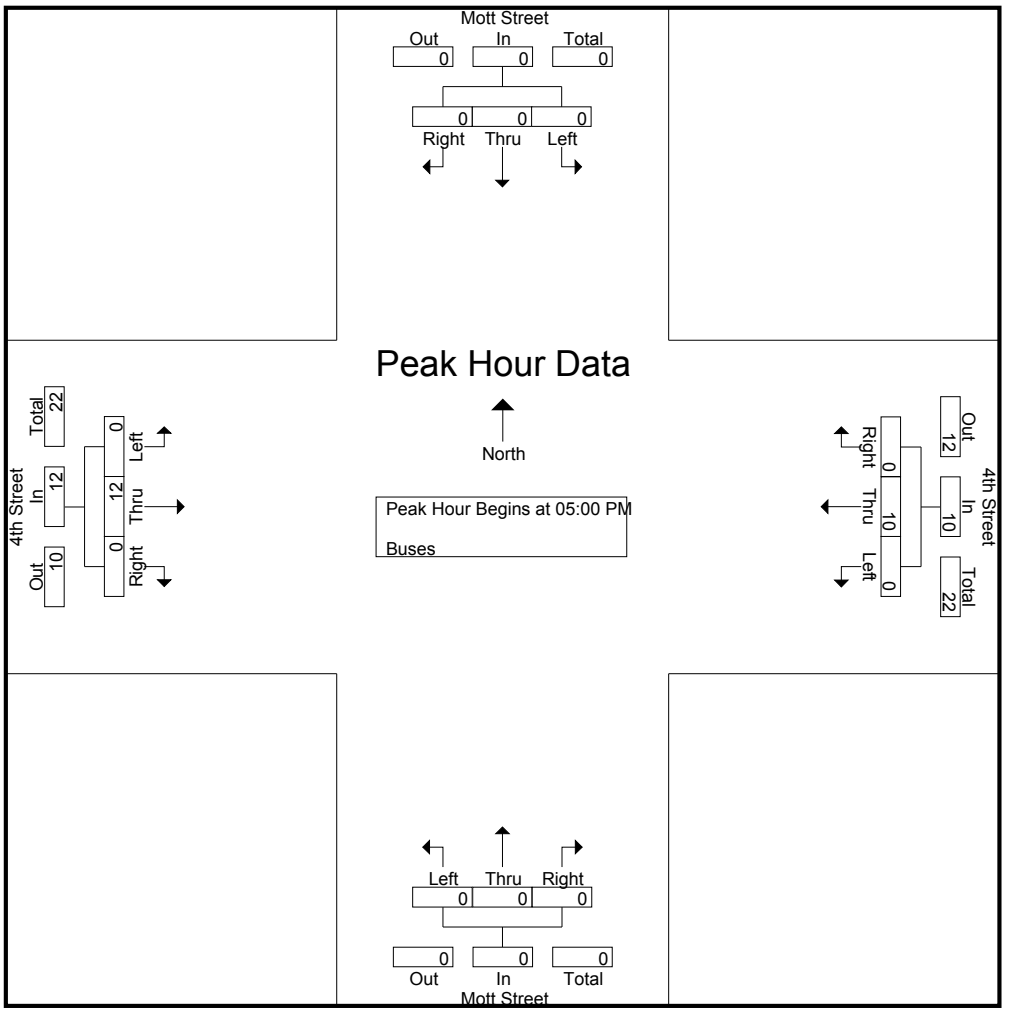
	Mott Street Southbound				4th Street Westbound				Mott Street Northbound				4th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
03:00 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	4	0	4	6
03:15 PM	0	0	0	0	0	4	0	4	0	0	1	1	0	3	1	4	9
03:30 PM	0	0	0	0	0	3	0	3	0	0	0	0	0	3	0	3	6
03:45 PM	0	1	0	1	0	3	0	3	0	0	0	0	0	2	0	2	6
Total	0	1	0	1	0	12	0	12	0	0	1	1	0	12	1	13	27
04:00 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	5	0	5	7
04:15 PM	0	0	0	0	0	3	0	3	0	0	0	0	0	2	0	2	5
04:30 PM	0	0	0	0	0	4	0	4	0	0	0	0	0	4	0	4	8
04:45 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	3	0	3	5
Total	0	0	0	0	0	11	0	11	0	0	0	0	0	14	0	14	25
05:00 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	3	0	3	5
05:15 PM	0	0	0	0	0	4	0	4	0	0	0	0	0	3	0	3	7
05:30 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	5	0	5	7
05:45 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	1	0	1	3
Total	0	0	0	0	0	10	0	10	0	0	0	0	0	12	0	12	22
Grand Total	0	1	0	1	0	33	0	33	0	0	1	1	0	38	1	39	74
Apprch %	0	100	0		0	100	0		0	0	100		0	97.4	2.6		
Total %	0	1.4	0	1.4	0	44.6	0	44.6	0	0	1.4	1.4	0	51.4	1.4	52.7	

	Mott Street Southbound				4th Street Westbound				Mott Street Northbound				4th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	3	0	3	5
05:15 PM	0	0	0	0	0	**4**	0	**4**	0	0	0	0	0	3	0	3	**7**
05:30 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	**5**	0	**5**	7
05:45 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	1	0	1	3
Total Volume	0	0	0	0	0	10	0	10	0	0	0	0	0	12	0	12	22
% App. Total	0	0	0		0	100	0		0	0	0		0	100	0		
PHF	.000	.000	.000	.000	.000	.625	.000	.625	.000	.000	.000	.000	.000	.600	.000	.600	.786

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File Name : LACMO4TPM
Site Code : 04116347
Start Date : 6/2/2016
Page No : 2



Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	05:00 PM				05:00 PM				05:00 PM				05:00 PM			
+0 mins.	0	0	0	0	0	2	0	2	0	0	0	0	0	3	0	3
+15 mins.	0	0	0	0	0	**4**	0	**4**	0	0	0	0	0	3	0	3
+30 mins.	0	0	0	0	0	2	0	2	0	0	0	0	0	**5**	0	**5**
+45 mins.	0	0	0	0	0	2	0	2	0	0	0	0	0	1	0	1
Total Volume	0	0	0	0	0	10	0	10	0	0	0	0	0	12	0	12
% App. Total	0	0	0		0	100	0		0	0	0		0	100	0	
PHF	.000	.000	.000	.000	.000	.625	.000	.625	.000	.000	.000	.000	.000	.600	.000	.600

City Of Los Angeles
Department Of Transportation
MANUAL TRAFFIC COUNT SUMMARY

STREET:

North/South Mathews Street

East/West 6th Street

Day: Thursday **Date:** June 2, 2016 **Weather:** CLEAR

Hours: 7-10AM 3-6PM **Staff:** CUI

School Day: YES **District:** Central I/S CODE 0

	N/B	S/B	E/B	W/B
DUAL-WHEELED	0	6	6	9
BIKES	1	4	10	3
BUSES	0	4	14	22

	N/B	TIME	S/B	TIME	E/B	TIME	W/B	TIME
AM PK 15 MIN	0	7.00	70	7.45	107	7.30	73	7.30
PM PK 15 MIN	0	3.00	41	3.00	47	5.30	66	3.00
AM PK HOUR	0	7.00	229	7.15	293	7.00	229	7.15
PM PK HOUR	0	3.00	151	5.00	159	4.45	193	3.00

NORTHBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	0	0	0	0
8-9	0	0	0	0
9-10	0	0	0	0
3-4	0	0	0	0
4-5	0	0	0	0
5-6	0	0	0	0
TOTAL	0	0	0	0

SOUTHBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	95	0	100	195
8-9	54	0	52	106
9-10	17	0	11	28
3-4	44	0	66	110
4-5	45	0	38	83
5-6	102	0	49	151
TOTAL	357	0	316	673

TOTAL	**XING S/L**		**XING N/L**	
N-S	Ped	Sch	Ped	Sch
195	0	1	12	120
106	3	2	9	33
28	0	0	9	2
110	0	0	9	121
83	0	0	10	26
151	0	0	8	24
673	3	3	57	326

EASTBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	77	216	0	293
8-9	33	56	0	89
9-10	14	23	0	37
3-4	43	83	0	126
4-5	51	79	0	130
5-6	55	99	0	154
TOTAL	273	556	0	829

WESTBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	0	139	89	228
8-9	0	44	38	82
9-10	0	29	13	42
3-4	0	106	87	193
4-5	0	61	30	91
5-6	0	61	41	102
TOTAL	0	440	298	738

TOTAL	**XING W/L**		**XING E/L**	
E-W	Ped	Sch	Ped	Sch
521	1	134	1	26
171	2	19	1	3
79	2	2	4	1
319	4	294	0	48
221	9	23	4	4
256	3	16	1	4
1567	21	488	11	86

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Groups Printed- Passenger Vehicles - Dual Wheeled - Buses

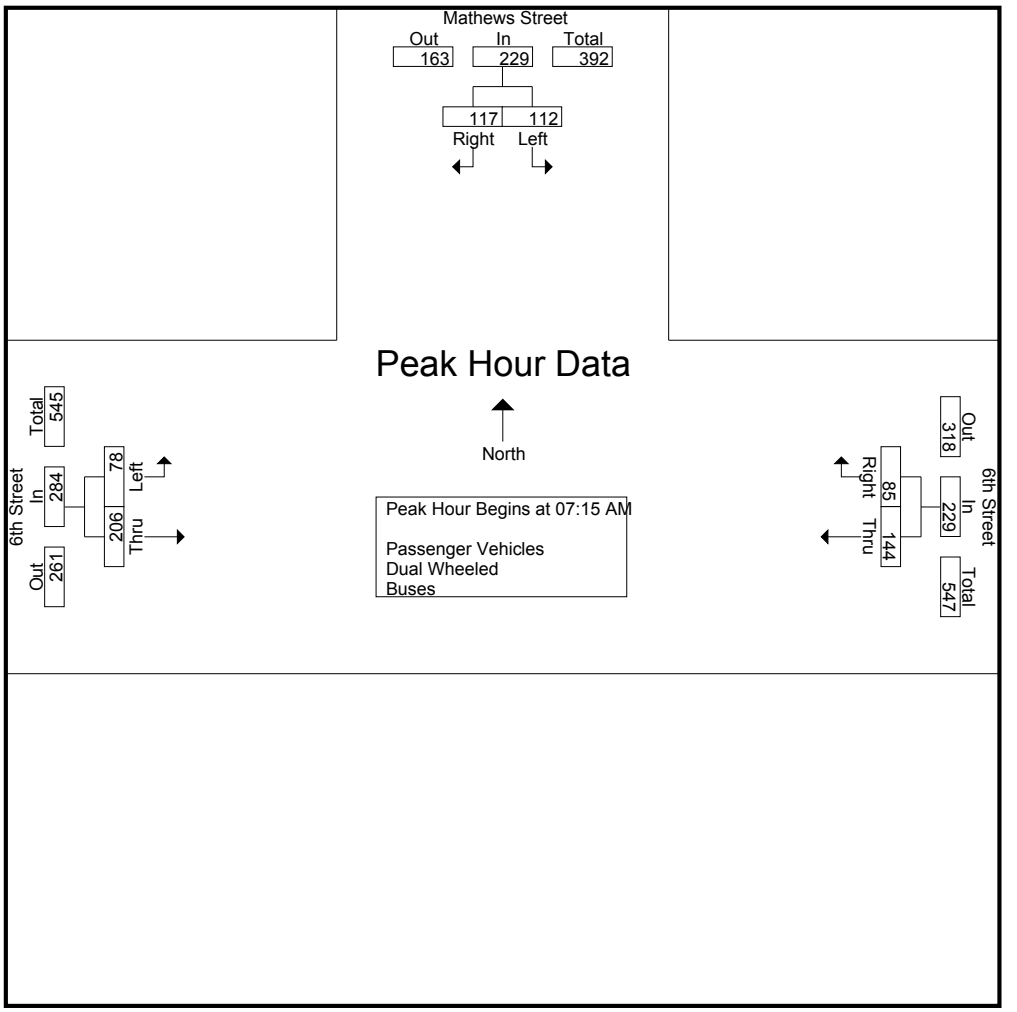
	Mathews Street Southbound			6th Street Westbound			6th Street Eastbound			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
07:00 AM	7	10	17	14	19	33	9	34	43	93
07:15 AM	28	23	51	36	17	53	20	67	87	191
07:30 AM	26	31	57	48	25	73	25	82	107	237
07:45 AM	34	36	70	41	28	69	23	33	56	195
Total	95	100	195	139	89	228	77	216	293	716
08:00 AM	24	27	51	19	15	34	10	24	34	119
08:15 AM	12	17	29	13	13	26	13	15	28	83
08:30 AM	14	4	18	6	8	14	6	8	14	46
08:45 AM	4	4	8	6	2	8	4	9	13	29
Total	54	52	106	44	38	82	33	56	89	277
09:00 AM	3	2	5	9	3	12	3	9	12	29
09:15 AM	6	5	11	5	3	8	1	3	4	23
09:30 AM	4	1	5	9	4	13	2	6	8	26
09:45 AM	4	3	7	6	3	9	8	5	13	29
Total	17	11	28	29	13	42	14	23	37	107
Grand Total	166	163	329	212	140	352	124	295	419	1100
Apprch %	50.5	49.5		60.2	39.8		29.6	70.4		
Total %	15.1	14.8	29.9	19.3	12.7	32	11.3	26.8	38.1	
Passenger Vehicles	165	160	325	196	137	333	123	285	408	1066
% Passenger Vehicles	99.4	98.2	98.8	92.5	97.9	94.6	99.2	96.6	97.4	96.9
Dual Wheeled	0	3	3	6	1	7	1	4	5	15
% Dual Wheeled	0	1.8	0.9	2.8	0.7	2	0.8	1.4	1.2	1.4
Buses	1	0	1	10	2	12	0	6	6	19
% Buses	0.6	0	0.3	4.7	1.4	3.4	0	2	1.4	1.7

	Mathews Street Southbound			6th Street Westbound			6th Street Eastbound			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 09:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:15 AM										
07:15 AM	28	23	51	36	17	53	20	67	87	191
07:30 AM	26	31	57	**48**	25	**73**	**25**	**82**	**107**	**237**
07:45 AM	**34**	**36**	**70**	41	**28**	69	23	33	56	195
08:00 AM	24	27	51	19	15	34	10	24	34	119
Total Volume	112	117	229	144	85	229	78	206	284	742
% App. Total	48.9	51.1		62.9	37.1		27.5	72.5		
PHF	.824	.813	.818	.750	.759	.784	.780	.628	.664	.783

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Peak Hour Analysis From 07:00 AM to 09:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM			07:15 AM			07:00 AM		
+0 mins.	28	23	51	36	17	53	9	34	43
+15 mins.	26	31	57	**48**	25	**73**	20	67	87
+30 mins.	**34**	**36**	**70**	41	**28**	69	**25**	**82**	**107**
+45 mins.	24	27	51	19	15	34	23	33	56
Total Volume	112	117	229	144	85	229	77	216	293
% App. Total	48.9	51.1		62.9	37.1		26.3	73.7	
PHF	.824	.813	.818	.750	.759	.784	.770	.659	.685

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Groups Printed- Passenger Vehicles

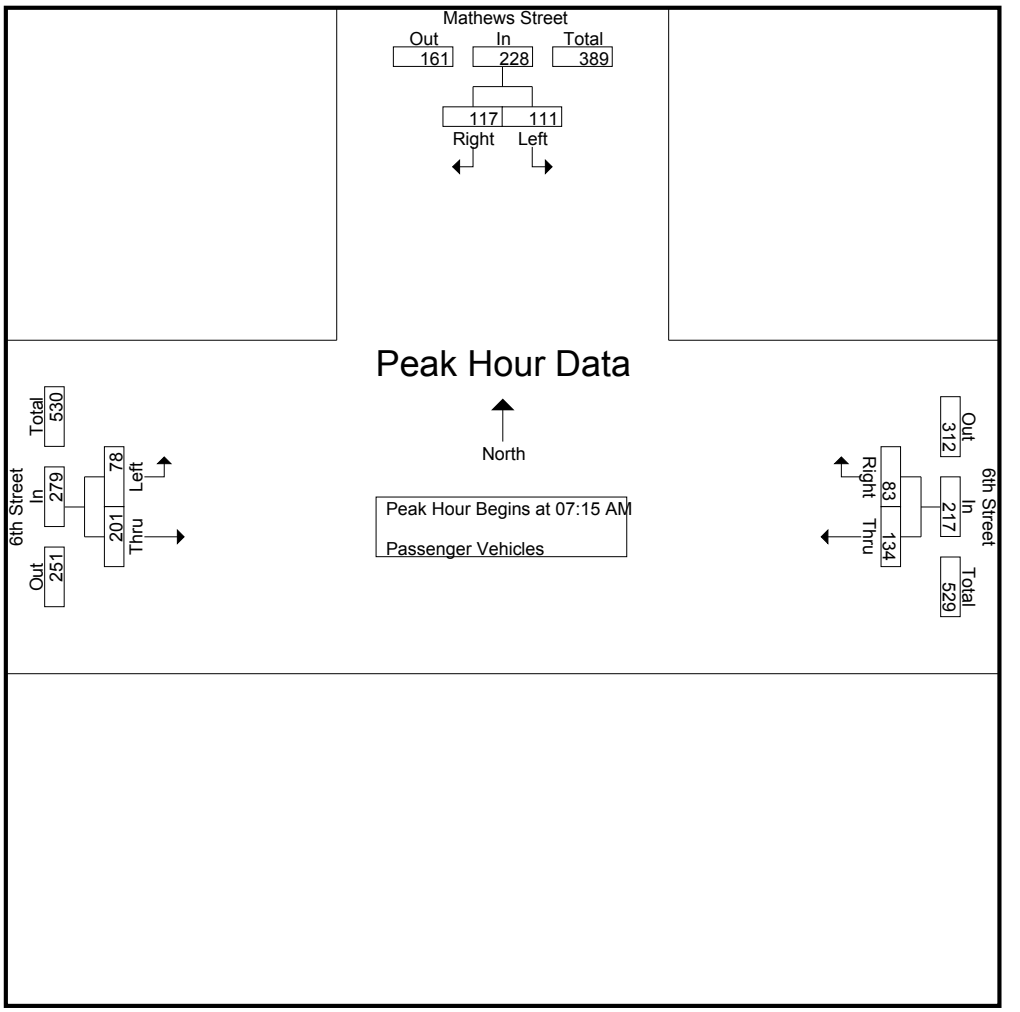
	Mathews Street Southbound			6th Street Westbound			6th Street Eastbound			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
07:00 AM	7	10	17	12	18	30	9	31	40	87
07:15 AM	28	23	51	28	15	43	20	63	83	177
07:30 AM	26	31	57	46	25	71	25	82	107	235
07:45 AM	34	36	70	41	28	69	23	32	55	194
Total	95	100	195	127	86	213	77	208	285	693
08:00 AM	23	27	50	19	15	34	10	24	34	118
08:15 AM	12	15	27	11	13	24	12	14	26	77
08:30 AM	14	4	18	6	8	14	6	7	13	45
08:45 AM	4	4	8	6	2	8	4	9	13	29
Total	53	50	103	42	38	80	32	54	86	269
09:00 AM	3	2	5	8	3	11	3	9	12	28
09:15 AM	6	4	10	4	3	7	1	3	4	21
09:30 AM	4	1	5	9	4	13	2	6	8	26
09:45 AM	4	3	7	6	3	9	8	5	13	29
Total	17	10	27	27	13	40	14	23	37	104
Grand Total	165	160	325	196	137	333	123	285	408	1066
Apprch %	50.8	49.2		58.9	41.1		30.1	69.9		
Total %	15.5	15	30.5	18.4	12.9	31.2	11.5	26.7	38.3	

	Mathews Street Southbound			6th Street Westbound			6th Street Eastbound			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:15 AM										
07:15 AM	28	23	51	28	15	43	20	63	83	177
07:30 AM	26	31	57	**46**	25	**71**	**25**	**82**	**107**	**235**
07:45 AM	**34**	**36**	**70**	41	**28**	69	23	32	55	194
08:00 AM	23	27	50	19	15	34	10	24	34	118
Total Volume	111	117	228	134	83	217	78	201	279	724
% App. Total	48.7	51.3		61.8	38.2		28	72		
PHF	.816	.813	.814	.728	.741	.764	.780	.613	.652	.770

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Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM			07:15 AM			07:15 AM		
+0 mins.	28	23	51	28	15	43	20	63	83
+15 mins.	26	31	57	**46**	25	**71**	**25**	**82**	**107**
+30 mins.	**34**	**36**	**70**	41	**28**	69	23	32	55
+45 mins.	23	27	50	19	15	34	10	24	34
Total Volume	111	117	228	134	83	217	78	201	279
% App. Total	48.7	51.3		61.8	38.2		28	72	
PHF	.816	.813	.814	.728	.741	.764	.780	.613	.652

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Groups Printed- Dual Wheeled

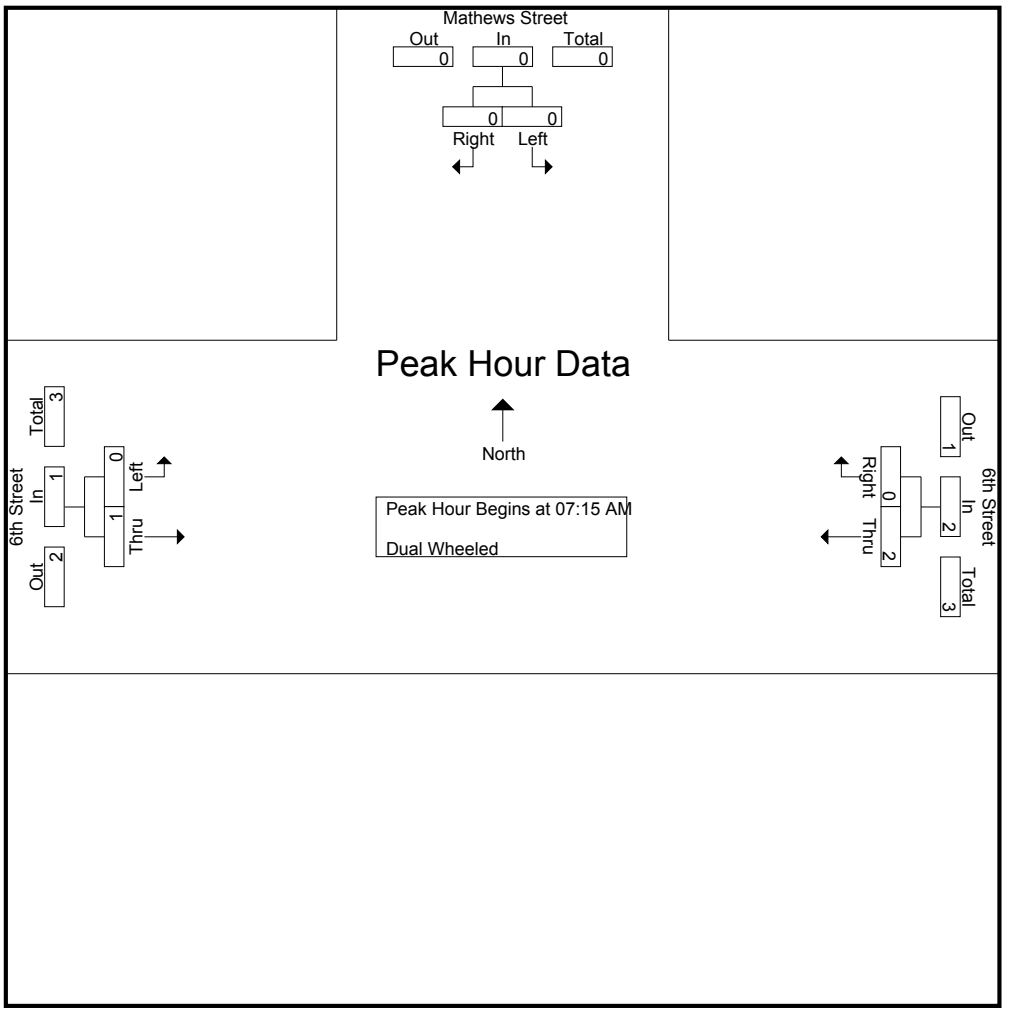
	Mathews Street Southbound			6th Street Westbound			6th Street Eastbound			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
07:00 AM	0	0	0	0	1	1	0	1	1	2
07:15 AM	0	0	0	1	0	1	0	1	1	2
07:30 AM	0	0	0	1	0	1	0	0	0	1
07:45 AM	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	2	1	3	0	2	2	5
08:00 AM	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	2	2	2	0	2	1	1	2	6
08:30 AM	0	0	0	0	0	0	0	1	1	1
08:45 AM	0	0	0	0	0	0	0	0	0	0
Total	0	2	2	2	0	2	1	2	3	7
09:00 AM	0	0	0	1	0	1	0	0	0	1
09:15 AM	0	1	1	1	0	1	0	0	0	2
09:30 AM	0	0	0	0	0	0	0	0	0	0
09:45 AM	0	0	0	0	0	0	0	0	0	0
Total	0	1	1	2	0	2	0	0	0	3
Grand Total	0	3	3	6	1	7	1	4	5	15
Apprch %	0	100		85.7	14.3		20	80		
Total %	0	20	20	40	6.7	46.7	6.7	26.7	33.3	

	Mathews Street Southbound			6th Street Westbound			6th Street Eastbound			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:15 AM										
07:15 AM	0	0	0	**1**	0	**1**	0	**1**	**1**	**2**
07:30 AM	0	0	0	1	0	1	0	0	0	1
07:45 AM	0	0	0	0	0	0	0	0	0	0
08:00 AM	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	2	0	2	0	1	1	3
% App. Total	0	0		100	0		0	100		
PHF	.000	.000	.000	.500	.000	.500	.000	.250	.250	.375

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Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM			07:15 AM			07:15 AM		
+0 mins.	0	0	0	**1**	0	**1**	0	**1**	**1**
+15 mins.	0	0	0	1	0	1	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	2	0	2	0	1	1
% App. Total	0	0		100	0		0	100	
PHF	.000	.000	.000	.500	.000	.500	.000	.250	.250

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File Name : LACMA6TAM
Site Code : 04116347
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Groups Printed- Buses

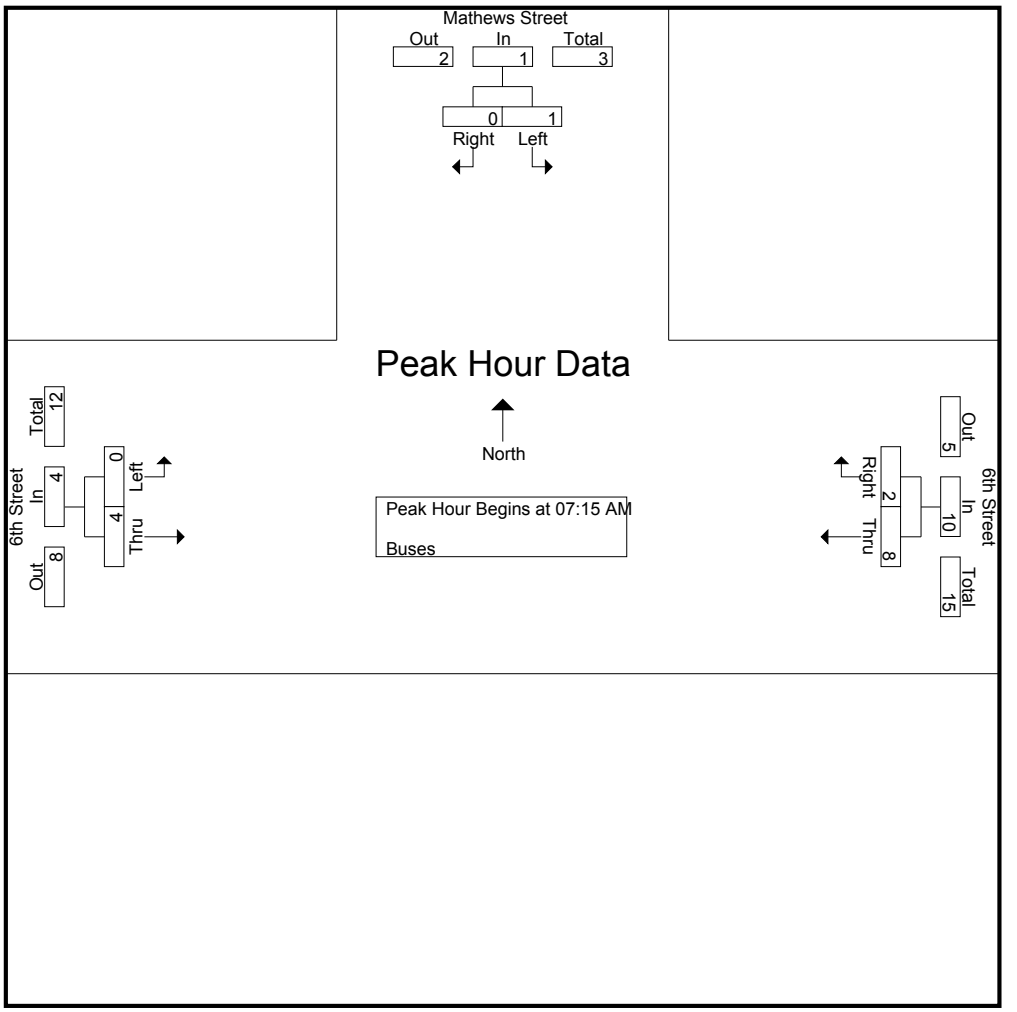
	Mathews Street Southbound			6th Street Westbound			6th Street Eastbound			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
07:00 AM	0	0	0	2	0	2	0	2	2	4
07:15 AM	0	0	0	7	2	9	0	3	3	12
07:30 AM	0	0	0	1	0	1	0	0	0	1
07:45 AM	0	0	0	0	0	0	0	1	1	1
Total	0	0	0	10	2	12	0	6	6	18
08:00 AM	1	0	1	0	0	0	0	0	0	1
08:15 AM	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	0
Total	1	0	1	0	0	0	0	0	0	1
09:00 AM	0	0	0	0	0	0	0	0	0	0
09:15 AM	0	0	0	0	0	0	0	0	0	0
09:30 AM	0	0	0	0	0	0	0	0	0	0
09:45 AM	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0
Grand Total	1	0	1	10	2	12	0	6	6	19
Apprch %	100	0		83.3	16.7		0	100		
Total %	5.3	0	5.3	52.6	10.5	63.2	0	31.6	31.6	

	Mathews Street Southbound			6th Street Westbound			6th Street Eastbound			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:15 AM										
07:15 AM	0	0	0	**7**	**2**	**9**	0	**3**	**3**	**12**
07:30 AM	0	0	0	1	0	1	0	0	0	1
07:45 AM	0	0	0	0	0	0	0	1	1	1
08:00 AM	**1**	0	**1**	0	0	0	0	0	0	1
Total Volume	1	0	1	8	2	10	0	4	4	15
% App. Total	100	0		80	20		0	100		
PHF	.250	.000	.250	.286	.250	.278	.000	.333	.333	.313

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Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM			07:15 AM			07:15 AM		
+0 mins.	0	0	0	**7**	**2**	**9**	0	**3**	**3**
+15 mins.	0	0	0	1	0	1	0	0	0
+30 mins.	0	0	0	0	0	0	0	1	1
+45 mins.	**1**	0	**1**	0	0	0	0	0	0
Total Volume	1	0	1	8	2	10	0	4	4
% App. Total	100	0		80	20		0	100	
PHF	.250	.000	.250	.286	.250	.278	.000	.333	.333

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File Name : LACMA6TPM
Site Code : 04116347
Start Date : 6/2/2016
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Groups Printed- Passenger Vehicles - Dual Wheeled - Buses

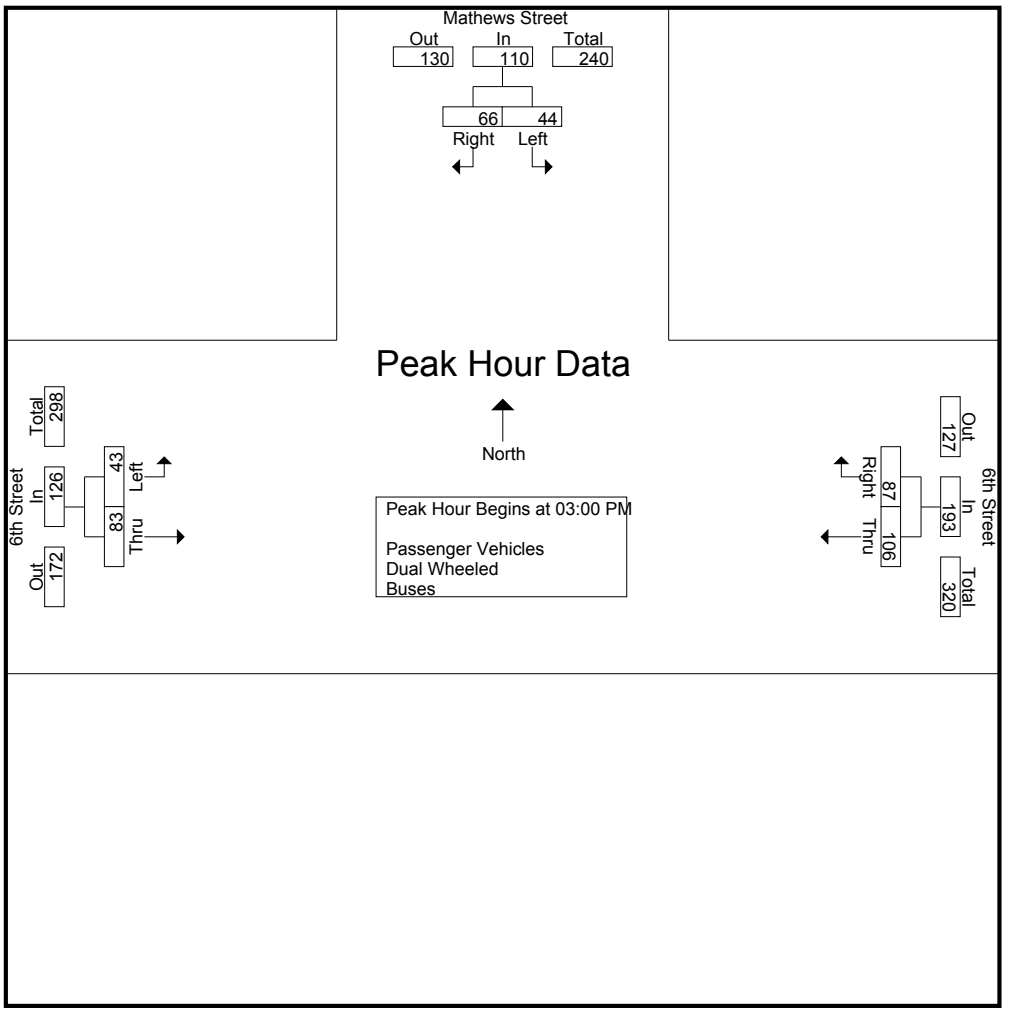
	Mathews Street Southbound			6th Street Westbound			6th Street Eastbound			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
03:00 PM	14	27	41	36	30	66	6	27	33	140
03:15 PM	14	15	29	28	27	55	13	26	39	123
03:30 PM	10	12	22	19	15	34	12	18	30	86
03:45 PM	6	12	18	23	15	38	12	12	24	80
Total	44	66	110	106	87	193	43	83	126	429
04:00 PM	10	7	17	16	9	25	12	20	32	74
04:15 PM	9	11	20	11	4	15	9	13	22	57
04:30 PM	10	6	16	17	7	24	15	18	33	73
04:45 PM	16	14	30	17	10	27	15	28	43	100
Total	45	38	83	61	30	91	51	79	130	304
05:00 PM	22	15	37	23	9	32	14	16	30	99
05:15 PM	24	14	38	9	14	23	15	24	39	100
05:30 PM	25	11	36	19	9	28	16	31	47	111
05:45 PM	31	9	40	10	9	19	10	28	38	97
Total	102	49	151	61	41	102	55	99	154	407
Grand Total	191	153	344	228	158	386	149	261	410	1140
Apprch %	55.5	44.5		59.1	40.9		36.3	63.7		
Total %	16.8	13.4	30.2	20	13.9	33.9	13.1	22.9	36	
Passenger Vehicles	188	150	338	218	156	374	141	260	401	1113
% Passenger Vehicles	98.4	98	98.3	95.6	98.7	96.9	94.6	99.6	97.8	97.6
Dual Wheeled	2	1	3	1	1	2	0	1	1	6
% Dual Wheeled	1	0.7	0.9	0.4	0.6	0.5	0	0.4	0.2	0.5
Buses	1	2	3	9	1	10	8	0	8	21
% Buses	0.5	1.3	0.9	3.9	0.6	2.6	5.4	0	2	1.8

	Mathews Street Southbound			6th Street Westbound			6th Street Eastbound			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
Peak Hour Analysis From 03:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 03:00 PM										
03:00 PM	**14**	**27**	**41**	**36**	**30**	**66**	6	**27**	33	**140**
03:15 PM	14	15	29	28	27	55	**13**	26	**39**	123
03:30 PM	10	12	22	19	15	34	12	18	30	86
03:45 PM	6	12	18	23	15	38	12	12	24	80
Total Volume	44	66	110	106	87	193	43	83	126	429
% App. Total	40	60		54.9	45.1		34.1	65.9		
PHF	.786	.611	.671	.736	.725	.731	.827	.769	.808	.766

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Peak Hour Analysis From 03:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	05:00 PM			03:00 PM			04:45 PM		
+0 mins.	22	**15**	37	**36**	**30**	**66**	15	28	43
+15 mins.	24	14	38	28	27	55	14	16	30
+30 mins.	25	11	36	19	15	34	15	24	39
+45 mins.	**31**	9	**40**	23	15	38	**16**	**31**	**47**
Total Volume	102	49	151	106	87	193	60	99	159
% App. Total	67.5	32.5		54.9	45.1		37.7	62.3	
PHF	.823	.817	.944	.736	.725	.731	.938	.798	.846

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City of Los Angeles
N/S: Mathews Street
E/W: 6th Street
Weather: Clear

File Name : LACMA6TPM
Site Code : 04116347
Start Date : 6/2/2016
Page No : 1

Groups Printed- Passenger Vehicles

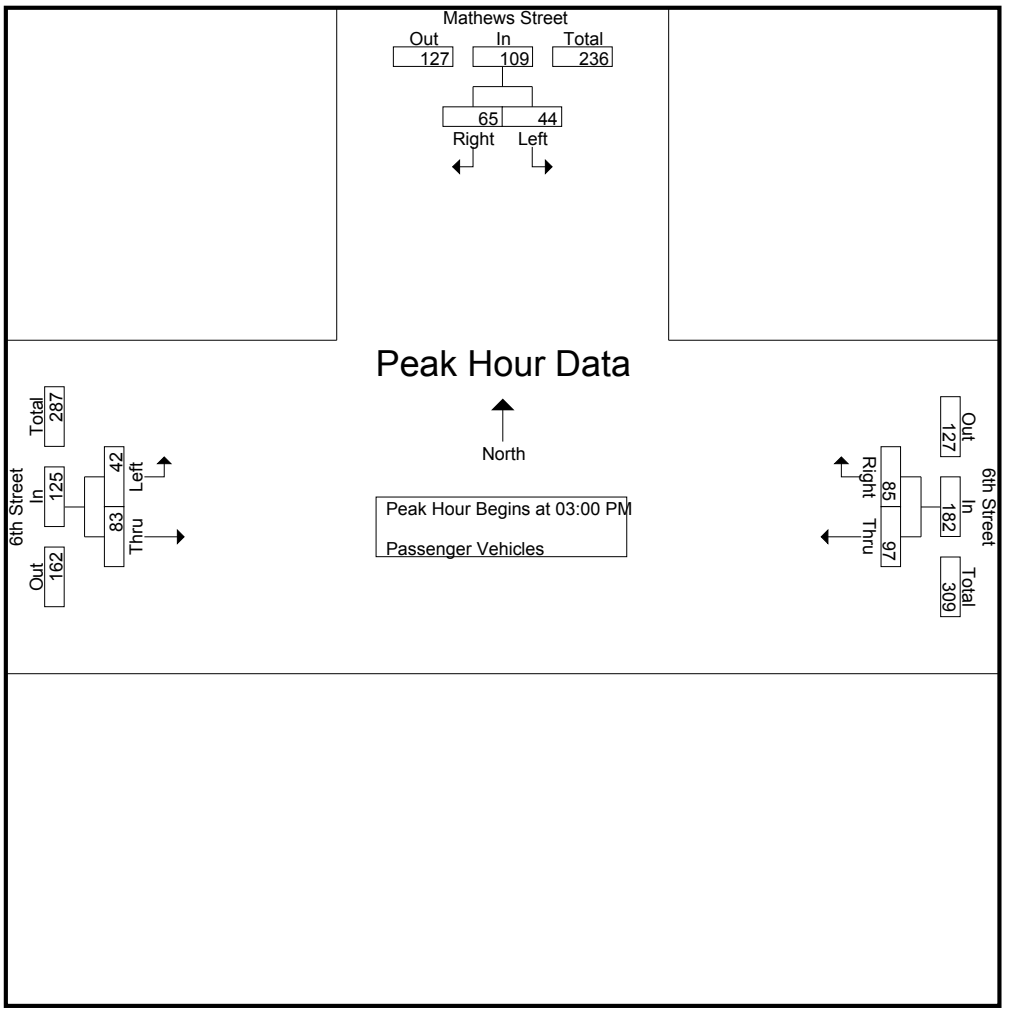
	Mathews Street Southbound			6th Street Westbound			6th Street Eastbound			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
03:00 PM	14	27	41	32	29	61	6	27	33	135
03:15 PM	14	15	29	24	27	51	13	26	39	119
03:30 PM	10	11	21	19	15	34	11	18	29	84
03:45 PM	6	12	18	22	14	36	12	12	24	78
Total	44	65	109	97	85	182	42	83	125	416
04:00 PM	9	7	16	16	9	25	11	20	31	72
04:15 PM	9	11	20	11	4	15	7	13	20	55
04:30 PM	9	6	15	17	7	24	14	18	32	71
04:45 PM	15	12	27	16	10	26	14	28	42	95
Total	42	36	78	60	30	90	46	79	125	293
05:00 PM	22	15	37	23	9	32	14	16	30	99
05:15 PM	24	14	38	9	14	23	13	24	37	98
05:30 PM	25	11	36	19	9	28	16	30	46	110
05:45 PM	31	9	40	10	9	19	10	28	38	97
Total	102	49	151	61	41	102	53	98	151	404
Grand Total	188	150	338	218	156	374	141	260	401	1113
Apprch %	55.6	44.4		58.3	41.7		35.2	64.8		
Total %	16.9	13.5	30.4	19.6	14	33.6	12.7	23.4	36	

	Mathews Street Southbound			6th Street Westbound			6th Street Eastbound			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
Peak Hour Analysis From 03:00 PM to 03:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 03:00 PM										
03:00 PM	**14**	**27**	**41**	**32**	**29**	**61**	6	**27**	33	**135**
03:15 PM	14	15	29	24	27	51	**13**	26	**39**	119
03:30 PM	10	11	21	19	15	34	11	18	29	84
03:45 PM	6	12	18	22	14	36	12	12	24	78
Total Volume	44	65	109	97	85	182	42	83	125	416
% App. Total	40.4	59.6		53.3	46.7		33.6	66.4		
PHF	.786	.602	.665	.758	.733	.746	.808	.769	.801	.770

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Peak Hour Analysis From 03:00 PM to 03:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	03:00 PM			03:00 PM			03:00 PM		
+0 mins.	**14**	**27**	**41**	**32**	**29**	**61**	6	**27**	33
+15 mins.	14	15	29	24	27	51	**13**	26	**39**
+30 mins.	10	11	21	19	15	34	11	18	29
+45 mins.	6	12	18	22	14	36	12	12	24
Total Volume	44	65	109	97	85	182	42	83	125
% App. Total	40.4	59.6		53.3	46.7		33.6	66.4	
PHF	.786	.602	.665	.758	.733	.746	.808	.769	.801

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Groups Printed- Dual Wheeled

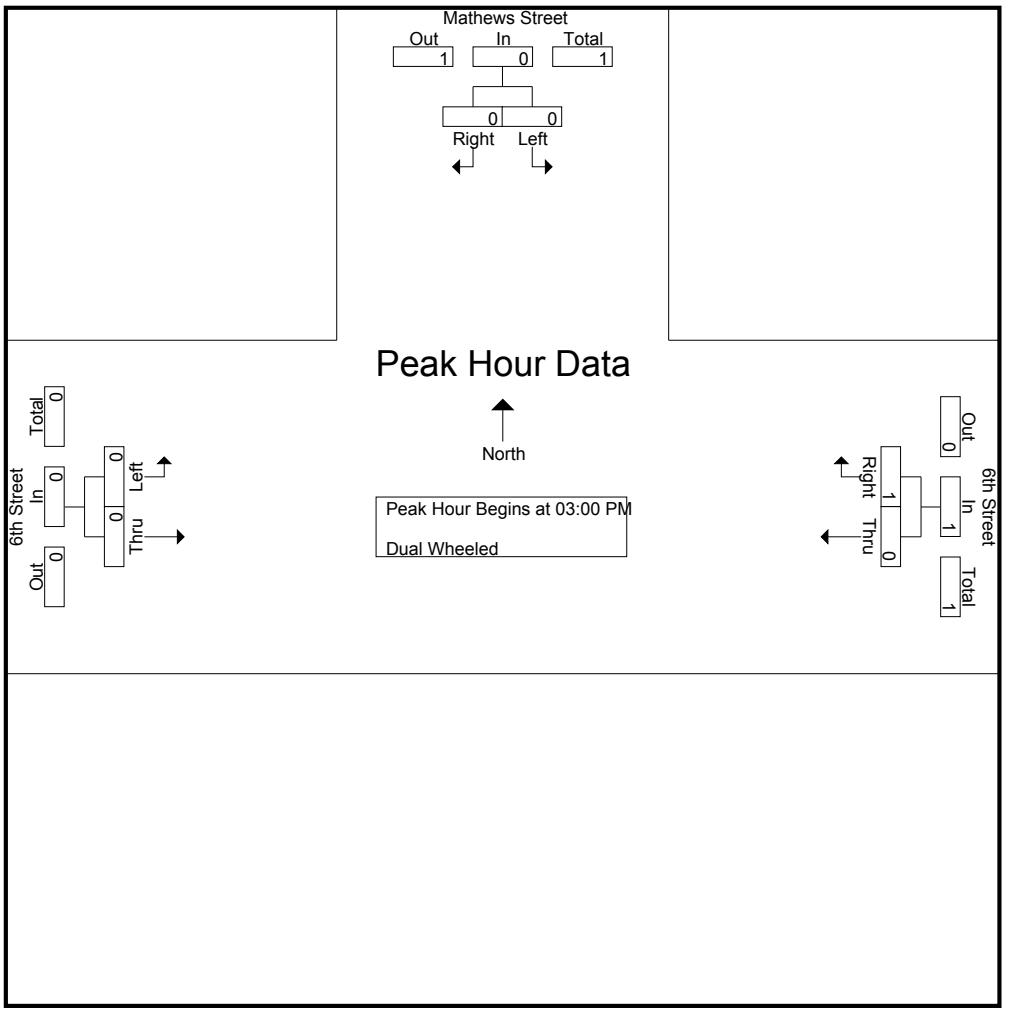
	Mathews Street Southbound			6th Street Westbound			6th Street Eastbound			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
03:00 PM	0	0	0	0	0	0	0	0	0	0
03:15 PM	0	0	0	0	0	0	0	0	0	0
03:30 PM	0	0	0	0	0	0	0	0	0	0
03:45 PM	0	0	0	0	1	1	0	0	0	1
Total	0	0	0	0	1	1	0	0	0	1
04:00 PM	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0
04:30 PM	1	0	1	0	0	0	0	0	0	1
04:45 PM	1	1	2	1	0	1	0	0	0	3
Total	2	1	3	1	0	1	0	0	0	4
05:00 PM	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	1	1	1
05:45 PM	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	1	1	1
Grand Total	2	1	3	1	1	2	0	1	1	6
Apprch %	66.7	33.3		50	50		0	100		
Total %	33.3	16.7	50	16.7	16.7	33.3	0	16.7	16.7	

	Mathews Street Southbound			6th Street Westbound			6th Street Eastbound			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
Peak Hour Analysis From 03:00 PM to 03:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 03:00 PM										
03:00 PM	0	0	0	0	0	0	0	0	0	0
03:15 PM	0	0	0	0	0	0	0	0	0	0
03:30 PM	0	0	0	0	0	0	0	0	0	0
03:45 PM	0	0	0	0	**1**	**1**	0	0	0	**1**
Total Volume	0	0	0	0	1	1	0	0	0	1
% App. Total	0	0		0	100		0	0		
PHF	.000	.000	.000	.000	.250	.250	.000	.000	.000	.250

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Site Code : 04116347
Start Date : 6/2/2016
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Peak Hour Analysis From 03:00 PM to 03:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	03:00 PM			03:00 PM			03:00 PM		
+0 mins.	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	**1**	**1**	0	0	0
Total Volume	0	0	0	0	1	1	0	0	0
% App. Total	0	0		0	100		0	0	
PHF	.000	.000	.000	.000	.250	.250	.000	.000	.000

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Groups Printed- Buses

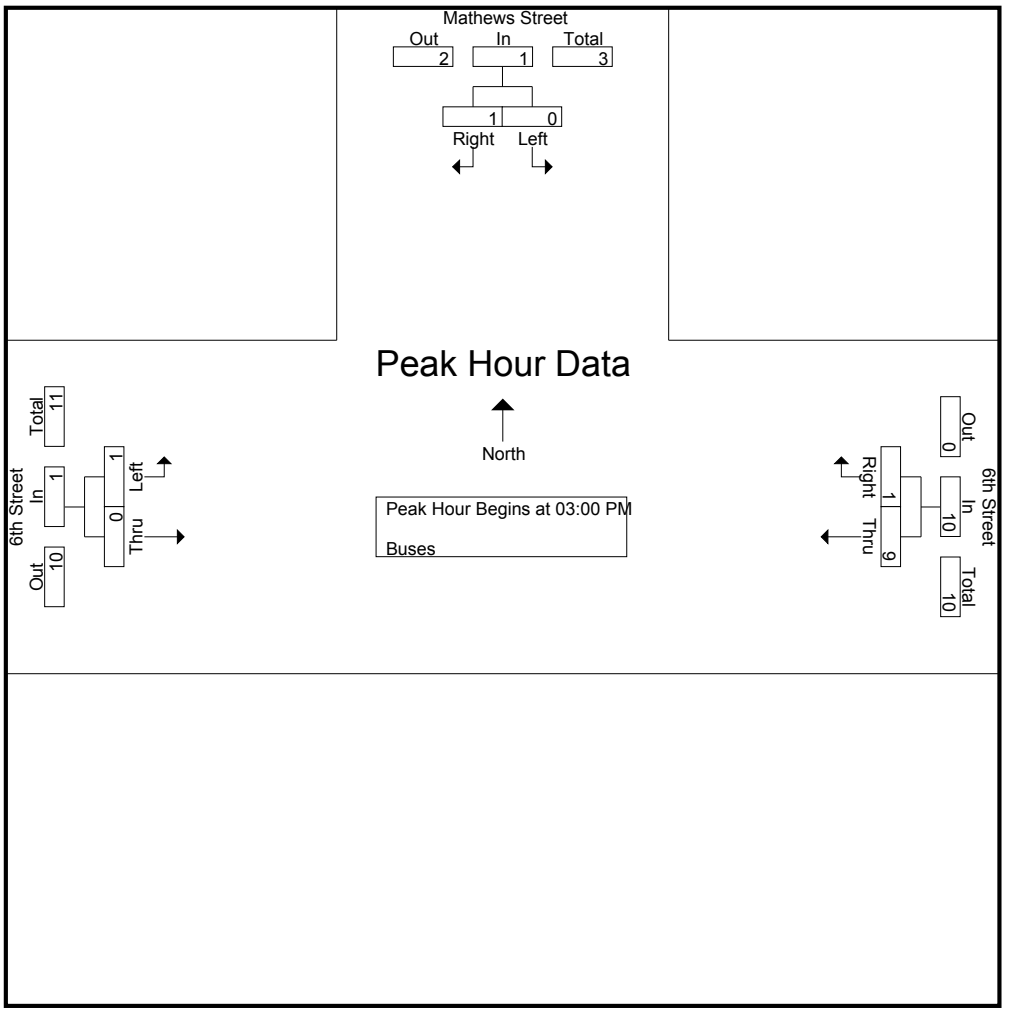
	Mathews Street Southbound			6th Street Westbound			6th Street Eastbound			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
03:00 PM	0	0	0	4	1	5	0	0	0	5
03:15 PM	0	0	0	4	0	4	0	0	0	4
03:30 PM	0	1	1	0	0	0	1	0	1	2
03:45 PM	0	0	0	1	0	1	0	0	0	1
Total	0	1	1	9	1	10	1	0	1	12
04:00 PM	1	0	1	0	0	0	1	0	1	2
04:15 PM	0	0	0	0	0	0	2	0	2	2
04:30 PM	0	0	0	0	0	0	1	0	1	1
04:45 PM	0	1	1	0	0	0	1	0	1	2
Total	1	1	2	0	0	0	5	0	5	7
05:00 PM	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	2	0	2	2
05:30 PM	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	2	0	2	2
Grand Total	1	2	3	9	1	10	8	0	8	21
Apprch %	33.3	66.7		90	10		100	0		
Total %	4.8	9.5	14.3	42.9	4.8	47.6	38.1	0	38.1	

	Mathews Street Southbound			6th Street Westbound			6th Street Eastbound			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
Peak Hour Analysis From 03:00 PM to 03:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 03:00 PM										
03:00 PM	0	0	0	**4**	**1**	**5**	0	0	0	**5**
03:15 PM	0	0	0	4	0	4	0	0	0	4
03:30 PM	0	**1**	**1**	0	0	0	**1**	0	**1**	2
03:45 PM	0	0	0	1	0	1	0	0	0	1
Total Volume	0	1	1	9	1	10	1	0	1	12
% App. Total	0	100		90	10		100	0		
PHF	.000	.250	.250	.563	.250	.500	.250	.000	.250	.600

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Peak Hour Analysis From 03:00 PM to 03:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	03:00 PM			03:00 PM			03:00 PM		
+0 mins.	0	0	0	**4**	**1**	**5**	0	0	0
+15 mins.	0	0	0	4	0	4	0	0	0
+30 mins.	0	**1**	**1**	0	0	0	**1**	0	**1**
+45 mins.	0	0	0	1	0	1	0	0	0
Total Volume	0	1	1	9	1	10	1	0	1
% App. Total	0	100		90	10		100	0	
PHF	.000	.250	.250	.563	.250	.500	.250	.000	.250

City Of Los Angeles
Department Of Transportation
MANUAL TRAFFIC COUNT SUMMARY

STREET:

North/South Mott Street

East/West 6th Street

Day: Thursday **Date:** June 2, 2016 **Weather:** CLEAR

Hours: 7-10AM 3-6PM **Staff:** CUI

School Day: YES **District:** Central I/S CODE 0

	N/B	S/B	E/B	W/B
DUAL-WHEELED	3	12	6	3
BIKES	7	3	9	0
BUSES	16	5	13	0

	N/B	TIME	S/B	TIME	E/B	TIME	W/B	TIME
AM PK 15 MIN	56	7.30	76	7.30	81	7.30	29	7.30
PM PK 15 MIN	48	3.00	54	3.00	60	3.00	18	3.00
AM PK HOUR	189	7.00	239	7.00	259	7.15	76	7.15
PM PK HOUR	147	5.00	162	5.00	176	3.00	38	3.00

NORTHBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	114	69	6	189
8-9	36	48	6	90
9-10	12	31	0	43
3-4	38	90	8	136
4-5	28	80	4	112
5-6	39	99	9	147
TOTAL	267	417	33	717

SOUTHBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	7	100	132	239
8-9	4	61	29	94
9-10	4	44	13	61
3-4	16	70	66	152
4-5	10	67	41	118
5-6	10	80	72	162
TOTAL	51	422	353	826

TOTAL	**XING S/L**		**XING N/L**	
N-S	Ped	Sch	Ped	Sch
428	5	122	8	56
184	4	11	3	10
104	3	2	3	0
288	2	128	0	40
230	1	6	4	7
309	2	10	15	9
1543	17	279	33	122

EASTBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	121	12	113	246
8-9	31	3	31	65
9-10	10	3	14	27
3-4	81	13	82	176
4-5	47	8	49	104
5-6	67	7	53	127
TOTAL	357	46	342	745

WESTBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	12	41	21	74
8-9	2	8	7	17
9-10	1	3	10	14
3-4	11	11	16	38
4-5	5	8	4	17
5-6	3	7	8	18
TOTAL	34	78	66	178

TOTAL	**XING W/L**		**XING E/L**	
E-W	Ped	Sch	Ped	Sch
320	4	85	15	55
82	2	17	5	11
41	5	1	5	4
214	9	185	6	54
121	6	26	3	7
145	14	24	5	4
923	40	338	39	135

(Rev Oct 06)

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Groups Printed- Passenger Vehicles - Dual Wheeled - Buses

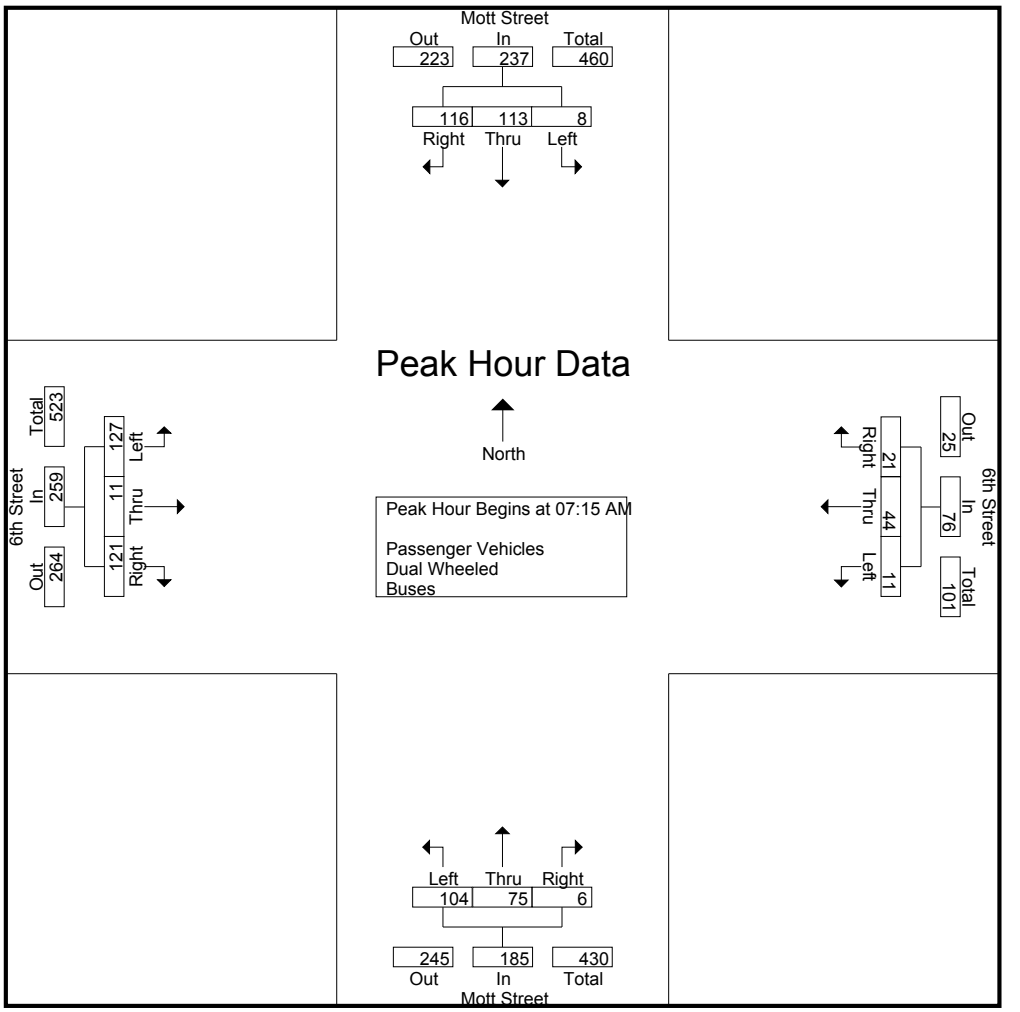
	Mott Street Southbound				6th Street Westbound				Mott Street Northbound				6th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	1	12	24	37	2	3	1	6	27	14	0	41	8	2	9	19	103
07:15 AM	2	29	31	62	6	10	5	21	26	13	2	41	33	3	34	70	194
07:30 AM	0	33	43	76	4	19	6	29	33	20	3	56	43	5	33	81	242
07:45 AM	4	26	34	64	0	9	9	18	28	22	1	51	37	2	37	76	209
Total	7	100	132	239	12	41	21	74	114	69	6	189	121	12	113	246	748
08:00 AM	2	25	8	35	1	6	1	8	17	20	0	37	14	1	17	32	112
08:15 AM	0	17	12	29	0	0	3	3	8	11	4	23	5	0	9	14	69
08:30 AM	1	11	5	17	1	2	1	4	7	10	1	18	6	1	4	11	50
08:45 AM	1	8	4	13	0	0	2	2	4	7	1	12	6	1	1	8	35
Total	4	61	29	94	2	8	7	17	36	48	6	90	31	3	31	65	266
09:00 AM	2	12	4	18	0	1	1	2	4	13	0	17	5	0	2	7	44
09:15 AM	1	9	3	13	0	0	4	4	2	9	0	11	2	0	5	7	35
09:30 AM	1	10	4	15	0	0	1	1	4	5	0	9	2	1	3	6	31
09:45 AM	0	13	2	15	1	2	4	7	2	4	0	6	1	2	4	7	35
Total	4	44	13	61	1	3	10	14	12	31	0	43	10	3	14	27	145
Grand Total	15	205	174	394	15	52	38	105	162	148	12	322	162	18	158	338	1159
Apprch %	3.8	52	44.2		14.3	49.5	36.2		50.3	46	3.7		47.9	5.3	46.7		
Total %	1.3	17.7	15	34	1.3	4.5	3.3	9.1	14	12.8	1	27.8	14	1.6	13.6	29.2	
Passenger Vehicles	14	204	168	386	14	51	37	102	150	146	11	307	159	15	154	328	1123
% Passenger Vehicles	93.3	99.5	96.6	98	93.3	98.1	97.4	97.1	92.6	98.6	91.7	95.3	98.1	83.3	97.5	97	96.9
Dual Wheeled	0	0	6	6	1	1	1	3	1	1	0	2	0	1	2	3	14
% Dual Wheeled	0	0	3.4	1.5	6.7	1.9	2.6	2.9	0.6	0.7	0	0.6	0	5.6	1.3	0.9	1.2
Buses	1	1	0	2	0	0	0	0	11	1	1	13	3	2	2	7	22
% Buses	6.7	0.5	0	0.5	0	0	0	0	6.8	0.7	8.3	4	1.9	11.1	1.3	2.1	1.9

	Mott Street Southbound				6th Street Westbound				Mott Street Northbound				6th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 09:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	2	29	31	62	**6**	10	5	21	26	13	2	41	33	3	34	70	194
07:30 AM	0	**33**	**43**	**76**	4	**19**	6	**29**	**33**	20	**3**	**56**	**43**	**5**	33	**81**	**242**
07:45 AM	**4**	26	34	64	0	9	**9**	18	28	**22**	1	51	37	2	**37**	76	209
08:00 AM	2	25	8	35	1	6	1	8	17	20	0	37	14	1	17	32	112
Total Volume	8	113	116	237	11	44	21	76	104	75	6	185	127	11	121	259	757
% App. Total	3.4	47.7	48.9		14.5	57.9	27.6		56.2	40.5	3.2		49	4.2	46.7		
PHF	.500	.856	.674	.780	.458	.579	.583	.655	.788	.852	.500	.826	.738	.550	.818	.799	.782

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Peak Hour Analysis From 07:00 AM to 09:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:00 AM				07:15 AM				07:00 AM				07:15 AM			
+0 mins.	1	12	24	37	**6**	10	5	21	27	14	0	41	33	3	34	70
+15 mins.	2	29	31	62	4	**19**	6	**29**	26	13	2	41	**43**	**5**	33	**81**
+30 mins.	0	**33**	**43**	**76**	0	9	**9**	18	**33**	20	**3**	**56**	37	2	**37**	76
+45 mins.	**4**	26	34	64	1	6	1	8	28	**22**	1	51	14	1	17	32
Total Volume	7	100	132	239	11	44	21	76	114	69	6	189	127	11	121	259
% App. Total	2.9	41.8	55.2		14.5	57.9	27.6		60.3	36.5	3.2		49	4.2	46.7	
PHF	.438	.758	.767	.786	.458	.579	.583	.655	.864	.784	.500	.844	.738	.550	.818	.799

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Groups Printed- Passenger Vehicles

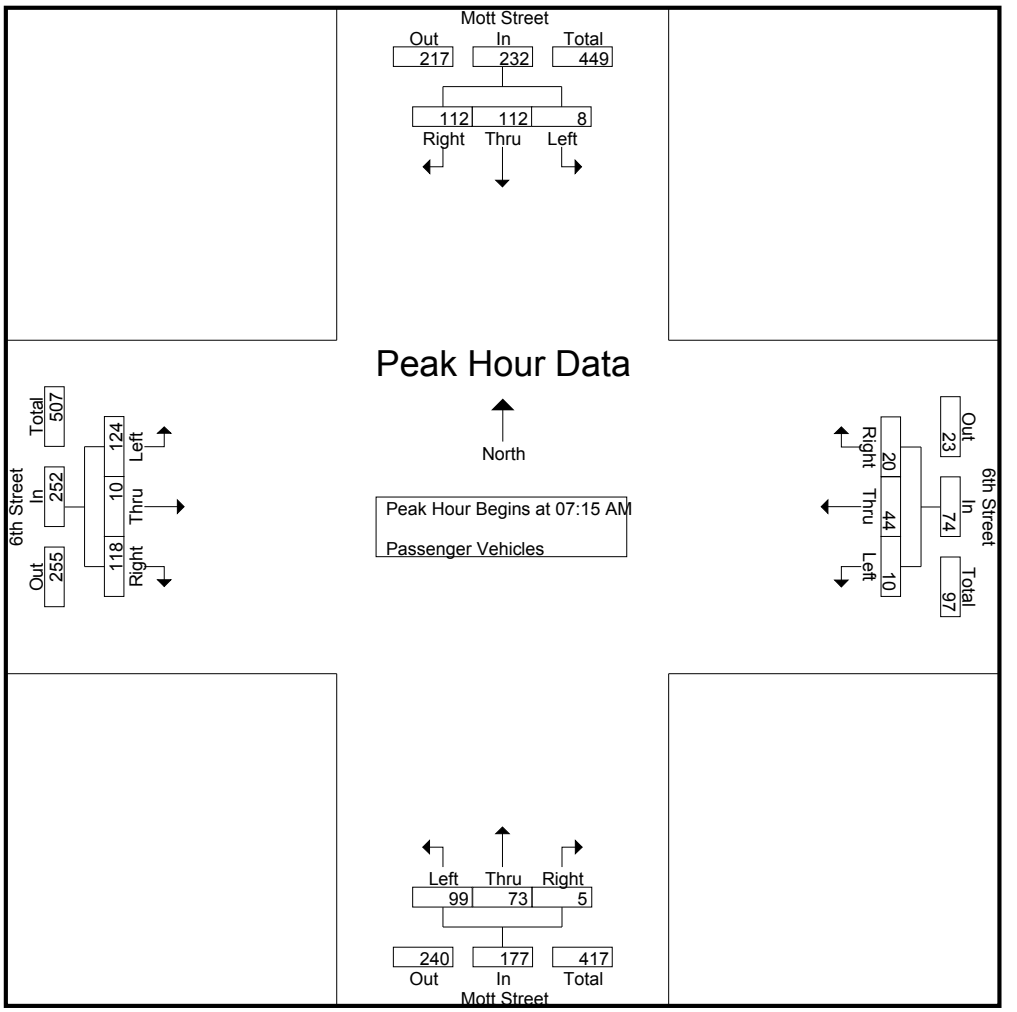
	Mott Street Southbound				6th Street Westbound				Mott Street Northbound				6th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	12	24	36	2	2	1	5	20	14	0	34	8	0	9	17	92
07:15 AM	2	28	30	60	5	10	5	20	22	13	1	36	31	2	33	66	182
07:30 AM	0	33	40	73	4	19	6	29	32	18	3	53	43	5	33	81	236
07:45 AM	4	26	34	64	0	9	8	17	28	22	1	51	36	2	36	74	206
Total	6	99	128	233	11	40	20	71	102	67	5	174	118	9	111	238	716
08:00 AM	2	25	8	35	1	6	1	8	17	20	0	37	14	1	16	31	111
08:15 AM	0	17	11	28	0	0	3	3	8	11	4	23	5	0	8	13	67
08:30 AM	1	11	5	17	1	2	1	4	7	10	1	18	6	1	4	11	50
08:45 AM	1	8	4	13	0	0	2	2	4	7	1	12	6	1	1	8	35
Total	4	61	28	93	2	8	7	17	36	48	6	90	31	3	29	63	263
09:00 AM	2	12	4	18	0	1	1	2	4	13	0	17	5	0	2	7	44
09:15 AM	1	9	2	12	0	0	4	4	2	9	0	11	2	0	5	7	34
09:30 AM	1	10	4	15	0	0	1	1	4	5	0	9	2	1	3	6	31
09:45 AM	0	13	2	15	1	2	4	7	2	4	0	6	1	2	4	7	35
Total	4	44	12	60	1	3	10	14	12	31	0	43	10	3	14	27	144
Grand Total	14	204	168	386	14	51	37	102	150	146	11	307	159	15	154	328	1123
Apprch %	3.6	52.8	43.5		13.7	50	36.3		48.9	47.6	3.6		48.5	4.6	47		
Total %	1.2	18.2	15	34.4	1.2	4.5	3.3	9.1	13.4	13	1	27.3	14.2	1.3	13.7	29.2	

	Mott Street Southbound				6th Street Westbound				Mott Street Northbound				6th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	2	28	30	60	**5**	10	5	20	22	13	1	36	31	2	33	66	182
07:30 AM	0	**33**	**40**	**73**	4	**19**	6	**29**	**32**	18	**3**	**53**	**43**	**5**	33	**81**	**236**
07:45 AM	**4**	26	34	64	0	9	**8**	17	28	**22**	1	51	36	2	**36**	74	206
08:00 AM	2	25	8	35	1	6	1	8	17	20	0	37	14	1	16	31	111
Total Volume	8	112	112	232	10	44	20	74	99	73	5	177	124	10	118	252	735
% App. Total	3.4	48.3	48.3		13.5	59.5	27		55.9	41.2	2.8		49.2	4	46.8		
PHF	.500	.848	.700	.795	.500	.579	.625	.638	.773	.830	.417	.835	.721	.500	.819	.778	.779

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Site Code : 04116347
Start Date : 6/2/2016
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Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:15 AM				07:15 AM			
+0 mins.	2	28	30	60	**5**	10	5	20	22	13	1	36	31	2	33	66
+15 mins.	0	**33**	**40**	**73**	4	**19**	6	**29**	**32**	18	**3**	**53**	**43**	**5**	33	**81**
+30 mins.	**4**	26	34	64	0	9	**8**	17	28	**22**	1	51	36	2	**36**	74
+45 mins.	2	25	8	35	1	6	1	8	17	20	0	37	14	1	16	31
Total Volume	8	112	112	232	10	44	20	74	99	73	5	177	124	10	118	252
% App. Total	3.4	48.3	48.3		13.5	59.5	27		55.9	41.2	2.8		49.2	4	46.8	
PHF	.500	.848	.700	.795	.500	.579	.625	.638	.773	.830	.417	.835	.721	.500	.819	.778

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Site Code : 04116347
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Groups Printed- Dual Wheeled

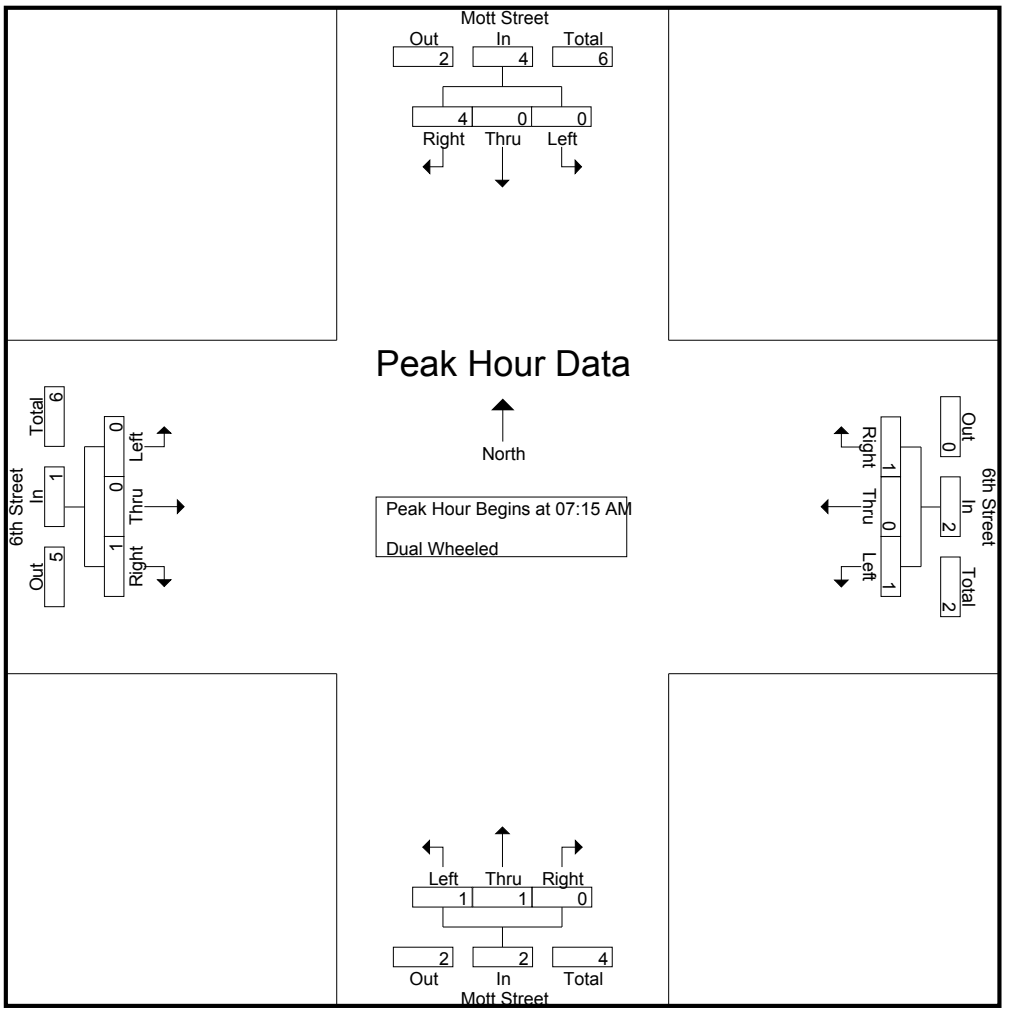
	Mott Street Southbound				6th Street Westbound				Mott Street Northbound				6th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	2
07:15 AM	0	0	1	1	1	0	0	1	0	0	0	0	0	0	0	0	2
07:30 AM	0	0	3	3	0	0	0	0	1	1	0	2	0	0	0	0	5
07:45 AM	0	0	0	0	0	0	1	1	0	0	0	0	0	0	1	1	2
Total	0	0	4	4	1	1	1	3	1	1	0	2	0	1	1	2	11
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	1	1	0	0	0	0	0	0	0	0	0	0	1	1	2
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	1	1	0	0	0	0	0	0	0	0	0	0	1	1	2
09:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:15 AM	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1
09:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Grand Total	0	0	6	6	1	1	1	3	1	1	0	2	0	1	2	3	14
Apprch %	0	0	100		33.3	33.3	33.3		50	50	0		0	33.3	66.7		
Total %	0	0	42.9	42.9	7.1	7.1	7.1	21.4	7.1	7.1	0	14.3	0	7.1	14.3	21.4	

	Mott Street Southbound				6th Street Westbound				Mott Street Northbound				6th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	0	0	1	1	**1**	0	0	**1**	0	0	0	0	0	0	0	0	2
07:30 AM	0	0	**3**	**3**	0	0	0	0	**1**	**1**	0	**2**	0	0	0	0	**5**
07:45 AM	0	0	0	0	0	0	**1**	1	0	0	0	0	0	0	**1**	**1**	2
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	4	4	1	0	1	2	1	1	0	2	0	0	1	1	9
% App. Total	0	0	100		50	0	50		50	50	0		0	0	100		
PHF	.000	.000	.333	.333	.250	.000	.250	.500	.250	.250	.000	.250	.000	.000	.250	.250	.450

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Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:15 AM				07:15 AM			
+0 mins.	0	0	1	1	**1**	0	0	**1**	0	0	0	0	0	0	0	0
+15 mins.	0	0	**3**	**3**	0	0	0	0	**1**	**1**	0	**2**	0	0	0	0
+30 mins.	0	0	0	0	0	0	**1**	1	0	0	0	0	0	0	**1**	**1**
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	4	4	1	0	1	2	1	1	0	2	0	0	1	1
% App. Total	0	0	100		50	0	50		50	50	0		0	0	100	
PHF	.000	.000	.333	.333	.250	.000	.250	.500	.250	.250	.000	.250	.000	.000	.250	.250

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Site Code : 04116347
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Groups Printed- Buses

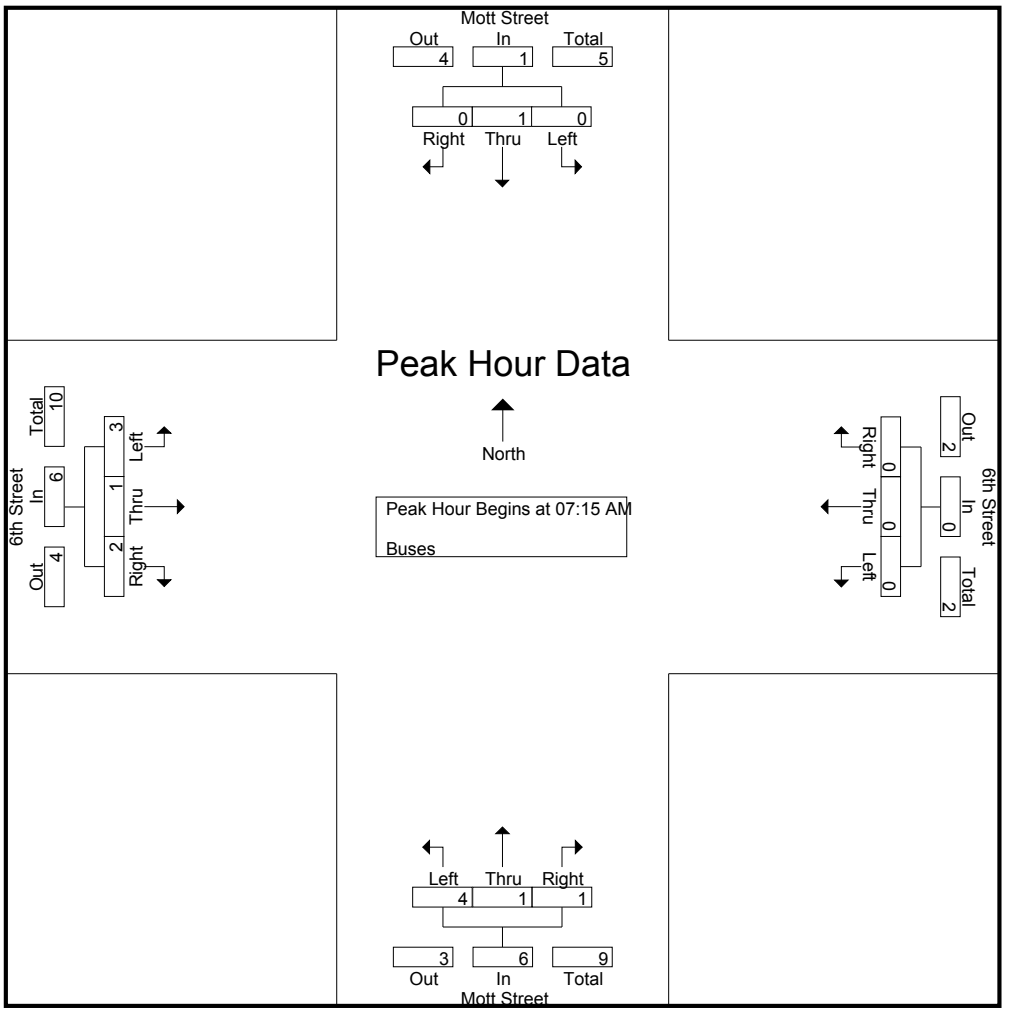
	Mott Street Southbound				6th Street Westbound				Mott Street Northbound				6th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	1	0	0	1	0	0	0	0	7	0	0	7	0	1	0	1	9
07:15 AM	0	1	0	1	0	0	0	0	4	0	1	5	2	1	1	4	10
07:30 AM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
Total	1	1	0	2	0	0	0	0	11	1	1	13	3	2	1	6	21
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
09:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	1	1	0	2	0	0	0	0	11	1	1	13	3	2	2	7	22
Apprch %	50	50	0		0	0	0		84.6	7.7	7.7		42.9	28.6	28.6		
Total %	4.5	4.5	0	9.1	0	0	0	0	50	4.5	4.5	59.1	13.6	9.1	9.1	31.8	

	Mott Street Southbound				6th Street Westbound				Mott Street Northbound				6th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	0	**1**	0	**1**	0	0	0	0	**4**	0	**1**	**5**	**2**	**1**	**1**	**4**	**10**
07:30 AM	0	0	0	0	0	0	0	0	0	**1**	0	1	0	0	0	0	1
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
Total Volume	0	1	0	1	0	0	0	0	4	1	1	6	3	1	2	6	13
% App. Total	0	100	0		0	0	0		66.7	16.7	16.7		50	16.7	33.3		
PHF	.000	.250	.000	.250	.000	.000	.000	.000	.250	.250	.250	.300	.375	.250	.500	.375	.325

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Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:15 AM				07:15 AM			
+0 mins.	0	**1**	0	**1**	0	0	0	0	**4**	0	**1**	**5**	**2**	**1**	**1**	**4**
+15 mins.	0	0	0	0	0	0	0	0	0	**1**	0	1	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
Total Volume	0	1	0	1	0	0	0	0	4	1	1	6	3	1	2	6
% App. Total	0	100	0		0	0	0		66.7	16.7	16.7		50	16.7	33.3	
PHF	.000	.250	.000	.250	.000	.000	.000	.000	.250	.250	.250	.300	.375	.250	.500	.375

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File Name : LACMO6TPM
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Groups Printed- Passenger Vehicles - Dual Wheeled - Buses

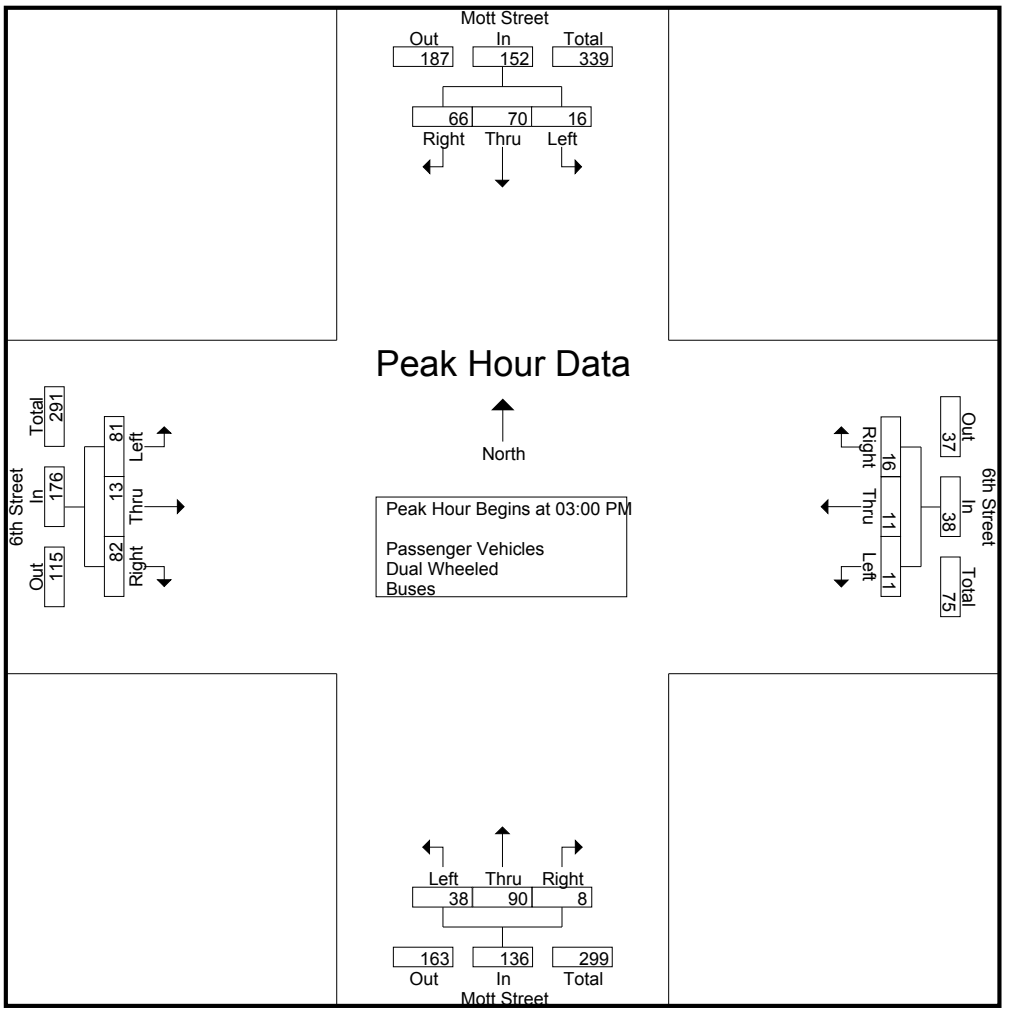
	Mott Street Southbound				6th Street Westbound				Mott Street Northbound				6th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
03:00 PM	5	23	26	54	6	3	9	18	11	32	5	48	31	2	27	60	180
03:15 PM	6	16	10	32	2	4	2	8	10	22	1	33	18	7	23	48	121
03:30 PM	0	19	12	31	1	3	2	6	8	14	1	23	20	1	14	35	95
03:45 PM	5	12	18	35	2	1	3	6	9	22	1	32	12	3	18	33	106
Total	16	70	66	152	11	11	16	38	38	90	8	136	81	13	82	176	502
04:00 PM	5	16	6	27	1	3	0	4	4	19	1	24	13	1	12	26	81
04:15 PM	2	15	8	25	1	2	2	5	7	23	0	30	12	4	13	29	89
04:30 PM	1	17	13	31	0	1	0	1	11	19	1	31	12	2	10	24	87
04:45 PM	2	19	14	35	3	2	2	7	6	19	2	27	10	1	14	25	94
Total	10	67	41	118	5	8	4	17	28	80	4	112	47	8	49	104	351
05:00 PM	3	17	13	33	0	4	3	7	12	27	2	41	12	2	11	25	106
05:15 PM	0	19	13	32	0	2	1	3	10	18	0	28	16	2	20	38	101
05:30 PM	3	23	26	52	2	1	1	4	10	30	5	45	22	1	9	32	133
05:45 PM	4	21	20	45	1	0	3	4	7	24	2	33	17	2	13	32	114
Total	10	80	72	162	3	7	8	18	39	99	9	147	67	7	53	127	454
Grand Total	36	217	179	432	19	26	28	73	105	269	21	395	195	28	184	407	1307
Apprch %	8.3	50.2	41.4		26	35.6	38.4		26.6	68.1	5.3		47.9	6.9	45.2		
Total %	2.8	16.6	13.7	33.1	1.5	2	2.1	5.6	8	20.6	1.6	30.2	14.9	2.1	14.1	31.1	
Passenger Vehicles	33	215	175	423	19	26	28	73	102	268	21	391	191	25	182	398	1285
% Passenger Vehicles	91.7	99.1	97.8	97.9	100	100	100	100	97.1	99.6	100	99	97.9	89.3	98.9	97.8	98.3
Dual Wheeled	2	1	3	6	0	0	0	0	1	0	0	1	2	0	1	3	10
% Dual Wheeled	5.6	0.5	1.7	1.4	0	0	0	0	1	0	0	0.3	1	0	0.5	0.7	0.8
Buses	1	1	1	3	0	0	0	0	2	1	0	3	2	3	1	6	12
% Buses	2.8	0.5	0.6	0.7	0	0	0	0	1.9	0.4	0	0.8	1	10.7	0.5	1.5	0.9

	Mott Street Southbound				6th Street Westbound				Mott Street Northbound				6th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 03:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 03:00 PM																	
03:00 PM	5	**23**	**26**	**54**	**6**	3	**9**	**18**	**11**	**32**	**5**	**48**	**31**	2	**27**	**60**	**180**
03:15 PM	**6**	16	10	32	2	**4**	2	8	10	22	1	33	18	**7**	23	48	121
03:30 PM	0	19	12	31	1	3	2	6	8	14	1	23	20	1	14	35	95
03:45 PM	5	12	18	35	2	1	3	6	9	22	1	32	12	3	18	33	106
Total Volume	16	70	66	152	11	11	16	38	38	90	8	136	81	13	82	176	502
% App. Total	10.5	46.1	43.4		28.9	28.9	42.1		27.9	66.2	5.9		46	7.4	46.6		
PHF	.667	.761	.635	.704	.458	.688	.444	.528	.864	.703	.400	.708	.653	.464	.759	.733	.697

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Peak Hour Analysis From 03:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	05:00 PM				03:00 PM				05:00 PM				03:00 PM			
+0 mins.	3	17	13	33	**6**	3	**9**	**18**	**12**	27	2	41	**31**	2	**27**	**60**
+15 mins.	0	19	13	32	2	**4**	2	8	10	18	0	28	18	**7**	23	48
+30 mins.	3	**23**	**26**	**52**	1	3	2	6	10	**30**	**5**	**45**	20	1	14	35
+45 mins.	**4**	21	20	45	2	1	3	6	7	24	2	33	12	3	18	33
Total Volume	10	80	72	162	11	11	16	38	39	99	9	147	81	13	82	176
% App. Total	6.2	49.4	44.4		28.9	28.9	42.1		26.5	67.3	6.1		46	7.4	46.6	
PHF	.625	.870	.692	.779	.458	.688	.444	.528	.813	.825	.450	.817	.653	.464	.759	.733

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Groups Printed- Passenger Vehicles

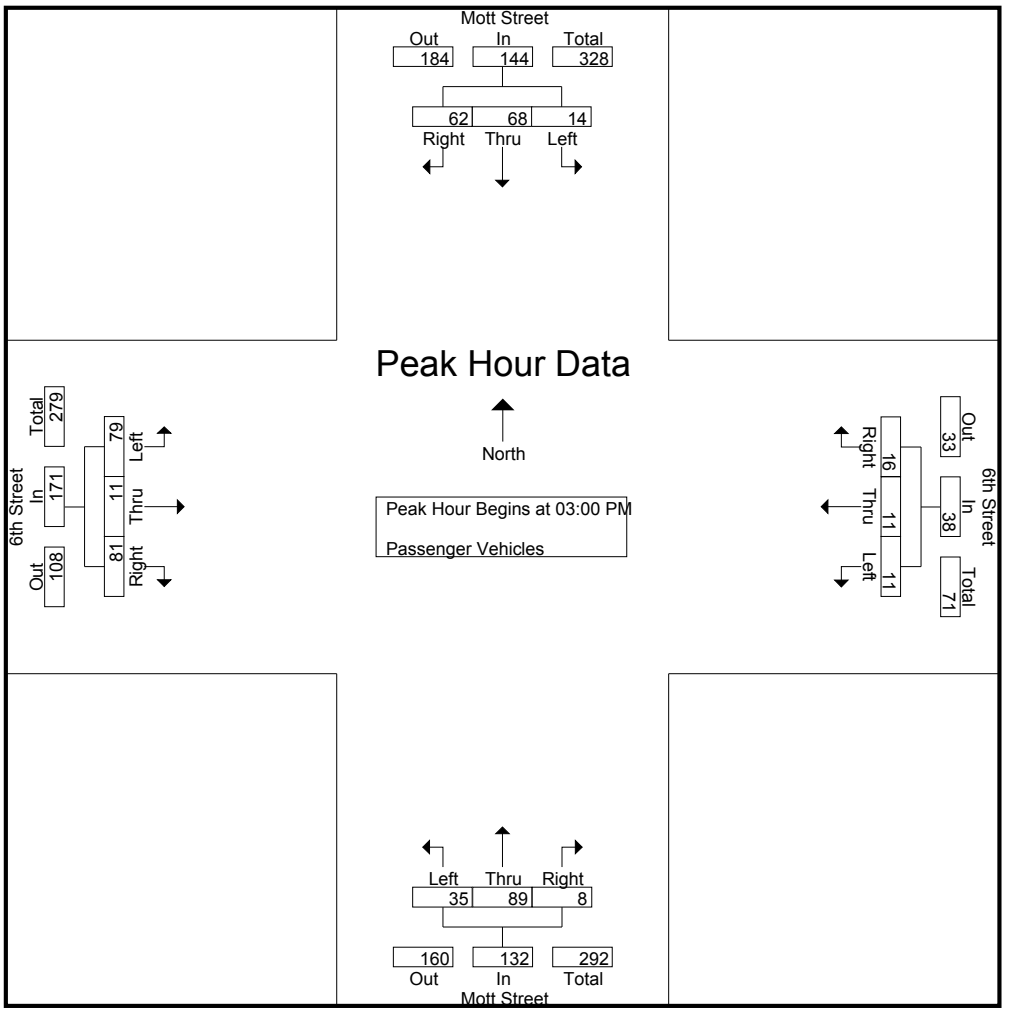
	Mott Street Southbound				6th Street Westbound				Mott Street Northbound				6th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
03:00 PM	5	22	22	49	6	3	9	18	10	31	5	46	30	0	26	56	169
03:15 PM	4	16	10	30	2	4	2	8	10	22	1	33	17	7	23	47	118
03:30 PM	0	19	12	31	1	3	2	6	8	14	1	23	20	1	14	35	95
03:45 PM	5	11	18	34	2	1	3	6	7	22	1	30	12	3	18	33	103
Total	14	68	62	144	11	11	16	38	35	89	8	132	79	11	81	171	485
04:00 PM	5	16	6	27	1	3	0	4	4	19	1	24	13	1	11	25	80
04:15 PM	2	15	8	25	1	2	2	5	7	23	0	30	12	4	13	29	89
04:30 PM	1	17	13	31	0	1	0	1	11	19	1	31	12	2	10	24	87
04:45 PM	1	19	14	34	3	2	2	7	6	19	2	27	10	1	14	25	93
Total	9	67	41	117	5	8	4	17	28	80	4	112	47	8	48	103	349
05:00 PM	3	17	13	33	0	4	3	7	12	27	2	41	12	2	11	25	106
05:15 PM	0	19	13	32	0	2	1	3	10	18	0	28	15	1	20	36	99
05:30 PM	3	23	26	52	2	1	1	4	10	30	5	45	22	1	9	32	133
05:45 PM	4	21	20	45	1	0	3	4	7	24	2	33	16	2	13	31	113
Total	10	80	72	162	3	7	8	18	39	99	9	147	65	6	53	124	451
Grand Total	33	215	175	423	19	26	28	73	102	268	21	391	191	25	182	398	1285
Apprch %	7.8	50.8	41.4		26	35.6	38.4		26.1	68.5	5.4		48	6.3	45.7		
Total %	2.6	16.7	13.6	32.9	1.5	2	2.2	5.7	7.9	20.9	1.6	30.4	14.9	1.9	14.2	31	

	Mott Street Southbound				6th Street Westbound				Mott Street Northbound				6th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 03:00 PM to 03:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 03:00 PM																	
03:00 PM	**5**	**22**	**22**	**49**	**6**	3	**9**	**18**	**10**	**31**	**5**	**46**	**30**	0	**26**	**56**	**169**
03:15 PM	4	16	10	30	2	**4**	2	8	10	22	1	33	17	**7**	23	47	118
03:30 PM	0	19	12	31	1	3	2	6	8	14	1	23	20	1	14	35	95
03:45 PM	5	11	18	34	2	1	3	6	7	22	1	30	12	3	18	33	103
Total Volume	14	68	62	144	11	11	16	38	35	89	8	132	79	11	81	171	485
% App. Total	9.7	47.2	43.1		28.9	28.9	42.1		26.5	67.4	6.1		46.2	6.4	47.4		
PHF	.700	.773	.705	.735	.458	.688	.444	.528	.875	.718	.400	.717	.658	.393	.779	.763	.717

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Site Code : 04116347
Start Date : 6/2/2016
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Peak Hour Analysis From 03:00 PM to 03:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	03:00 PM				03:00 PM				03:00 PM				03:00 PM			
+0 mins.	**5**	**22**	**22**	**49**	**6**	3	**9**	**18**	**10**	**31**	**5**	**46**	**30**	0	**26**	**56**
+15 mins.	4	16	10	30	2	**4**	2	8	10	22	1	33	17	**7**	23	47
+30 mins.	0	19	12	31	1	3	2	6	8	14	1	23	20	1	14	35
+45 mins.	5	11	18	34	2	1	3	6	7	22	1	30	12	3	18	33
Total Volume	14	68	62	144	11	11	16	38	35	89	8	132	79	11	81	171
% App. Total	9.7	47.2	43.1		28.9	28.9	42.1		26.5	67.4	6.1		46.2	6.4	47.4	
PHF	.700	.773	.705	.735	.458	.688	.444	.528	.875	.718	.400	.717	.658	.393	.779	.763

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Weather: Clear

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Site Code : 04116347
Start Date : 6/2/2016

Groups Printed- Dual Wheeled

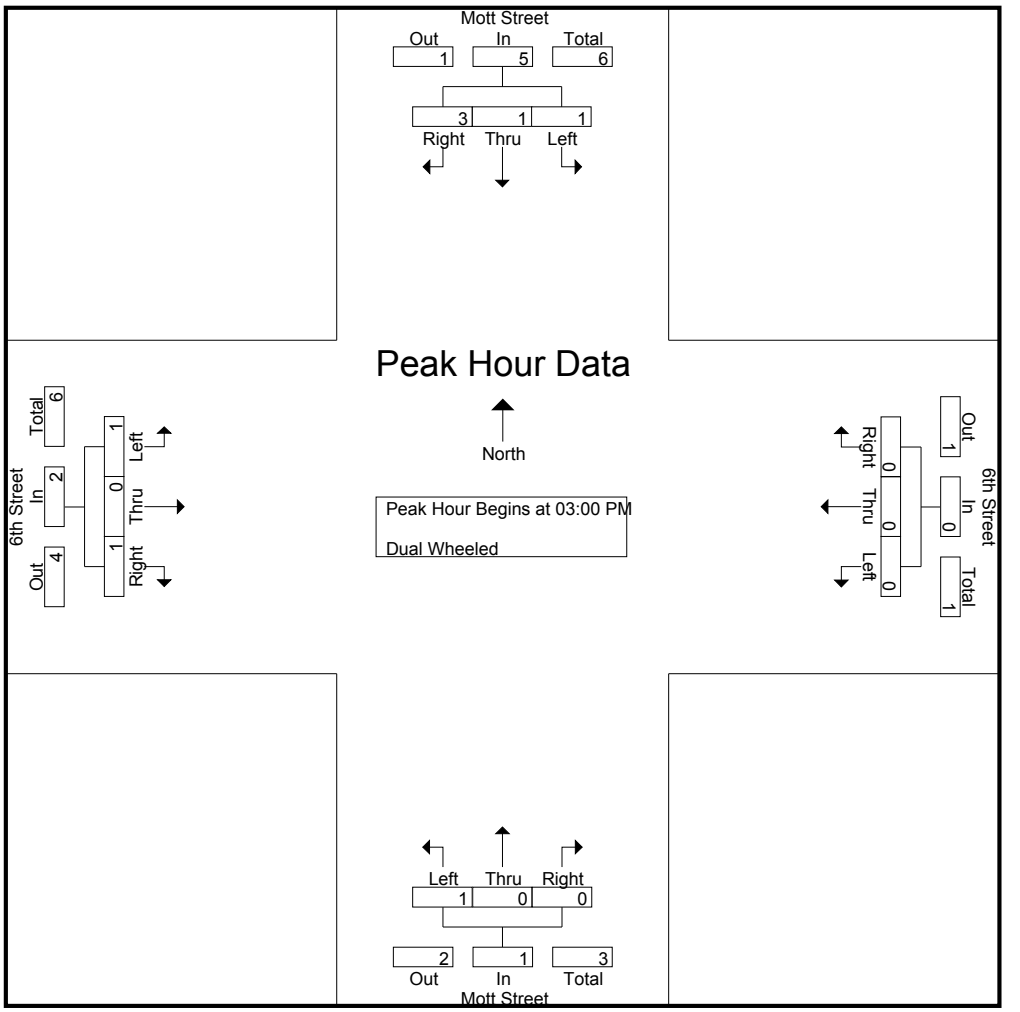
	Mott Street Southbound				6th Street Westbound				Mott Street Northbound				6th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
03:00 PM	0	1	3	4	0	0	0	0	0	0	0	0	0	0	1	1	5
03:15 PM	1	0	0	1	0	0	0	0	0	0	0	0	1	0	0	1	2
03:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:45 PM	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	1
Total	1	1	3	5	0	0	0	0	1	0	0	1	1	0	1	2	8
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
Total	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
Grand Total	2	1	3	6	0	0	0	0	1	0	0	1	2	0	1	3	10
Apprch %	33.3	16.7	50		0	0	0		100	0	0		66.7	0	33.3		
Total %	20	10	30	60	0	0	0	0	10	0	0	10	20	0	10	30	

	Mott Street Southbound				6th Street Westbound				Mott Street Northbound				6th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 03:00 PM to 03:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 03:00 PM																	
03:00 PM	0	**1**	**3**	**4**	0	0	0	0	0	0	0	0	0	0	**1**	**1**	**5**
03:15 PM	**1**	0	0	1	0	0	0	0	0	0	0	0	**1**	0	0	1	2
03:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:45 PM	0	0	0	0	0	0	0	0	**1**	0	0	**1**	0	0	0	0	1
Total Volume	1	1	3	5	0	0	0	0	1	0	0	1	1	0	1	2	8
% App. Total	20	20	60		0	0	0		100	0	0		50	0	50		
PHF	.250	.250	.250	.313	.000	.000	.000	.000	.250	.000	.000	.250	.250	.000	.250	.500	.400

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Peak Hour Analysis From 03:00 PM to 03:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	03:00 PM				03:00 PM				03:00 PM				03:00 PM			
+0 mins.	0	**1**	**3**	**4**	0	0	0	0	0	0	0	0	0	0	**1**	**1**
+15 mins.	**1**	0	0	1	0	0	0	0	0	0	0	0	**1**	0	0	1
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	**1**	0	0	**1**	0	0	0	0
Total Volume	1	1	3	5	0	0	0	0	1	0	0	1	1	0	1	2
% App. Total	20	20	60		0	0	0		100	0	0		50	0	50	
PHF	.250	.250	.250	.313	.000	.000	.000	.000	.250	.000	.000	.250	.250	.000	.250	.500

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Weather: Clear

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Site Code : 04116347
Start Date : 6/2/2016

Groups Printed- Buses

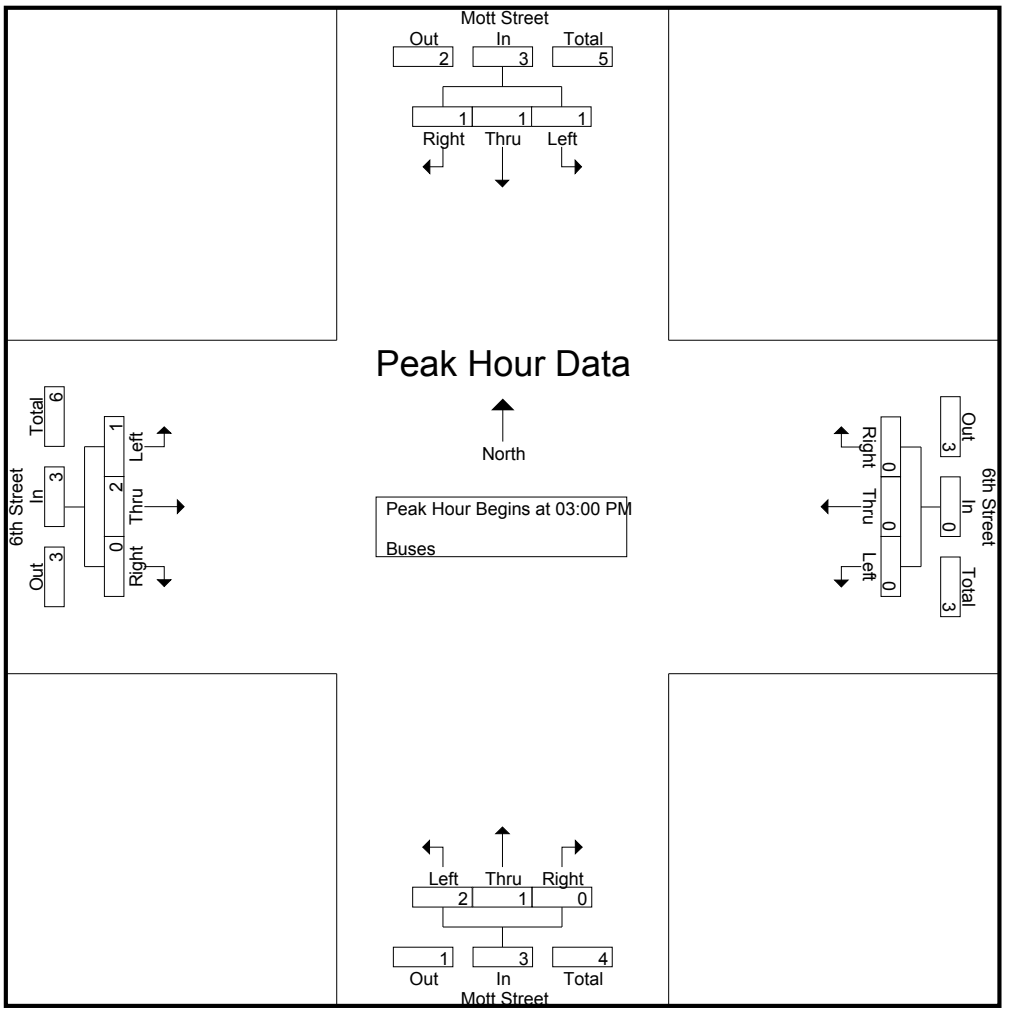
	Mott Street Southbound				6th Street Westbound				Mott Street Northbound				6th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
03:00 PM	0	0	1	1	0	0	0	0	1	1	0	2	1	2	0	3	6
03:15 PM	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
03:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:45 PM	0	1	0	1	0	0	0	0	1	0	0	1	0	0	0	0	2
Total	1	1	1	3	0	0	0	0	2	1	0	3	1	2	0	3	9
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	2	2
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	2	2
Grand Total	1	1	1	3	0	0	0	0	2	1	0	3	2	3	1	6	12
Apprch %	33.3	33.3	33.3		0	0	0		66.7	33.3	0		33.3	50	16.7		
Total %	8.3	8.3	8.3	25	0	0	0	0	16.7	8.3	0	25	16.7	25	8.3	50	

	Mott Street Southbound				6th Street Westbound				Mott Street Northbound				6th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 03:00 PM to 03:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 03:00 PM																	
03:00 PM	0	0	**1**	**1**	0	0	0	0	**1**	**1**	0	**2**	**1**	**2**	0	**3**	**6**
03:15 PM	**1**	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
03:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:45 PM	0	**1**	0	1	0	0	0	0	1	0	0	1	0	0	0	0	2
Total Volume	1	1	1	3	0	0	0	0	2	1	0	3	1	2	0	3	9
% App. Total	33.3	33.3	33.3		0	0	0		66.7	33.3	0		33.3	66.7	0		
PHF	.250	.250	.250	.750	.000	.000	.000	.000	.500	.250	.000	.375	.250	.250	.000	.250	.375

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Site Code : 04116347
Start Date : 6/2/2016
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Peak Hour Analysis From 03:00 PM to 03:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	03:00 PM				03:00 PM				03:00 PM				03:00 PM			
+0 mins.	0	0	**1**	**1**	0	0	0	0	**1**	**1**	0	**2**	**1**	**2**	0	**3**
+15 mins.	**1**	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	**1**	0	1	0	0	0	0	1	0	0	1	0	0	0	0
Total Volume	1	1	1	3	0	0	0	0	2	1	0	3	1	2	0	3
% App. Total	33.3	33.3	33.3		0	0	0		66.7	33.3	0		33.3	66.7	0	
PHF	.250	.250	.250	.750	.000	.000	.000	.000	.500	.250	.000	.375	.250	.250	.000	.250

APPENDIX B
Intersection Analysis Worksheets – Existing Conditions

LAUSD Roosevelt HS Improvements
Existing Conditions
AM Peak Hour

Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #1 Soto/4th

Cycle (sec):	100	Critical Vol./Cap.(X):	0.854
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	127	Level Of Service:	D

Street Name:	Soto Street						4th Street					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Prot+Permit			Permitted		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0 2	0 1	1	0 2	0 1	1	0 1	1 0	1	0 1	1 0
Volume Module:												
Base Vol:	89	578	70	140	855	120	66	415	77	110	1184	85
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	89	578	70	140	855	120	66	415	77	110	1184	85
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	89	578	70	140	855	120	66	415	77	110	1184	85
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	89	578	70	140	855	120	66	415	77	110	1184	85
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	89	578	70	140	855	120	66	415	77	110	1184	85
Saturation Flow Module:												
Sat/Lane:	1425	1425	1425	1425	1425	1425	1425	1425	1425	1425	1425	1425
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.69	0.31	1.00	1.87	0.13
Final Sat.:	1425	2850	1425	1425	2850	1425	1425	2404	446	1425	2659	191
Capacity Analysis Module:												
Vol/Sat:	0.06	0.20	0.05	0.10	0.30	0.08	0.05	0.17	0.17	0.08	0.45	0.45
Crit Volume:	89			428			66			635		
Crit Moves:	****			****			****			****		

LAUSD Roosevelt HS Improvements
Existing Conditions
AM Peak Hour

Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #2 Mathews/4th

Cycle (sec):	100	Critical Vol./Cap.(X):	0.567
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	33	Level Of Service:	A

Street Name:	Mathews St						4th St					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0 1! 0	0	0	0 1! 0	0	1	0 1	1 0	1	0 1	1 0
Volume Module:												
Base Vol:	35	53	76	10	85	40	20	435	127	121	1288	26
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	35	53	76	10	85	40	20	435	127	121	1288	26
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	35	53	76	10	85	40	20	435	127	121	1288	26
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	35	53	76	10	85	40	20	435	127	121	1288	26
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	35	53	76	10	85	40	20	435	127	121	1288	26
Saturation Flow Module:												
Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.21	0.32	0.47	0.07	0.63	0.30	1.00	1.55	0.45	1.00	1.96	0.04
Final Sat.:	320	485	695	111	944	444	1500	2322	678	1500	2941	59
Capacity Analysis Module:												
Vol/Sat:	0.11	0.11	0.11	0.09	0.09	0.09	0.01	0.19	0.19	0.08	0.44	0.44
Crit Volume:			164		10		20					657
Crit Moves:			****	****			****					****

LAUSD Roosevelt HS Improvements
Existing Conditions
AM Peak Hour

Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #3 Mott/4th

Cycle (sec):	100	Critical Vol./Cap.(X):	0.653
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	42	Level Of Service:	B

Street Name:	Mott Street						4th Street					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	1! 0	0	0	1! 0	1	0	1 1	0	1	0 1 0
Volume Module:												
Base Vol:	52	124	41	47	129	53	39	393	42	61	1266	54
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	52	124	41	47	129	53	39	393	42	61	1266	54
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	52	124	41	47	129	53	39	393	42	61	1266	54
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	52	124	41	47	129	53	39	393	42	61	1266	54
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	52	124	41	47	129	53	39	393	42	61	1266	54
Saturation Flow Module:												
Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.24	0.57	0.19	0.21	0.56	0.23	1.00	1.81	0.19	1.00	1.92	0.08
Final Sat.:	359	857	283	308	845	347	1500	2710	290	1500	2877	123
Capacity Analysis Module:												
Vol/Sat:	0.14	0.14	0.14	0.15	0.15	0.15	0.03	0.14	0.15	0.04	0.44	0.44
Crit Volume:	52					229	39					660
Crit Moves:	****					****	****					****

LAUSD Roosevelt HS Improvements
Existing Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #4 Mathews/6th

Cycle (sec):	100	Critical Vol./Cap.(X):	0.395
Loss Time (sec):	0	Average Delay (sec/veh):	10.1
Optimal Cycle:	0	Level Of Service:	B

Street Name:	Mathews St									6th St					
Approach:	North Bound			South Bound			East Bound			West Bound					
Movement:	L	T	R	L	T	R	L	T	R	L	T	R			
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign					
Rights:	Include			Include			Include			Include					
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0			
Lanes:	0	0	1! 0	0	0	1! 0	0	1	0 0	0	0	0 1			
Volume Module:															
Base Vol:	0	0	0	113	0	118	79	208	0	0	145	86			
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Initial Bse:	0	0	0	113	0	118	79	208	0	0	145	86			
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
PHF Volume:	0	0	0	113	0	118	79	208	0	0	145	86			
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0			
Reduced Vol:	0	0	0	113	0	118	79	208	0	0	145	86			
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
FinalVolume:	0	0	0	113	0	118	79	208	0	0	145	86			
Saturation Flow Module:															
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Lanes:	0.00	1.00	0.00	0.49	0.00	0.51	0.28	0.72	0.00	0.00	0.63	0.37			
Final Sat.:	0	589	0	340	0	355	200	526	0	0	471	279			
Capacity Analysis Module:															
Vol/Sat:	xxxx	0.00	xxxx	0.33	xxxx	0.33	0.40	0.40	xxxx	xxxx	0.31	0.31			
Crit Moves:		****		****				****				****			
Delay/Veh:	0.0	0.0	0.0	10.0	0.0	10.0	10.7	10.7	0.0	0.0	9.5	9.5			
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
AdjDel/Veh:	0.0	0.0	0.0	10.0	0.0	10.0	10.7	10.7	0.0	0.0	9.5	9.5			
LOS by Move:	*	*	*	B	*	B	B	B	*	*	A	A			
ApproachDel:	xxxxxx			10.0			10.7			9.5					
Delay Adj:	xxxxx			1.00			1.00			1.00					
ApprAdjDel:	xxxxxx			10.0			10.7			9.5					
LOS by Appr:	*			B			B			A					
AllWayAvgQ:	0.0	0.0	0.0	0.4	0.4	0.4	0.6	0.6	0.6	0.4	0.4	0.4			

Note: Queue reported is the number of cars per lane.

LAUSD Roosevelt HS Improvements
Existing Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #5 Mott/6th

Cycle (sec):	100	Critical Vol./Cap.(X):	0.372
Loss Time (sec):	0	Average Delay (sec/veh):	9.9
Optimal Cycle:	0	Level Of Service:	A

Street Name:	Mott St							6th St							
Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Stop Sign					Stop Sign				
Rights:	Include					Include					Include					Include				
Min. Green:	0	0	0			0	0	0			0	0	0			0	0	0		
Lanes:	0	0	1!	0	0	0	0	1!	0	0	0	0	1!	0	0	0	0	1!	0	0
Volume Module:																				
Base Vol:	105		76		6	8		114		117	128		11		122	11		44		21
Growth Adj:	1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00
Initial Bse:	105		76		6	8		114		117	128		11		122	11		44		21
User Adj:	1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00
PHF Adj:	1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00
PHF Volume:	105		76		6	8		114		117	128		11		122	11		44		21
Reduct Vol:	0		0		0	0		0		0	0		0		0	0		0		0
Reduced Vol:	105		76		6	8		114		117	128		11		122	11		44		21
PCE Adj:	1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00
MLF Adj:	1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00
FinalVolume:	105		76		6	8		114		117	128		11		122	11		44		21
Saturation Flow Module:																				
Adjustment:	1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00
Lanes:	0.56	0.41		0.03	0.03	0.48	0.49		0.49	0.04	0.47	0.14		0.58	0.28					
Final Sat.:	373		270		21	24		345		355	344		30		328	92		369		176
Capacity Analysis Module:																				
Vol/Sat:	0.28	0.28		0.28	0.33	0.33	0.33		0.37	0.37	0.37	0.12		0.12	0.12					
Crit Moves:		****				****				****					****					
Delay/Veh:	10.0	10.0		10.0	9.8	9.8	9.8		10.4	10.4	10.4	8.8		8.8	8.8					
Delay Adj:	1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00					
AdjDel/Veh:	10.0	10.0		10.0	9.8	9.8	9.8		10.4	10.4	10.4	8.8		8.8	8.8					
LOS by Move:	A		A		A	A		A		A	B		B		B	A		A		A
ApproachDel:	10.0					9.8					10.4					8.8				
Delay Adj:	1.00					1.00					1.00					1.00				
ApprAdjDel:	10.0					9.8					10.4					8.8				
LOS by Appr:	A					A					B					A				
AllWayAvgQ:	0.3	0.3		0.3	0.4	0.4	0.4		0.5	0.5	0.5	0.1		0.1	0.1					

Note: Queue reported is the number of cars per lane.

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LAUSD Roosevelt HS Improvements
Existing Conditions
PM Peak Hour

Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #1 Soto/4th

Cycle (sec):	100	Critical Vol./Cap.(X):	0.895
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	177	Level Of Service:	D

Street Name:	Soto Street						4th Street					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Prot+Permit			Permitted		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0 2	0 1	1	0 2	0 1	1	0 1	1 0	1	0 1	1 0
Volume Module:												
Base Vol:	149	824	134	88	622	72	195	1137	181	116	517	76
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	149	824	134	88	622	72	195	1137	181	116	517	76
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	149	824	134	88	622	72	195	1137	181	116	517	76
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	149	824	134	88	622	72	195	1137	181	116	517	76
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	149	824	134	88	622	72	195	1137	181	116	517	76
Saturation Flow Module:												
Sat/Lane:	1425	1425	1425	1425	1425	1425	1425	1425	1425	1425	1425	1425
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.73	0.27	1.00	1.74	0.26
Final Sat.:	1425	2850	1425	1425	2850	1425	1425	2459	391	1425	2485	365
Capacity Analysis Module:												
Vol/Sat:	0.10	0.29	0.09	0.06	0.22	0.05	0.14	0.46	0.46	0.08	0.21	0.21
Crit Volume:		412			88			659		116		
Crit Moves:		****			****			****		****		

LAUSD Roosevelt HS Improvements
Existing Conditions
PM Peak Hour

Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #2 Mathews/4th

Cycle (sec):	100	Critical Vol./Cap.(X):	0.575
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	34	Level Of Service:	A

Street Name:	Mathews St						4th St					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0 1! 0	0	0	0 1! 0	0	1	0 1	1 0	1	0 1	1 0
Volume Module:												
Base Vol:	39	27	64	14	36	26	27	1186	117	67	636	21
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	39	27	64	14	36	26	27	1186	117	67	636	21
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	39	27	64	14	36	26	27	1186	117	67	636	21
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	39	27	64	14	36	26	27	1186	117	67	636	21
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	39	27	64	14	36	26	27	1186	117	67	636	21
Saturation Flow Module:												
Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.30	0.21	0.49	0.18	0.48	0.34	1.00	1.82	0.18	1.00	1.94	0.06
Final Sat.:	450	312	738	276	711	513	1500	2731	269	1500	2904	96
Capacity Analysis Module:												
Vol/Sat:	0.09	0.09	0.09	0.05	0.05	0.05	0.02	0.43	0.43	0.04	0.22	0.22
Crit Volume:		130			14			652		67		
Crit Moves:		****			****			****		****		

LAUSD Roosevelt HS Improvements
Existing Conditions
PM Peak Hour

Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #3 Mott/4th

Cycle (sec):	100	Critical Vol./Cap.(X):	0.556
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	32	Level Of Service:	A

Street Name:	Mott Street						4th Street					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	1 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	34	87	47	79	75	47	100	1045	62	34	609	62
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	34	87	47	79	75	47	100	1045	62	34	609	62
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	34	87	47	79	75	47	100	1045	62	34	609	62
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	34	87	47	79	75	47	100	1045	62	34	609	62
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	34	87	47	79	75	47	100	1045	62	34	609	62
Saturation Flow Module:												
Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.20	0.52	0.28	0.40	0.37	0.23	1.00	1.89	0.11	1.00	1.82	0.18
Final Sat.:	304	777	420	590	560	351	1500	2832	168	1500	2723	277
Capacity Analysis Module:												
Vol/Sat:	0.11	0.11	0.11	0.13	0.13	0.13	0.07	0.37	0.37	0.02	0.22	0.22
Crit Volume:		168			79				554	34		
Crit Moves:		****			****				****	****		

LAUSD Roosevelt HS Improvements
Existing Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #4 Mathews/6th

Cycle (sec):	100	Critical Vol./Cap.(X):	0.222
Loss Time (sec):	0	Average Delay (sec/veh):	8.1
Optimal Cycle:	0	Level Of Service:	A

Street Name:	Mathews St								6th St					
Approach:	North Bound			South Bound			East Bound			West Bound				
Movement:	L	T	R	L	T	R	L	T	R	L	T	R		
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign				
Rights:	Include			Include			Include			Include				
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0		
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 1	0	0 0	0	0	1 0		
Volume Module:														
Base Vol:	0	0	0	44	0	67	43	84	0	0	107	88		
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
Initial Bse:	0	0	0	44	0	67	43	84	0	0	107	88		
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
PHF Volume:	0	0	0	44	0	67	43	84	0	0	107	88		
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0		
Reduced Vol:	0	0	0	44	0	67	43	84	0	0	107	88		
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
FinalVolume:	0	0	0	44	0	67	43	84	0	0	107	88		
Saturation Flow Module:														
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
Lanes:	0.00	1.00	0.00	0.40	0.00	0.60	0.34	0.66	0.00	0.00	0.55	0.45		
Final Sat.:	0	714	0	314	0	478	270	527	0	0	481	396		
Capacity Analysis Module:														
Vol/Sat:	xxxx	0.00	xxxx	0.14	xxxx	0.14	0.16	0.16	xxxx	xxxx	0.22	0.22		
Crit Moves:		****		****				****			****			
Delay/Veh:	0.0	0.0	0.0	7.9	0.0	7.9	8.2	8.2	0.0	0.0	8.1	8.1		
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
AdjDel/Veh:	0.0	0.0	0.0	7.9	0.0	7.9	8.2	8.2	0.0	0.0	8.1	8.1		
LOS by Move:	*	*	*	A	*	A	A	A	*	*	A	A		
ApproachDel:	xxxxxx			7.9			8.2			8.1				
Delay Adj:	xxxxx			1.00			1.00			1.00				
ApprAdjDel:	xxxxxx			7.9			8.2			8.1				
LOS by Appr:	*			A			A			A				
AllWayAvgQ:	0.0	0.0	0.0	0.1	0.1	0.1	0.2	0.2	0.2	0.3	0.3	0.3		

Note: Queue reported is the number of cars per lane.

LAUSD Roosevelt HS Improvements
Existing Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #5 Mott/6th

Cycle (sec):	100	Critical Vol./Cap.(X):	0.228
Loss Time (sec):	0	Average Delay (sec/veh):	8.4
Optimal Cycle:	0	Level Of Service:	A

Street Name:	Mott St							6th St							
Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign				Stop Sign				Stop Sign				Stop Sign			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Lanes:	0	0	1!	0	0	0	0	1!	0	0	0	0	1!	0	0	0
Volume Module:																
Base Vol:	38		91		8	16		71		67	82		13		83	11		11		16
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	38		91		8	16		71		67	82		13		83	11		11		16
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	38		91		8	16		71		67	82		13		83	11		11		16
Reduct Vol:	0		0		0	0		0		0	0		0		0	0		0		0
Reduced Vol:	38		91		8	16		71		67	82		13		83	11		11		16
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	38		91		8	16		71		67	82		13		83	11		11		16
Saturation Flow Module:																
Adjustment:	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.28	0.66	0.06		0.10	0.46	0.44	0.46	0.07	0.47	0.29	0.29	0.42			
Final Sat.:	209		501		44	83		369		348	359		57		363	214		214		311
Capacity Analysis Module:																
Vol/Sat:	0.18	0.18	0.18		0.19	0.19	0.19	0.23	0.23	0.23	0.05	0.05	0.05			
Crit Moves:			****			****			****				****			
Delay/Veh:	8.5	8.5	8.5		8.3	8.3	8.3	8.6	8.6	8.6	7.8	7.8	7.8			
Delay Adj:	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
AdjDel/Veh:	8.5	8.5	8.5		8.3	8.3	8.3	8.6	8.6	8.6	7.8	7.8	7.8			
LOS by Move:	A		A		A	A		A		A	A		A			
ApproachDel:	8.5				8.3			8.6			7.8					
Delay Adj:	1.00				1.00			1.00			1.00					
ApprAdjDel:	8.5				8.3			8.6			7.8					
LOS by Appr:	A				A			A			A					
AllWayAvgQ:	0.2	0.2	0.2		0.2	0.2	0.2	0.3	0.3	0.3	0.0	0.0	0.0			

Note: Queue reported is the number of cars per lane.

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APPENDIX C
Intersection Analysis Worksheets – Future Conditions

LAUSD Roosevelt HS Improvements
Future without Project Conditions
AM Peak Hour

Level Of Service Computation Report
Circular 212 Planning Method (Future Volume Alternative)

Intersection #1 Soto/4th

Cycle (sec):	100	Critical Vol./Cap.(X):	0.940
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	180	Level Of Service:	E

Street Name:	Soto Street						4th Street					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Prot+Permit			Permitted		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0	2 0 1	1	0	2 0 1	1	0	1 1 0	1	0	1 1 0
Volume Module:												
Base Vol:	89	578	70	140	855	120	66	415	77	110	1184	85
Growth Adj:	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
Initial Bse:	93	607	74	147	898	126	69	436	81	116	1243	89
Added Vol:	0	74	2	6	72	0	0	50	0	7	43	7
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	93	681	76	153	970	126	69	486	81	123	1286	96
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	93	681	76	153	970	126	69	486	81	123	1286	96
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	93	681	76	153	970	126	69	486	81	123	1286	96
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	93	681	76	153	970	126	69	486	81	123	1286	96
Saturation Flow Module:												
Sat/Lane:	1425	1425	1425	1425	1425	1425	1425	1425	1425	1425	1425	1425
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.71	0.29	1.00	1.86	0.14
Final Sat.:	1425	2850	1425	1425	2850	1425	1425	2443	407	1425	2652	198
Capacity Analysis Module:												
Vol/Sat:	0.07	0.24	0.05	0.11	0.34	0.09	0.05	0.20	0.20	0.09	0.49	0.49
Crit Volume:	93				485		69				691	
Crit Moves:	****				****		****				****	

LAUSD Roosevelt HS Improvements
Future without Project Conditions
AM Peak Hour

Level Of Service Computation Report
Circular 212 Planning Method (Future Volume Alternative)

Intersection #2 Mathews/4th

Cycle (sec):	100	Critical Vol./Cap.(X):	0.614
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	37	Level Of Service:	B

Street Name:	Mathews St						4th St					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	1! 0 0	0	0	1! 0 0	1	0	1 1 0	1	0	1 1 0
Volume Module:												
Base Vol:	35	53	76	10	85	40	20	435	127	121	1288	26
Growth Adj:	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
Initial Bse:	37	56	80	11	89	42	21	457	133	127	1352	27
Added Vol:	0	0	0	0	0	0	0	59	0	0	56	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	37	56	80	11	89	42	21	516	133	127	1408	27
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	37	56	80	11	89	42	21	516	133	127	1408	27
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	37	56	80	11	89	42	21	516	133	127	1408	27
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	37	56	80	11	89	42	21	516	133	127	1408	27
Saturation Flow Module:												
Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.21	0.32	0.47	0.07	0.63	0.30	1.00	1.59	0.41	1.00	1.96	0.04
Final Sat.:	320	485	695	111	944	444	1500	2384	616	1500	2943	57
Capacity Analysis Module:												
Vol/Sat:	0.11	0.11	0.11	0.09	0.09	0.09	0.01	0.22	0.22	0.08	0.48	0.48
Crit Volume:			172	11			21					718
Crit Moves:			****	****			****					****

LAUSD Roosevelt HS Improvements
Future without Project Conditions
AM Peak Hour

Level Of Service Computation Report
Circular 212 Planning Method (Future Volume Alternative)

Intersection #3 Mott/4th

Cycle (sec):	100	Critical Vol./Cap.(X):	0.705
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	49	Level Of Service:	C

Street Name:	Mott Street						4th Street					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	1! 0	0	0	1! 0	1	0	1 1	0	1	0 1 0
Volume Module:												
Base Vol:	52	124	41	47	129	53	39	393	42	61	1266	54
Growth Adj:	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
Initial Bse:	55	130	43	49	135	56	41	413	44	64	1329	57
Added Vol:	0	0	0	0	0	0	0	59	0	0	56	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	55	130	43	49	135	56	41	472	44	64	1385	57
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	55	130	43	49	135	56	41	472	44	64	1385	57
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	55	130	43	49	135	56	41	472	44	64	1385	57
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	55	130	43	49	135	56	41	472	44	64	1385	57
Saturation Flow Module:												
Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.24	0.57	0.19	0.21	0.56	0.23	1.00	1.83	0.17	1.00	1.92	0.08
Final Sat.:	359	857	283	308	845	347	1500	2743	257	1500	2882	118
Capacity Analysis Module:												
Vol/Sat:	0.15	0.15	0.15	0.16	0.16	0.16	0.03	0.17	0.17	0.04	0.48	0.48
Crit Volume:	55					240	41				721	
Crit Moves:	****					****	****				****	

LAUSD Roosevelt HS Improvements
Future without Project Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #4 Mathews/6th

Cycle (sec):	100	Critical Vol./Cap.(X):	0.511
Loss Time (sec):	0	Average Delay (sec/veh):	11.7
Optimal Cycle:	0	Level Of Service:	B

Street Name:	Mathews St						6th St					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0	1! 0	0	0	1! 0	0	1	0 0	0	0	0 1 0
Volume Module:												
Base Vol:	0	0	0	113	0	118	79	208	0	0	145	86
Growth Adj:	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
Initial Bse:	0	0	0	119	0	124	83	218	0	0	152	90
Added Vol:	0	0	0	0	0	0	0	59	0	0	56	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	119	0	124	83	277	0	0	208	90
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	119	0	124	83	277	0	0	208	90
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	119	0	124	83	277	0	0	208	90
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	119	0	124	83	277	0	0	208	90
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.00	0.00	0.49	0.00	0.51	0.23	0.77	0.00	0.00	0.70	0.30
Final Sat.:	0	525	0	316	0	330	162	543	0	0	502	218
Capacity Analysis Module:												
Vol/Sat:	xxxx	0.00	xxxx	0.38	xxxx	0.38	0.51	0.51	xxxx	xxxx	0.41	0.41
Crit Moves:		****				****		****			****	
Delay/Veh:	0.0	0.0	0.0	11.0	0.0	11.0	12.7	12.7	0.0	0.0	11.0	11.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	11.0	0.0	11.0	12.7	12.7	0.0	0.0	11.0	11.0
LOS by Move:	*	*	*	B	*	B	B	B	*	*	B	B
ApproachDel:	xxxxxx			11.0			12.7			11.0		
Delay Adj:	xxxxx			1.00			1.00			1.00		
ApprAdjDel:	xxxxxx			11.0			12.7			11.0		
LOS by Appr:	*			B			B			B		
AllWayAvgQ:	0.0	0.0	0.0	0.5	0.5	0.5	0.9	0.9	0.9	0.6	0.6	0.6

LAUSD Roosevelt HS Improvements
Future without Project Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #5 Mott/6th

Cycle (sec):	100	Critical Vol./Cap.(X):	0.499
Loss Time (sec):	0	Average Delay (sec/veh):	11.4
Optimal Cycle:	0	Level Of Service:	B

Street Name:	Mott St							6th St							
Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Stop Sign				Stop Sign				Stop Sign				Stop Sign			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0	1!	0 0	0	0	1!	0 0	0	0	1!	0 0	0	0	1!	0 0
Volume Module:																
Base Vol:	105		76	6	8		114	117	128		11	122	11		44	21
Growth Adj:	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
Initial Bse:	110		80	6	8		120	123	134		12	128	12		46	22
Added Vol:	0		0	0	0		0	0	0		59	0	0		56	0
PasserByVol:	0		0	0	0		0	0	0		0	0	0		0	0
Initial Fut:	110		80	6	8		120	123	134		71	128	12		102	22
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	110		80	6	8		120	123	134		71	128	12		102	22
Reduct Vol:	0		0	0	0		0	0	0		0	0	0		0	0
Reduced Vol:	110		80	6	8		120	123	134		71	128	12		102	22
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	110		80	6	8		120	123	134		71	128	12		102	22
Saturation Flow Module:																
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.56	0.41	0.03	0.03	0.48	0.49	0.41	0.21	0.38	0.09	0.75	0.16				
Final Sat.:	337		244	19	22		312	320	269		141	257	51		450	97
Capacity Analysis Module:																
Vol/Sat:	0.33	0.33	0.33	0.38	0.38	0.38	0.50	0.50	0.50	0.23	0.23	0.23				
Crit Moves:	****				****				****							****
Delay/Veh:	11.0	11.0	11.0	10.9	10.9	10.9	12.6	12.6	12.6	9.9	9.9	9.9				
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
AdjDel/Veh:	11.0	11.0	11.0	10.9	10.9	10.9	12.6	12.6	12.6	9.9	9.9	9.9				
LOS by Move:	B		B	B	B		B	B		B	A	A	A			
ApproachDel:	11.0				10.9				12.6				9.9			
Delay Adj:	1.00				1.00				1.00				1.00			
ApprAdjDel:	11.0				10.9				12.6				9.9			
LOS by Appr:	B				B				B				A			
AllWayAvgQ:	0.4	0.4	0.4	0.5	0.5	0.5	0.8	0.8	0.8	0.2	0.2	0.2				

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LAUSD Roosevelt HS Improvements
Future without Project Conditions
PM Peak Hour

Level Of Service Computation Report
Circular 212 Planning Method (Future Volume Alternative)

Intersection #1 Soto/4th

Cycle (sec):	100	Critical Vol./Cap.(X):	0.916
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	180	Level Of Service:	E

Street Name:	Soto Street						4th Street					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Prot+Permit			Permitted		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0 2	0 1	1	0 2	0 1	1	0 1	1 0	1	0 1	1 0
Volume Module:												
Base Vol:	149	824	134	88	622	72	195	1137	181	116	517	76
Growth Adj:	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
Initial Bse:	156	865	141	92	653	76	205	1194	190	122	543	80
Added Vol:	0	99	9	9	97	0	0	60	0	4	66	9
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	156	964	150	101	750	76	205	1254	190	126	609	89
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	156	964	150	101	750	76	205	1254	190	126	609	89
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	156	964	150	101	750	76	205	1254	190	126	609	89
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	156	964	150	101	750	76	205	1254	190	126	609	89
Saturation Flow Module:												
Sat/Lane:	1425	1425	1425	1425	1425	1425	1425	1425	1425	1425	1425	1425
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.74	0.26	1.00	1.75	0.25
Final Sat.:	1425	2850	1425	1425	2850	1425	1425	2475	375	1425	2487	363
Capacity Analysis Module:												
Vol/Sat:	0.11	0.34	0.11	0.07	0.26	0.05	0.14	0.51	0.51	0.09	0.24	0.24
Crit Volume:		482			101			722			349	
Crit Moves:		****			****			****				

LAUSD Roosevelt HS Improvements
Future without Project Conditions
PM Peak Hour

Level Of Service Computation Report
Circular 212 Planning Method (Future Volume Alternative)

Intersection #2 Mathews/4th

Cycle (sec):	100	Critical Vol./Cap.(X):	0.629
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	39	Level Of Service:	B

Street Name:	Mathews St						4th St					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0 1! 0	0	0	0 1! 0	0	1	0 1	1 0	1	0 1	1 0
Volume Module:												
Base Vol:	39	27	64	14	36	26	27	1186	117	67	636	21
Growth Adj:	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
Initial Bse:	41	28	67	15	38	27	28	1245	123	70	668	22
Added Vol:	0	0	0	0	0	0	0	77	0	0	78	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	41	28	67	15	38	27	28	1322	123	70	746	22
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	41	28	67	15	38	27	28	1322	123	70	746	22
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	41	28	67	15	38	27	28	1322	123	70	746	22
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	41	28	67	15	38	27	28	1322	123	70	746	22
Saturation Flow Module:												
Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.30	0.21	0.49	0.18	0.48	0.34	1.00	1.83	0.17	1.00	1.94	0.06
Final Sat.:	450	312	738	276	711	513	1500	2745	255	1500	2914	86
Capacity Analysis Module:												
Vol/Sat:	0.09	0.09	0.09	0.05	0.05	0.05	0.02	0.48	0.48	0.05	0.26	0.26
Crit Volume:		137			15			723			70	
Crit Moves:		****			****			****			****	

LAUSD Roosevelt HS Improvements
Future without Project Conditions
PM Peak Hour

Level Of Service Computation Report
Circular 212 Planning Method (Future Volume Alternative)

Intersection #3 Mott/4th

Cycle (sec):	100	Critical Vol./Cap.(X):	0.610
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	37	Level Of Service:	B

Street Name:	Mott Street						4th Street					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0 1!	0	0	0 1!	0	1	0 1	1 0	1	0 1	1 0
Volume Module:												
Base Vol:	34	87	47	79	75	47	100	1045	62	34	609	62
Growth Adj:	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
Initial Bse:	36	91	49	83	79	49	105	1097	65	36	639	65
Added Vol:	0	0	0	0	0	0	0	77	0	0	78	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	36	91	49	83	79	49	105	1174	65	36	717	65
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	36	91	49	83	79	49	105	1174	65	36	717	65
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	36	91	49	83	79	49	105	1174	65	36	717	65
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	36	91	49	83	79	49	105	1174	65	36	717	65
Saturation Flow Module:												
Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.20	0.52	0.28	0.40	0.37	0.23	1.00	1.89	0.11	1.00	1.83	0.17
Final Sat.:	304	777	420	590	560	351	1500	2842	158	1500	2750	250
Capacity Analysis Module:												
Vol/Sat:	0.12	0.12	0.12	0.14	0.14	0.14	0.07	0.41	0.41	0.02	0.26	0.26
Crit Volume:		176			83				620	36		
Crit Moves:		****			****				****	****		

LAUSD Roosevelt HS Improvements
Future without Project Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #4 Mathews/6th

Cycle (sec):	100	Critical Vol./Cap.(X):	0.338
Loss Time (sec):	0	Average Delay (sec/veh):	9.1
Optimal Cycle:	0	Level Of Service:	A

Street Name:	Mathews St						6th St					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0 1!	0	0	0 1!	0	0	1 0	0	0	0 1	0
Volume Module:												
Base Vol:	0	0	0	44	0	67	43	84	0	0	107	88
Growth Adj:	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
Initial Bse:	0	0	0	46	0	70	45	88	0	0	112	92
Added Vol:	0	0	0	0	0	0	0	77	0	0	78	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	46	0	70	45	165	0	0	190	92
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	46	0	70	45	165	0	0	190	92
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	46	0	70	45	165	0	0	190	92
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	46	0	70	45	165	0	0	190	92
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.00	0.00	0.40	0.00	0.60	0.21	0.79	0.00	0.00	0.67	0.33
Final Sat.:	0	638	0	284	0	432	167	611	0	0	563	273
Capacity Analysis Module:												
Vol/Sat:	xxxx	0.00	xxxx	0.16	xxxx	0.16	0.27	0.27	xxxx	xxxx	0.34	0.34
Crit Moves:		****		****				****			****	
Delay/Veh:	0.0	0.0	0.0	8.5	0.0	8.5	9.1	9.1	0.0	0.0	9.3	9.3
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	8.5	0.0	8.5	9.1	9.1	0.0	0.0	9.3	9.3
LOS by Move:	*	*	*	A	*	A	A	A	*	*	A	A
ApproachDel:	xxxxxx			8.5			9.1			9.3		
Delay Adj:	xxxxx			1.00			1.00			1.00		
ApprAdjDel:	xxxxxx			8.5			9.1			9.3		
LOS by Appr:	*			A			A			A		
AllWayAvgQ:	0.0	0.0	0.0	0.2	0.2	0.2	0.3	0.3	0.3	0.5	0.5	0.5

LAUSD Roosevelt HS Improvements
Future without Project Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #5 Mott/6th

Cycle (sec):	100	Critical Vol./Cap.(X):	0.358
Loss Time (sec):	0	Average Delay (sec/veh):	9.4
Optimal Cycle:	0	Level Of Service:	A

Street Name:	Mott St								6th St							
Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Stop Sign				Stop Sign				Stop Sign				Stop Sign			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Lanes:	0	0	1!	0 0	0	0	1!	0 0	0	0	1!	0 0	0	0	1!	0 0
Volume Module:																
Base Vol:	38	91	8		16	71	67		82	13	83		11	11	16	
Growth Adj:	1.05	1.05	1.05		1.05	1.05	1.05		1.05	1.05	1.05		1.05	1.05	1.05	
Initial Bse:	40	96	8		17	75	70		86	14	87		12	12	17	
Added Vol:	0	0	0		0	0	0		0	77	0		0	78	0	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	40	96	8		17	75	70		86	91	87		12	90	17	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	40	96	8		17	75	70		86	91	87		12	90	17	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	40	96	8		17	75	70		86	91	87		12	90	17	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	40	96	8		17	75	70		86	91	87		12	90	17	
Saturation Flow Module:																
Adjustment:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Lanes:	0.28	0.66	0.06		0.10	0.46	0.44		0.33	0.34	0.33		0.10	0.76	0.14	
Final Sat.:	186	445	39		73	326	308		241	253	244		67	522	98	
Capacity Analysis Module:																
Vol/Sat:	0.21	0.21	0.21		0.23	0.23	0.23		0.36	0.36	0.36		0.17	0.17	0.17	
Crit Moves:		****					****			****				****		
Delay/Veh:	9.3	9.3	9.3		9.0	9.0	9.0		10.0	10.0	10.0		8.8	8.8	8.8	
Delay Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
AdjDel/Veh:	9.3	9.3	9.3		9.0	9.0	9.0		10.0	10.0	10.0		8.8	8.8	8.8	
LOS by Move:	A	A	A		A	A	A		B	B	B		A	A	A	
ApproachDel:	9.3				9.0				10.0				8.8			
Delay Adj:	1.00				1.00				1.00				1.00			
ApprAdjDel:	9.3				9.0				10.0				8.8			
LOS by Appr:	A				A				B				A			
AllWayAvgQ:	0.2	0.2	0.2		0.3	0.3	0.3		0.5	0.5	0.5		0.2	0.2	0.2	

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APPENDIX D
Intersection Analysis Worksheets – Future with Construction Conditions

LAUSD Roosevelt HS Improvements
Future w Project Construction Conditions
AM Peak Hour

Level Of Service Computation Report
Circular 212 Planning Method (Future Volume Alternative)

Intersection #1 Soto/4th

Cycle (sec):	100	Critical Vol./Cap.(X):	0.949
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	180	Level Of Service:	E

Street Name:	Soto Street						4th Street					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Prot+Permit			Permitted		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0	2 0 1	1	0	2 0 1	1	0	1 1 0	1	0	1 1 0
Volume Module:												
Base Vol:	89	578	70	140	855	120	66	415	77	110	1184	85
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	90	584	71	141	864	121	67	419	78	111	1196	86
Added Vol:	12	99	9	9	97	0	0	110	13	4	115	9
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	102	683	80	150	961	121	67	529	91	115	1311	95
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	102	683	80	150	961	121	67	529	91	115	1311	95
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	102	683	80	150	961	121	67	529	91	115	1311	95
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	102	683	80	150	961	121	67	529	91	115	1311	95
Saturation Flow Module:												
Sat/Lane:	1425	1425	1425	1425	1425	1425	1425	1425	1425	1425	1425	1425
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.71	0.29	1.00	1.87	0.13
Final Sat.:	1425	2850	1425	1425	2850	1425	1425	2433	417	1425	2658	192
Capacity Analysis Module:												
Vol/Sat:	0.07	0.24	0.06	0.11	0.34	0.09	0.05	0.22	0.22	0.08	0.49	0.49
Crit Volume:	102				480		67					703
Crit Moves:	****				****		****					****

LAUSD Roosevelt HS Improvements
Future w Project Construction Conditions
AM Peak Hour

Level Of Service Computation Report
Circular 212 Planning Method (Future Volume Alternative)

Intersection #2 Mathews/4th

Cycle (sec):	100	Critical Vol./Cap.(X):	0.618
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	38	Level Of Service:	B

Street Name:	Mathews St						4th St					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	1! 0 0	0	0	1! 0 0	1	0	1 1 0	1	0	1 1 0
Volume Module:												
Base Vol:	35	53	76	10	85	40	20	435	127	121	1288	26
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	35	54	77	10	86	40	20	439	128	122	1301	26
Added Vol:	6	0	0	0	0	0	0	121	6	0	122	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	41	54	77	10	86	40	20	560	134	122	1423	26
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	41	54	77	10	86	40	20	560	134	122	1423	26
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	41	54	77	10	86	40	20	560	134	122	1423	26
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	41	54	77	10	86	40	20	560	134	122	1423	26
Saturation Flow Module:												
Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.24	0.31	0.45	0.07	0.63	0.30	1.00	1.61	0.39	1.00	1.96	0.04
Final Sat.:	361	468	671	111	944	444	1500	2420	580	1500	2946	54
Capacity Analysis Module:												
Vol/Sat:	0.11	0.11	0.11	0.09	0.09	0.09	0.01	0.23	0.23	0.08	0.48	0.48
Crit Volume:			172	10			20				725	
Crit Moves:			****	****			****				****	

LAUSD Roosevelt HS Improvements
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Level Of Service Computation Report
Circular 212 Planning Method (Future Volume Alternative)

Intersection #3 Mott/4th

Cycle (sec):	100	Critical Vol./Cap.(X):	0.715
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	50	Level Of Service:	C

Street Name:	Mott Street						4th Street					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0 1!	0	0	0 1!	0	1	0 1	1 0	1	0 1	1 0
Volume Module:												
Base Vol:	52	124	41	47	129	53	39	393	42	61	1266	54
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	53	125	41	47	130	54	39	397	42	62	1279	55
Added Vol:	43	0	0	0	0	0	0	77	44	0	78	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	96	125	41	47	130	54	39	474	86	62	1357	55
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	96	125	41	47	130	54	39	474	86	62	1357	55
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	96	125	41	47	130	54	39	474	86	62	1357	55
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	96	125	41	47	130	54	39	474	86	62	1357	55
Saturation Flow Module:												
Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.36	0.48	0.16	0.21	0.56	0.23	1.00	1.69	0.31	1.00	1.92	0.08
Final Sat.:	547	717	237	308	845	347	1500	2537	463	1500	2884	116
Capacity Analysis Module:												
Vol/Sat:	0.17	0.17	0.17	0.15	0.15	0.15	0.03	0.19	0.19	0.04	0.47	0.47
Crit Volume:	96					231	39				706	
Crit Moves:	****					****	****				****	

LAUSD Roosevelt HS Improvements
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Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #4 Mathews/6th

Cycle (sec):	100	Critical Vol./Cap.(X):	0.542
Loss Time (sec):	0	Average Delay (sec/veh):	12.3
Optimal Cycle:	0	Level Of Service:	B

Street Name:	Mathews St						6th St					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0 1!	0	0	0 1!	0	0	1 0	0	0	1 0	0
Volume Module:												
Base Vol:	0	0	0	113	0	118	79	208	0	0	145	86
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	0	0	0	114	0	119	80	210	0	0	146	87
Added Vol:	0	0	0	6	0	0	0	90	0	0	91	6
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	120	0	119	80	300	0	0	237	93
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	120	0	119	80	300	0	0	237	93
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	120	0	119	80	300	0	0	237	93
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	120	0	119	80	300	0	0	237	93
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.00	0.00	0.50	0.00	0.50	0.21	0.79	0.00	0.00	0.72	0.28
Final Sat.:	0	506	0	315	0	313	147	553	0	0	514	201
Capacity Analysis Module:												
Vol/Sat:	xxxx	0.00	xxxx	0.38	xxxx	0.38	0.54	0.54	xxxx	xxxx	0.46	0.46
Crit Moves:		****		****				****			****	
Delay/Veh:	0.0	0.0	0.0	11.2	0.0	11.2	13.4	13.4	0.0	0.0	11.7	11.7
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	11.2	0.0	11.2	13.4	13.4	0.0	0.0	11.7	11.7
LOS by Move:	*	*	*	B	*	B	B	B	*	*	B	B
ApproachDel:	xxxxxx			11.2			13.4			11.7		
Delay Adj:	xxxxx			1.00			1.00			1.00		
ApprAdjDel:	xxxxxx			11.2			13.4			11.7		
LOS by Appr:	*			B			B			B		
AllWayAvgQ:	0.0	0.0	0.0	0.5	0.5	0.5	1.1	1.1	1.1	0.8	0.8	0.8

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Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #5 Mott/6th

Cycle (sec):	100	Critical Vol./Cap.(X):	0.510
Loss Time (sec):	0	Average Delay (sec/veh):	11.5
Optimal Cycle:	0	Level Of Service:	B

Street Name:	Mott St							6th St							
Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Stop Sign					Stop Sign				
Rights:	Include					Include					Include					Include				
Min. Green:	0	0	0			0	0	0			0	0	0			0	0	0		
Lanes:	0	0	1!	0	0	0	0	1!	0	0	0	0	1!	0	0	0	0	1!	0	0
Volume Module:																				
Base Vol:	105		76		6	8		114		117	128		11		122	11		44		21
Growth Adj:	1.01	1.01		1.01	1.01	1.01	1.01		1.01	1.01	1.01	1.01		1.01	1.01	1.01	1.01		1.01	1.01
Initial Bse:	106		77		6	8		115		118	129		11		123	11		44		21
Added Vol:	0		0		0	0		0		0	0		77		0	0		78		0
PasserByVol:	0		0		0	0		0		0	0		0		0	0		0		0
Initial Fut:	106		77		6	8		115		118	129		88		123	11		122		21
User Adj:	1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00
PHF Adj:	1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00
PHF Volume:	106		77		6	8		115		118	129		88		123	11		122		21
Reduct Vol:	0		0		0	0		0		0	0		0		0	0		0		0
Reduced Vol:	106		77		6	8		115		118	129		88		123	11		122		21
PCE Adj:	1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00
MLF Adj:	1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00
FinalVolume:	106		77		6	8		115		118	129		88		123	11		122		21
Saturation Flow Module:																				
Adjustment:	1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00
Lanes:	0.56	0.41		0.03	0.03	0.48	0.49		0.38	0.26	0.36	0.07		0.79	0.14					
Final Sat.:	331		240		19	22		307		315	254		173		242	43		476		82
Capacity Analysis Module:																				
Vol/Sat:	0.32	0.32		0.32	0.38	0.38	0.38		0.51	0.51	0.51	0.26		0.26	0.26					
Crit Moves:		****				****			****			****								
Delay/Veh:	11.0	11.0		11.0	10.9	10.9	10.9		12.8	12.8	12.8	10.1		10.1	10.1					
Delay Adj:	1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00					
AdjDel/Veh:	11.0	11.0		11.0	10.9	10.9	10.9		12.8	12.8	12.8	10.1		10.1	10.1					
LOS by Move:	B		B		B	B		B		B	B		B		B	B		B		B
ApproachDel:	11.0					10.9					12.8					10.1				
Delay Adj:	1.00					1.00					1.00					1.00				
ApprAdjDel:	11.0					10.9					12.8					10.1				
LOS by Appr:	B					B					B					B				
AllWayAvgQ:	0.4	0.4		0.4	0.5	0.5	0.5		0.9	0.9	0.9	0.3		0.3	0.3					

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Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
Circular 212 Planning Method (Future Volume Alternative)

Intersection #1 Soto/4th

Cycle (sec):	100	Critical Vol./Cap.(X):	0.991
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	180	Level Of Service:	E

Street Name:	Soto Street						4th Street					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Prot+Permit			Permitted		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0 2	0 1	1	0 2	0 1	1	0 1	1 0	1	0 1	1 0
Volume Module:												
Base Vol:	149	824	134	88	622	72	195	1137	181	116	517	76
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	150	832	135	89	628	73	197	1148	183	117	522	77
Added Vol:	12	99	9	9	97	0	0	110	13	4	115	9
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	162	931	144	98	725	73	197	1258	196	121	637	86
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	162	931	144	98	725	73	197	1258	196	121	637	86
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	162	931	144	98	725	73	197	1258	196	121	637	86
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	162	931	144	98	725	73	197	1258	196	121	637	86
Saturation Flow Module:												
Sat/Lane:	1425	1425	1425	1425	1425	1425	1425	1425	1425	1425	1425	1425
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.73	0.27	1.00	1.76	0.24
Final Sat.:	1425	2850	1425	1425	2850	1425	1425	2466	384	1425	2512	338
Capacity Analysis Module:												
Vol/Sat:	0.11	0.33	0.10	0.07	0.25	0.05	0.14	0.51	0.51	0.09	0.25	0.25
Crit Volume:		466			98			727			121	
Crit Moves:		****			****			****			****	

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Level Of Service Computation Report
Circular 212 Planning Method (Future Volume Alternative)

Intersection #2 Mathews/4th

Cycle (sec):	100	Critical Vol./Cap.(X):	0.627
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	39	Level Of Service:	B

Street Name:	Mathews St						4th St					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0 1! 0	0	0	0 1! 0	0	1	0 1	1 0	1	0 1	1 0
Volume Module:												
Base Vol:	39	27	64	14	36	26	27	1186	117	67	636	21
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	39	27	65	14	36	26	27	1198	118	68	642	21
Added Vol:	6	0	0	0	0	0	0	121	6	0	122	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	45	27	65	14	36	26	27	1319	124	68	764	21
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	45	27	65	14	36	26	27	1319	124	68	764	21
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	45	27	65	14	36	26	27	1319	124	68	764	21
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	45	27	65	14	36	26	27	1319	124	68	764	21
Saturation Flow Module:												
Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.33	0.20	0.47	0.18	0.48	0.34	1.00	1.83	0.17	1.00	1.95	0.05
Final Sat.:	496	298	706	276	711	513	1500	2742	258	1500	2919	81
Capacity Analysis Module:												
Vol/Sat:	0.09	0.09	0.09	0.05	0.05	0.05	0.02	0.48	0.48	0.05	0.26	0.26
Crit Volume:		137			14				722	68		
Crit Moves:		****			****				****	****		

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Level Of Service Computation Report
Circular 212 Planning Method (Future Volume Alternative)

Intersection #3 Mott/4th

Cycle (sec):	100	Critical Vol./Cap.(X):	0.631
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	39	Level Of Service:	B

Street Name:	Mott Street						4th Street					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	1 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	34	87	47	79	75	47	100	1045	62	34	609	62
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	34	88	47	80	76	47	101	1055	63	34	615	63
Added Vol:	43	0	0	0	0	0	0	77	44	0	78	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	77	88	47	80	76	47	101	1132	107	34	693	63
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	77	88	47	80	76	47	101	1132	107	34	693	63
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	77	88	47	80	76	47	101	1132	107	34	693	63
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	77	88	47	80	76	47	101	1132	107	34	693	63
Saturation Flow Module:												
Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.36	0.42	0.22	0.40	0.37	0.23	1.00	1.83	0.17	1.00	1.83	0.17
Final Sat.:	545	620	335	590	560	351	1500	2742	258	1500	2751	249
Capacity Analysis Module:												
Vol/Sat:	0.14	0.14	0.14	0.14	0.14	0.14	0.07	0.41	0.41	0.02	0.25	0.25
Crit Volume:		213			80				620	34		
Crit Moves:		****			****				****	****		

LAUSD Roosevelt HS Improvements
Future w Project Construction Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #4 Mathews/6th

Cycle (sec):	100	Critical Vol./Cap.(X):	0.353
Loss Time (sec):	0	Average Delay (sec/veh):	9.2
Optimal Cycle:	0	Level Of Service:	A

Street Name:	Mathews St						6th St					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 1	0	0 0	0	1	0
Volume Module:												
Base Vol:	0	0	0	44	0	67	43	84	0	0	107	88
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	0	0	0	44	0	68	43	85	0	0	108	89
Added Vol:	0	0	0	6	0	0	0	90	0	0	91	6
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	50	0	68	43	175	0	0	199	95
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	50	0	68	43	175	0	0	199	95
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	50	0	68	43	175	0	0	199	95
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	50	0	68	43	175	0	0	199	95
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.00	0.00	0.43	0.00	0.57	0.20	0.80	0.00	0.00	0.68	0.32
Final Sat.:	0	630	0	301	0	404	154	621	0	0	564	269
Capacity Analysis Module:												
Vol/Sat:	xxxx	0.00	xxxx	0.17	xxxx	0.17	0.28	0.28	xxxx	xxxx	0.35	0.35
Crit Moves:		****		****				****			****	
Delay/Veh:	0.0	0.0	0.0	8.6	0.0	8.6	9.2	9.2	0.0	0.0	9.4	9.4
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	8.6	0.0	8.6	9.2	9.2	0.0	0.0	9.4	9.4
LOS by Move:	*	*	*	A	*	A	A	A	*	*	A	A
ApproachDel:	xxxxxx			8.6			9.2			9.4		
Delay Adj:	xxxxx			1.00			1.00			1.00		
ApprAdjDel:	xxxxxx			8.6			9.2			9.4		
LOS by Appr:	*			A			A			A		
AllWayAvgQ:	0.0	0.0	0.0	0.2	0.2	0.2	0.4	0.4	0.4	0.5	0.5	0.5

LAUSD Roosevelt HS Improvements
Future w Project Construction Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #5 Mott/6th

Cycle (sec):	100	Critical Vol./Cap.(X):	0.345
Loss Time (sec):	0	Average Delay (sec/veh):	9.3
Optimal Cycle:	0	Level Of Service:	A

Street Name:	Mott St								6th St							
Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Stop Sign				Stop Sign				Stop Sign				Stop Sign			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Lanes:	0	0	1!	0 0	0	0	1!	0 0	0	0	1!	0 0	0	0	1!	0 0
Volume Module:																
Base Vol:	38	91	8		16	71	67		82	13	83		11	11	16	
Growth Adj:	1.01	1.01	1.01		1.01	1.01	1.01		1.01	1.01	1.01		1.01	1.01	1.01	
Initial Bse:	38	92	8		16	72	68		83	13	84		11	11	16	
Added Vol:	0	0	0		0	0	0		0	77	0		0	78	0	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	38	92	8		16	72	68		83	90	84		11	89	16	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	38	92	8		16	72	68		83	90	84		11	89	16	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	38	92	8		16	72	68		83	90	84		11	89	16	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	38	92	8		16	72	68		83	90	84		11	89	16	
Saturation Flow Module:																
Adjustment:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Lanes:	0.28	0.66	0.06		0.10	0.46	0.44		0.32	0.35	0.33		0.09	0.77	0.14	
Final Sat.:	187	448	39		74	329	310		240	261	243		66	532	96	
Capacity Analysis Module:																
Vol/Sat:	0.21	0.21	0.21		0.22	0.22	0.22		0.34	0.34	0.34		0.17	0.17	0.17	
Crit Moves:		****			****					****				****		
Delay/Veh:	9.2	9.2	9.2		8.9	8.9	8.9		9.9	9.9	9.9		8.7	8.7	8.7	
Delay Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
AdjDel/Veh:	9.2	9.2	9.2		8.9	8.9	8.9		9.9	9.9	9.9		8.7	8.7	8.7	
LOS by Move:	A	A	A		A	A	A		A	A	A		A	A	A	
ApproachDel:	9.2				8.9				9.9				8.7			
Delay Adj:	1.00				1.00				1.00				1.00			
ApprAdjDel:	9.2				8.9				9.9				8.7			
LOS by Appr:	A				A				A				A			
AllWayAvgQ:	0.2	0.2	0.2		0.2	0.2	0.2		0.5	0.5	0.5		0.2	0.2	0.2	

Traffix 8.0.0715 (c) 2008 Dowling Assoc. Licensed to KOA CORP, MONTEREY PK

LAUSD Roosevelt HS Improvements
Future w Project Construction Conditions
PM Peak Hour

Note: Queue reported is the number of cars per lane.

Traffix 8.0.0715 (c) 2008 Dowling Assoc. Licensed to KOA CORP, MONTEREY PK

Counts Unlimited
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Corona, CA 92878
(951) 268-6268

City of Los Angeles
N/S: Mathews Street
E/W: 6th Street
Weather: Clear

File Name : LACMA6TPM
Site Code : 04116347
Start Date : 6/2/2016
Page No : 1

Groups Printed- Dual Wheeled

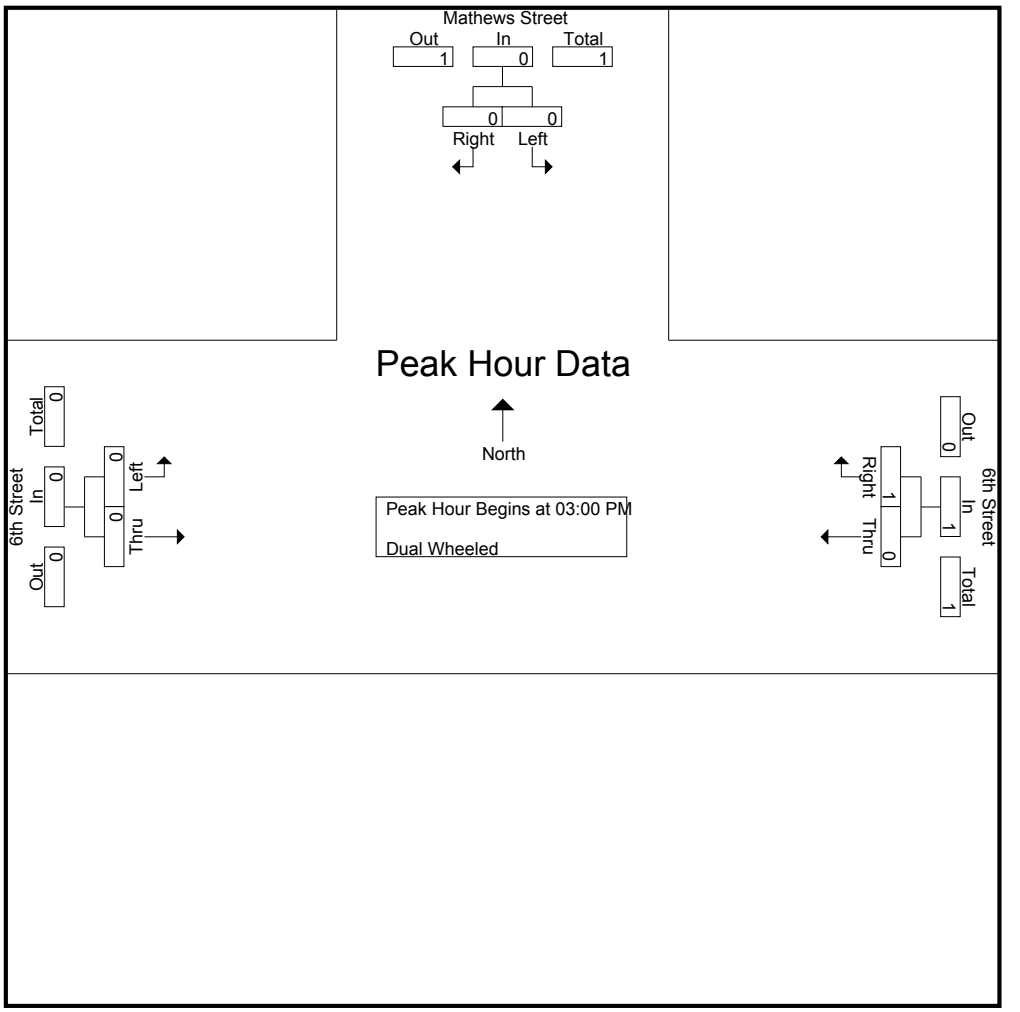
	Mathews Street Southbound			6th Street Westbound			6th Street Eastbound			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
03:00 PM	0	0	0	0	0	0	0	0	0	0
03:15 PM	0	0	0	0	0	0	0	0	0	0
03:30 PM	0	0	0	0	0	0	0	0	0	0
03:45 PM	0	0	0	0	1	1	0	0	0	1
Total	0	0	0	0	1	1	0	0	0	1
04:00 PM	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0
04:30 PM	1	0	1	0	0	0	0	0	0	1
04:45 PM	1	1	2	1	0	1	0	0	0	3
Total	2	1	3	1	0	1	0	0	0	4
05:00 PM	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	1	1	1
05:45 PM	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	1	1	1
Grand Total	2	1	3	1	1	2	0	1	1	6
Apprch %	66.7	33.3		50	50		0	100		
Total %	33.3	16.7	50	16.7	16.7	33.3	0	16.7	16.7	

	Mathews Street Southbound			6th Street Westbound			6th Street Eastbound			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
Peak Hour Analysis From 03:00 PM to 03:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 03:00 PM										
03:00 PM	0	0	0	0	0	0	0	0	0	0
03:15 PM	0	0	0	0	0	0	0	0	0	0
03:30 PM	0	0	0	0	0	0	0	0	0	0
03:45 PM	0	0	0	0	**1**	**1**	0	0	0	**1**
Total Volume	0	0	0	0	1	1	0	0	0	1
% App. Total	0	0		0	100		0	0		
PHF	.000	.000	.000	.000	.250	.250	.000	.000	.000	.250

Counts Unlimited
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City of Los Angeles
N/S: Mathews Street
E/W: 6th Street
Weather: Clear

File Name : LACMA6TPM
Site Code : 04116347
Start Date : 6/2/2016
Page No : 2



Peak Hour Analysis From 03:00 PM to 03:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	03:00 PM			03:00 PM			03:00 PM		
+0 mins.	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	**1**	**1**	0	0	0
Total Volume	0	0	0	0	1	1	0	0	0
% App. Total	0	0		0	100		0	0	
PHF	.000	.000	.000	.000	.250	.250	.000	.000	.000

Counts Unlimited
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(951) 268-6268

City of Los Angeles
N/S: Mathews Street
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File Name : LACMA6TPM
Site Code : 04116347
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Page No : 1

Groups Printed- Buses

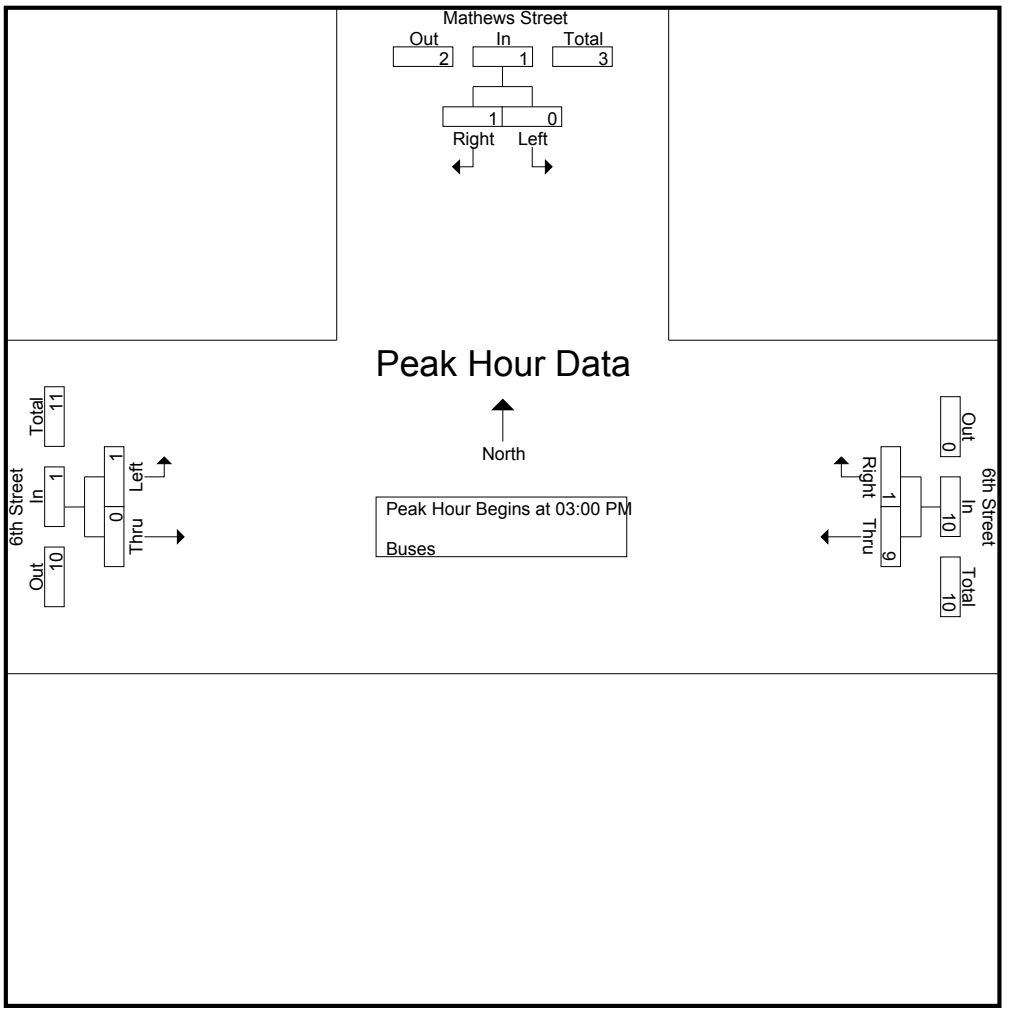
	Mathews Street Southbound			6th Street Westbound			6th Street Eastbound			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
03:00 PM	0	0	0	4	1	5	0	0	0	5
03:15 PM	0	0	0	4	0	4	0	0	0	4
03:30 PM	0	1	1	0	0	0	1	0	1	2
03:45 PM	0	0	0	1	0	1	0	0	0	1
Total	0	1	1	9	1	10	1	0	1	12
04:00 PM	1	0	1	0	0	0	1	0	1	2
04:15 PM	0	0	0	0	0	0	2	0	2	2
04:30 PM	0	0	0	0	0	0	1	0	1	1
04:45 PM	0	1	1	0	0	0	1	0	1	2
Total	1	1	2	0	0	0	5	0	5	7
05:00 PM	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	2	0	2	2
05:30 PM	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	2	0	2	2
Grand Total	1	2	3	9	1	10	8	0	8	21
Apprch %	33.3	66.7		90	10		100	0		
Total %	4.8	9.5	14.3	42.9	4.8	47.6	38.1	0	38.1	

	Mathews Street Southbound			6th Street Westbound			6th Street Eastbound			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
Peak Hour Analysis From 03:00 PM to 03:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 03:00 PM										
03:00 PM	0	0	0	**4**	**1**	**5**	0	0	0	**5**
03:15 PM	0	0	0	4	0	4	0	0	0	4
03:30 PM	0	**1**	**1**	0	0	0	**1**	0	**1**	2
03:45 PM	0	0	0	1	0	1	0	0	0	1
Total Volume	0	1	1	9	1	10	1	0	1	12
% App. Total	0	100		90	10		100	0		
PHF	.000	.250	.250	.563	.250	.500	.250	.000	.250	.600

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City of Los Angeles
N/S: Mathews Street
E/W: 6th Street
Weather: Clear

File Name : LACMA6TPM
Site Code : 04116347
Start Date : 6/2/2016
Page No : 2



Peak Hour Analysis From 03:00 PM to 03:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	03:00 PM			03:00 PM			03:00 PM		
+0 mins.	0	0	0	**4**	**1**	**5**	0	0	0
+15 mins.	0	0	0	4	0	4	0	0	0
+30 mins.	0	**1**	**1**	0	0	0	**1**	0	**1**
+45 mins.	0	0	0	1	0	1	0	0	0
Total Volume	0	1	1	9	1	10	1	0	1
% App. Total	0	100		90	10		100	0	
PHF	.000	.250	.250	.563	.250	.500	.250	.000	.250

City Of Los Angeles
Department Of Transportation
MANUAL TRAFFIC COUNT SUMMARY

STREET:

North/South Mott Street

East/West 6th Street

Day: Thursday **Date:** June 2, 2016 **Weather:** CLEAR

Hours: 7-10AM 3-6PM **Staff:** CUI

School Day: YES **District:** Central I/S CODE 0

	N/B	S/B	E/B	W/B
DUAL-WHEELED	3	12	6	3
BIKES	7	3	9	0
BUSES	16	5	13	0

	N/B	TIME	S/B	TIME	E/B	TIME	W/B	TIME
AM PK 15 MIN	56	7.30	76	7.30	81	7.30	29	7.30
PM PK 15 MIN	48	3.00	54	3.00	60	3.00	18	3.00
AM PK HOUR	189	7.00	239	7.00	259	7.15	76	7.15
PM PK HOUR	147	5.00	162	5.00	176	3.00	38	3.00

NORTHBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	114	69	6	189
8-9	36	48	6	90
9-10	12	31	0	43
3-4	38	90	8	136
4-5	28	80	4	112
5-6	39	99	9	147
TOTAL	267	417	33	717

SOUTHBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	7	100	132	239
8-9	4	61	29	94
9-10	4	44	13	61
3-4	16	70	66	152
4-5	10	67	41	118
5-6	10	80	72	162
TOTAL	51	422	353	826

TOTAL	**XING S/L**		**XING N/L**	
N-S	Ped	Sch	Ped	Sch
428	5	122	8	56
184	4	11	3	10
104	3	2	3	0
288	2	128	0	40
230	1	6	4	7
309	2	10	15	9
1543	17	279	33	122

EASTBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	121	12	113	246
8-9	31	3	31	65
9-10	10	3	14	27
3-4	81	13	82	176
4-5	47	8	49	104
5-6	67	7	53	127
TOTAL	357	46	342	745

WESTBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	12	41	21	74
8-9	2	8	7	17
9-10	1	3	10	14
3-4	11	11	16	38
4-5	5	8	4	17
5-6	3	7	8	18
TOTAL	34	78	66	178

TOTAL	**XING W/L**		**XING E/L**	
E-W	Ped	Sch	Ped	Sch
320	4	85	15	55
82	2	17	5	11
41	5	1	5	4
214	9	185	6	54
121	6	26	3	7
145	14	24	5	4
923	40	338	39	135

(Rev Oct 06)

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City of Los Angeles
N/S: Mott Street
E/W: 6th Street
Weather: Clear

File Name : LACMO6TAM
Site Code : 04116347
Start Date : 6/2/2016
Page No : 1

Groups Printed- Passenger Vehicles - Dual Wheeled - Buses

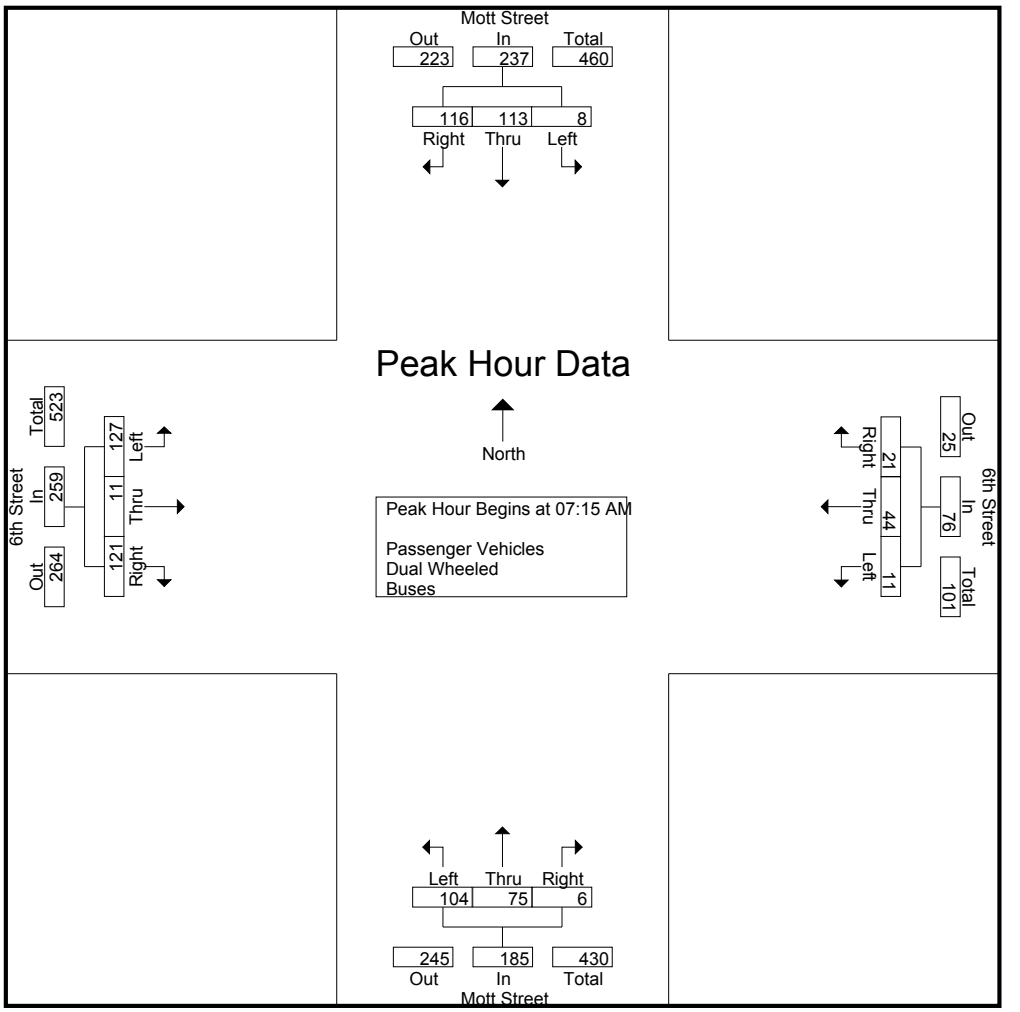
	Mott Street Southbound				6th Street Westbound				Mott Street Northbound				6th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	1	12	24	37	2	3	1	6	27	14	0	41	8	2	9	19	103
07:15 AM	2	29	31	62	6	10	5	21	26	13	2	41	33	3	34	70	194
07:30 AM	0	33	43	76	4	19	6	29	33	20	3	56	43	5	33	81	242
07:45 AM	4	26	34	64	0	9	9	18	28	22	1	51	37	2	37	76	209
Total	7	100	132	239	12	41	21	74	114	69	6	189	121	12	113	246	748
08:00 AM	2	25	8	35	1	6	1	8	17	20	0	37	14	1	17	32	112
08:15 AM	0	17	12	29	0	0	3	3	8	11	4	23	5	0	9	14	69
08:30 AM	1	11	5	17	1	2	1	4	7	10	1	18	6	1	4	11	50
08:45 AM	1	8	4	13	0	0	2	2	4	7	1	12	6	1	1	8	35
Total	4	61	29	94	2	8	7	17	36	48	6	90	31	3	31	65	266
09:00 AM	2	12	4	18	0	1	1	2	4	13	0	17	5	0	2	7	44
09:15 AM	1	9	3	13	0	0	4	4	2	9	0	11	2	0	5	7	35
09:30 AM	1	10	4	15	0	0	1	1	4	5	0	9	2	1	3	6	31
09:45 AM	0	13	2	15	1	2	4	7	2	4	0	6	1	2	4	7	35
Total	4	44	13	61	1	3	10	14	12	31	0	43	10	3	14	27	145
Grand Total	15	205	174	394	15	52	38	105	162	148	12	322	162	18	158	338	1159
Apprch %	3.8	52	44.2		14.3	49.5	36.2		50.3	46	3.7		47.9	5.3	46.7		
Total %	1.3	17.7	15	34	1.3	4.5	3.3	9.1	14	12.8	1	27.8	14	1.6	13.6	29.2	
Passenger Vehicles	14	204	168	386	14	51	37	102	150	146	11	307	159	15	154	328	1123
% Passenger Vehicles	93.3	99.5	96.6	98	93.3	98.1	97.4	97.1	92.6	98.6	91.7	95.3	98.1	83.3	97.5	97	96.9
Dual Wheeled	0	0	6	6	1	1	1	3	1	1	0	2	0	1	2	3	14
% Dual Wheeled	0	0	3.4	1.5	6.7	1.9	2.6	2.9	0.6	0.7	0	0.6	0	5.6	1.3	0.9	1.2
Buses	1	1	0	2	0	0	0	0	11	1	1	13	3	2	2	7	22
% Buses	6.7	0.5	0	0.5	0	0	0	0	6.8	0.7	8.3	4	1.9	11.1	1.3	2.1	1.9

	Mott Street Southbound				6th Street Westbound				Mott Street Northbound				6th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 09:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	2	29	31	62	**6**	10	5	21	26	13	2	41	33	3	34	70	194
07:30 AM	0	**33**	**43**	**76**	4	**19**	6	**29**	**33**	20	**3**	**56**	**43**	**5**	33	**81**	**242**
07:45 AM	**4**	26	34	64	0	9	**9**	18	28	**22**	1	51	37	2	**37**	76	209
08:00 AM	2	25	8	35	1	6	1	8	17	20	0	37	14	1	17	32	112
Total Volume	8	113	116	237	11	44	21	76	104	75	6	185	127	11	121	259	757
% App. Total	3.4	47.7	48.9		14.5	57.9	27.6		56.2	40.5	3.2		49	4.2	46.7		
PHF	.500	.856	.674	.780	.458	.579	.583	.655	.788	.852	.500	.826	.738	.550	.818	.799	.782

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Peak Hour Analysis From 07:00 AM to 09:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:00 AM				07:15 AM				07:00 AM				07:15 AM			
+0 mins.	1	12	24	37	**6**	10	5	21	27	14	0	41	33	3	34	70
+15 mins.	2	29	31	62	4	**19**	6	**29**	26	13	2	41	**43**	**5**	33	**81**
+30 mins.	0	**33**	**43**	**76**	0	9	**9**	18	**33**	20	**3**	**56**	37	2	**37**	76
+45 mins.	**4**	26	34	64	1	6	1	8	28	**22**	1	51	14	1	17	32
Total Volume	7	100	132	239	11	44	21	76	114	69	6	189	127	11	121	259
% App. Total	2.9	41.8	55.2		14.5	57.9	27.6		60.3	36.5	3.2		49	4.2	46.7	
PHF	.438	.758	.767	.786	.458	.579	.583	.655	.864	.784	.500	.844	.738	.550	.818	.799

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Groups Printed- Passenger Vehicles

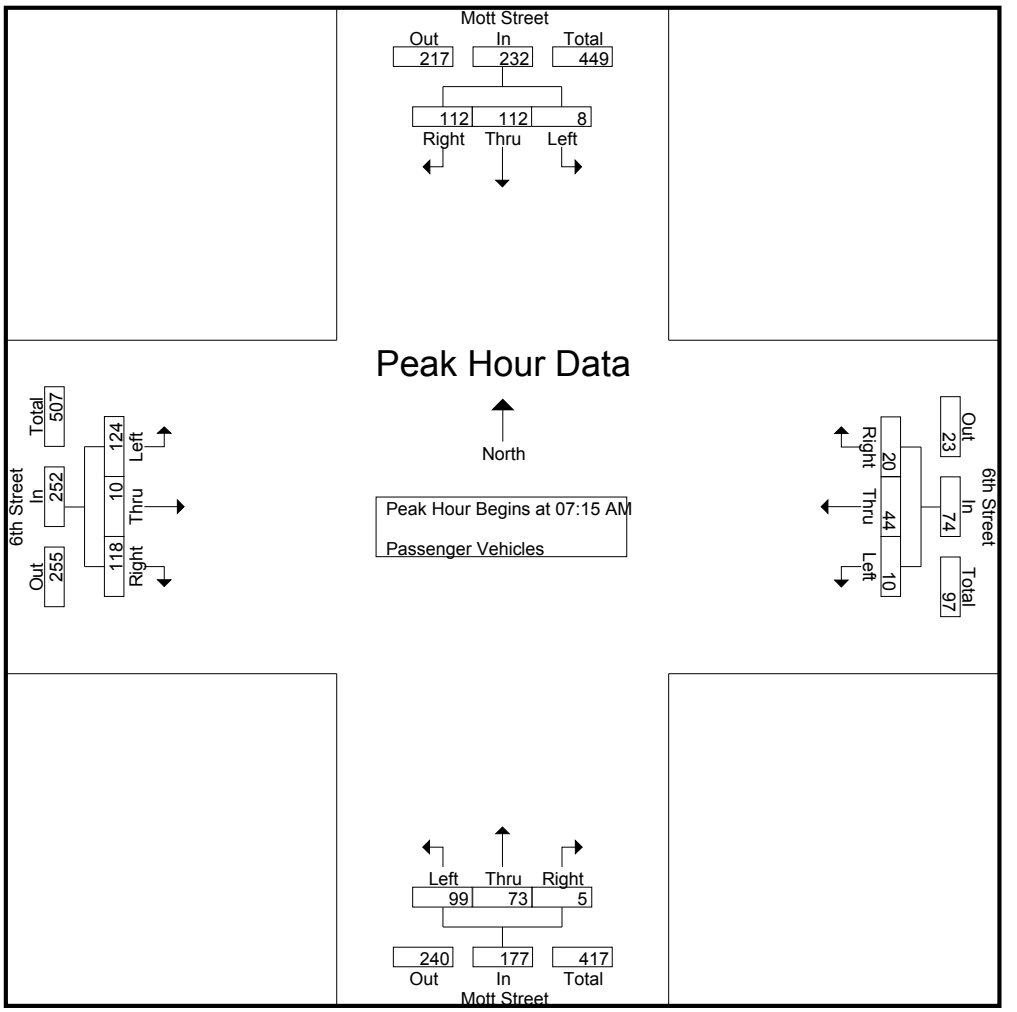
	Mott Street Southbound				6th Street Westbound				Mott Street Northbound				6th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	12	24	36	2	2	1	5	20	14	0	34	8	0	9	17	92
07:15 AM	2	28	30	60	5	10	5	20	22	13	1	36	31	2	33	66	182
07:30 AM	0	33	40	73	4	19	6	29	32	18	3	53	43	5	33	81	236
07:45 AM	4	26	34	64	0	9	8	17	28	22	1	51	36	2	36	74	206
Total	6	99	128	233	11	40	20	71	102	67	5	174	118	9	111	238	716
08:00 AM	2	25	8	35	1	6	1	8	17	20	0	37	14	1	16	31	111
08:15 AM	0	17	11	28	0	0	3	3	8	11	4	23	5	0	8	13	67
08:30 AM	1	11	5	17	1	2	1	4	7	10	1	18	6	1	4	11	50
08:45 AM	1	8	4	13	0	0	2	2	4	7	1	12	6	1	1	8	35
Total	4	61	28	93	2	8	7	17	36	48	6	90	31	3	29	63	263
09:00 AM	2	12	4	18	0	1	1	2	4	13	0	17	5	0	2	7	44
09:15 AM	1	9	2	12	0	0	4	4	2	9	0	11	2	0	5	7	34
09:30 AM	1	10	4	15	0	0	1	1	4	5	0	9	2	1	3	6	31
09:45 AM	0	13	2	15	1	2	4	7	2	4	0	6	1	2	4	7	35
Total	4	44	12	60	1	3	10	14	12	31	0	43	10	3	14	27	144
Grand Total	14	204	168	386	14	51	37	102	150	146	11	307	159	15	154	328	1123
Apprch %	3.6	52.8	43.5		13.7	50	36.3		48.9	47.6	3.6		48.5	4.6	47		
Total %	1.2	18.2	15	34.4	1.2	4.5	3.3	9.1	13.4	13	1	27.3	14.2	1.3	13.7	29.2	

	Mott Street Southbound				6th Street Westbound				Mott Street Northbound				6th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	2	28	30	60	**5**	10	5	20	22	13	1	36	31	2	33	66	182
07:30 AM	0	**33**	**40**	**73**	4	**19**	6	**29**	**32**	18	**3**	**53**	**43**	**5**	33	**81**	**236**
07:45 AM	**4**	26	34	64	0	9	**8**	17	28	**22**	1	51	36	2	**36**	74	206
08:00 AM	2	25	8	35	1	6	1	8	17	20	0	37	14	1	16	31	111
Total Volume	8	112	112	232	10	44	20	74	99	73	5	177	124	10	118	252	735
% App. Total	3.4	48.3	48.3		13.5	59.5	27		55.9	41.2	2.8		49.2	4	46.8		
PHF	.500	.848	.700	.795	.500	.579	.625	.638	.773	.830	.417	.835	.721	.500	.819	.778	.779

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Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:15 AM				07:15 AM			
+0 mins.	2	28	30	60	**5**	10	5	20	22	13	1	36	31	2	33	66
+15 mins.	0	**33**	**40**	**73**	4	**19**	6	**29**	**32**	18	**3**	**53**	**43**	**5**	33	**81**
+30 mins.	**4**	26	34	64	0	9	**8**	17	28	**22**	1	51	36	2	**36**	74
+45 mins.	2	25	8	35	1	6	1	8	17	20	0	37	14	1	16	31
Total Volume	8	112	112	232	10	44	20	74	99	73	5	177	124	10	118	252
% App. Total	3.4	48.3	48.3		13.5	59.5	27		55.9	41.2	2.8		49.2	4	46.8	
PHF	.500	.848	.700	.795	.500	.579	.625	.638	.773	.830	.417	.835	.721	.500	.819	.778

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Groups Printed- Dual Wheeled

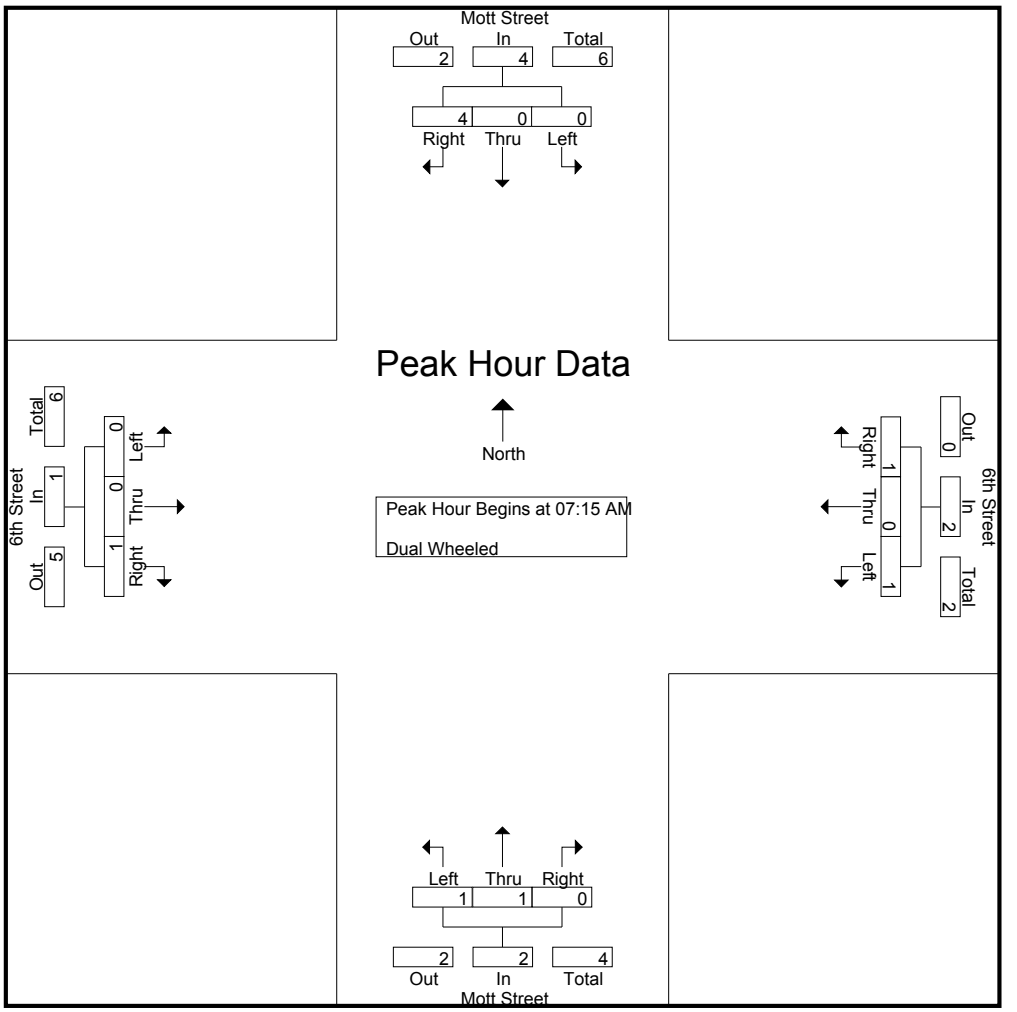
	Mott Street Southbound				6th Street Westbound				Mott Street Northbound				6th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	2
07:15 AM	0	0	1	1	1	0	0	1	0	0	0	0	0	0	0	0	2
07:30 AM	0	0	3	3	0	0	0	0	1	1	0	2	0	0	0	0	5
07:45 AM	0	0	0	0	0	0	1	1	0	0	0	0	0	0	1	1	2
Total	0	0	4	4	1	1	1	3	1	1	0	2	0	1	1	2	11
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	1	1	0	0	0	0	0	0	0	0	0	0	1	1	2
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	1	1	0	0	0	0	0	0	0	0	0	0	1	1	2
09:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:15 AM	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1
09:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Grand Total	0	0	6	6	1	1	1	3	1	1	0	2	0	1	2	3	14
Apprch %	0	0	100		33.3	33.3	33.3		50	50	0		0	33.3	66.7		
Total %	0	0	42.9	42.9	7.1	7.1	7.1	21.4	7.1	7.1	0	14.3	0	7.1	14.3	21.4	

	Mott Street Southbound				6th Street Westbound				Mott Street Northbound				6th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	0	0	1	1	**1**	0	0	**1**	0	0	0	0	0	0	0	0	2
07:30 AM	0	0	**3**	**3**	0	0	0	0	**1**	**1**	0	**2**	0	0	0	0	**5**
07:45 AM	0	0	0	0	0	0	**1**	1	0	0	0	0	0	0	**1**	**1**	2
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	4	4	1	0	1	2	1	1	0	2	0	0	1	1	9
% App. Total	0	0	100		50	0	50		50	50	0		0	0	100		
PHF	.000	.000	.333	.333	.250	.000	.250	.500	.250	.250	.000	.250	.000	.000	.250	.250	.450

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Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:15 AM				07:15 AM			
+0 mins.	0	0	1	1	**1**	0	0	**1**	0	0	0	0	0	0	0	0
+15 mins.	0	0	**3**	**3**	0	0	0	0	**1**	**1**	0	**2**	0	0	0	0
+30 mins.	0	0	0	0	0	0	**1**	1	0	0	0	0	0	0	**1**	**1**
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	4	4	1	0	1	2	1	1	0	2	0	0	1	1
% App. Total	0	0	100		50	0	50		50	50	0		0	0	100	
PHF	.000	.000	.333	.333	.250	.000	.250	.500	.250	.250	.000	.250	.000	.000	.250	.250

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File Name : LACMO6TAM
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Groups Printed- Buses

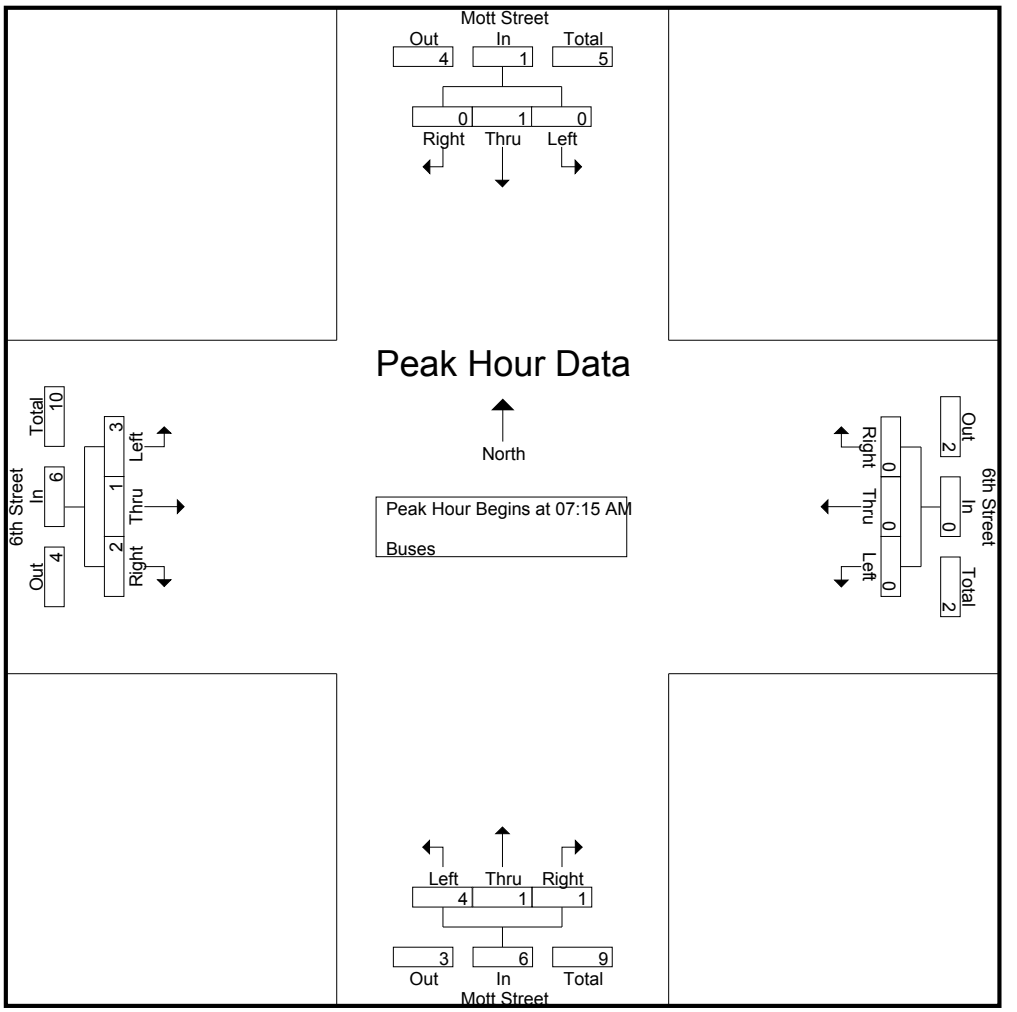
	Mott Street Southbound				6th Street Westbound				Mott Street Northbound				6th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	1	0	0	1	0	0	0	0	7	0	0	7	0	1	0	1	9
07:15 AM	0	1	0	1	0	0	0	0	4	0	1	5	2	1	1	4	10
07:30 AM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
Total	1	1	0	2	0	0	0	0	11	1	1	13	3	2	1	6	21
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
09:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	1	1	0	2	0	0	0	0	11	1	1	13	3	2	2	7	22
Apprch %	50	50	0		0	0	0		84.6	7.7	7.7		42.9	28.6	28.6		
Total %	4.5	4.5	0	9.1	0	0	0	0	50	4.5	4.5	59.1	13.6	9.1	9.1	31.8	

	Mott Street Southbound				6th Street Westbound				Mott Street Northbound				6th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	0	**1**	0	**1**	0	0	0	0	**4**	0	**1**	**5**	**2**	**1**	**1**	**4**	**10**
07:30 AM	0	0	0	0	0	0	0	0	0	**1**	0	1	0	0	0	0	1
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
Total Volume	0	1	0	1	0	0	0	0	4	1	1	6	3	1	2	6	13
% App. Total	0	100	0		0	0	0		66.7	16.7	16.7		50	16.7	33.3		
PHF	.000	.250	.000	.250	.000	.000	.000	.000	.250	.250	.250	.300	.375	.250	.500	.375	.325

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Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:15 AM				07:15 AM			
+0 mins.	0	**1**	0	**1**	0	0	0	0	**4**	0	**1**	**5**	**2**	**1**	**1**	**4**
+15 mins.	0	0	0	0	0	0	0	0	0	**1**	0	1	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
Total Volume	0	1	0	1	0	0	0	0	4	1	1	6	3	1	2	6
% App. Total	0	100	0		0	0	0		66.7	16.7	16.7		50	16.7	33.3	
PHF	.000	.250	.000	.250	.000	.000	.000	.000	.250	.250	.250	.300	.375	.250	.500	.375

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Groups Printed- Passenger Vehicles - Dual Wheeled - Buses

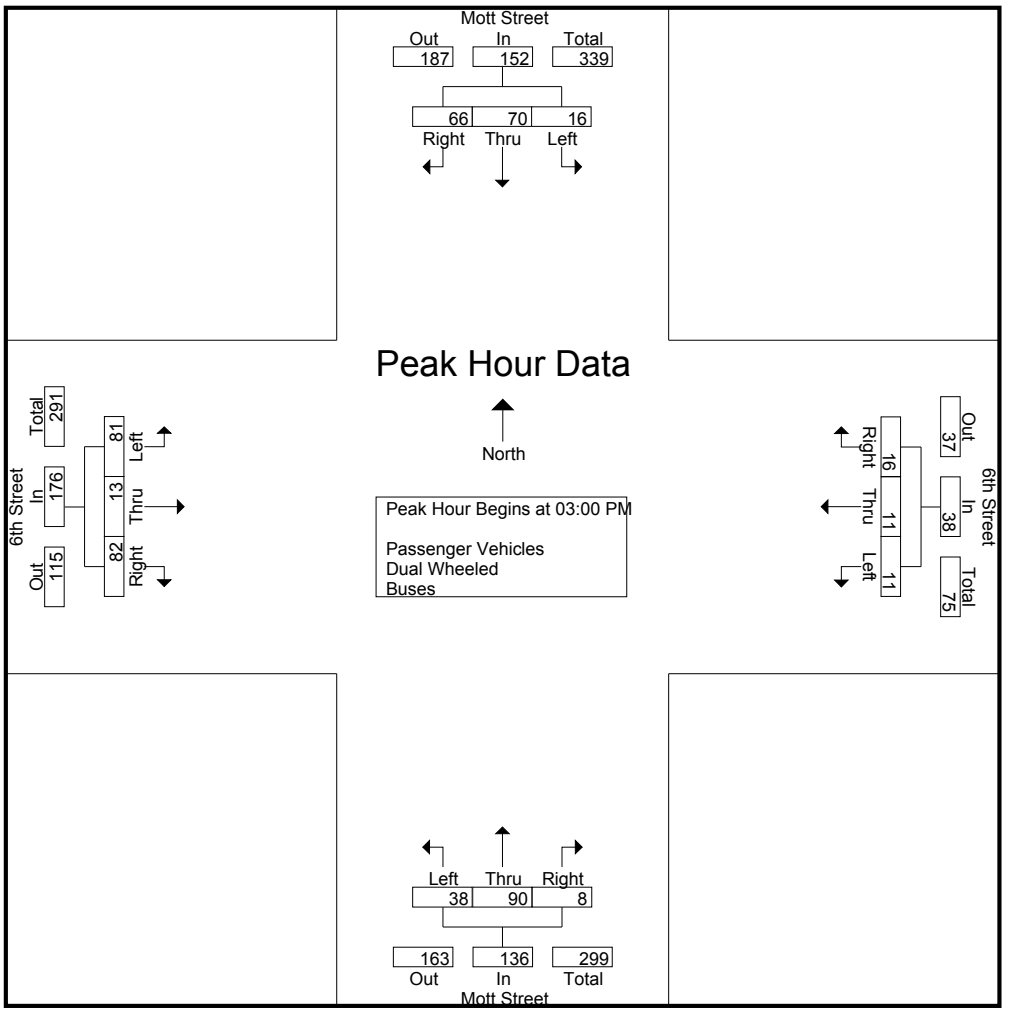
	Mott Street Southbound				6th Street Westbound				Mott Street Northbound				6th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
03:00 PM	5	23	26	54	6	3	9	18	11	32	5	48	31	2	27	60	180
03:15 PM	6	16	10	32	2	4	2	8	10	22	1	33	18	7	23	48	121
03:30 PM	0	19	12	31	1	3	2	6	8	14	1	23	20	1	14	35	95
03:45 PM	5	12	18	35	2	1	3	6	9	22	1	32	12	3	18	33	106
Total	16	70	66	152	11	11	16	38	38	90	8	136	81	13	82	176	502
04:00 PM	5	16	6	27	1	3	0	4	4	19	1	24	13	1	12	26	81
04:15 PM	2	15	8	25	1	2	2	5	7	23	0	30	12	4	13	29	89
04:30 PM	1	17	13	31	0	1	0	1	11	19	1	31	12	2	10	24	87
04:45 PM	2	19	14	35	3	2	2	7	6	19	2	27	10	1	14	25	94
Total	10	67	41	118	5	8	4	17	28	80	4	112	47	8	49	104	351
05:00 PM	3	17	13	33	0	4	3	7	12	27	2	41	12	2	11	25	106
05:15 PM	0	19	13	32	0	2	1	3	10	18	0	28	16	2	20	38	101
05:30 PM	3	23	26	52	2	1	1	4	10	30	5	45	22	1	9	32	133
05:45 PM	4	21	20	45	1	0	3	4	7	24	2	33	17	2	13	32	114
Total	10	80	72	162	3	7	8	18	39	99	9	147	67	7	53	127	454
Grand Total	36	217	179	432	19	26	28	73	105	269	21	395	195	28	184	407	1307
Apprch %	8.3	50.2	41.4		26	35.6	38.4		26.6	68.1	5.3		47.9	6.9	45.2		
Total %	2.8	16.6	13.7	33.1	1.5	2	2.1	5.6	8	20.6	1.6	30.2	14.9	2.1	14.1	31.1	
Passenger Vehicles	33	215	175	423	19	26	28	73	102	268	21	391	191	25	182	398	1285
% Passenger Vehicles	91.7	99.1	97.8	97.9	100	100	100	100	97.1	99.6	100	99	97.9	89.3	98.9	97.8	98.3
Dual Wheeled	2	1	3	6	0	0	0	0	1	0	0	1	2	0	1	3	10
% Dual Wheeled	5.6	0.5	1.7	1.4	0	0	0	0	1	0	0	0.3	1	0	0.5	0.7	0.8
Buses	1	1	1	3	0	0	0	0	2	1	0	3	2	3	1	6	12
% Buses	2.8	0.5	0.6	0.7	0	0	0	0	1.9	0.4	0	0.8	1	10.7	0.5	1.5	0.9

	Mott Street Southbound				6th Street Westbound				Mott Street Northbound				6th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 03:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 03:00 PM																	
03:00 PM	5	**23**	**26**	**54**	**6**	3	**9**	**18**	**11**	**32**	**5**	**48**	**31**	2	**27**	**60**	**180**
03:15 PM	**6**	16	10	32	2	**4**	2	8	10	22	1	33	18	**7**	23	48	121
03:30 PM	0	19	12	31	1	3	2	6	8	14	1	23	20	1	14	35	95
03:45 PM	5	12	18	35	2	1	3	6	9	22	1	32	12	3	18	33	106
Total Volume	16	70	66	152	11	11	16	38	38	90	8	136	81	13	82	176	502
% App. Total	10.5	46.1	43.4		28.9	28.9	42.1		27.9	66.2	5.9		46	7.4	46.6		
PHF	.667	.761	.635	.704	.458	.688	.444	.528	.864	.703	.400	.708	.653	.464	.759	.733	.697

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Page No : 2



Peak Hour Analysis From 03:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	05:00 PM				03:00 PM				05:00 PM				03:00 PM			
+0 mins.	3	17	13	33	**6**	3	**9**	**18**	**12**	27	2	41	**31**	2	**27**	**60**
+15 mins.	0	19	13	32	2	**4**	2	8	10	18	0	28	18	**7**	23	48
+30 mins.	3	**23**	**26**	**52**	1	3	2	6	10	**30**	**5**	**45**	20	1	14	35
+45 mins.	**4**	21	20	45	2	1	3	6	7	24	2	33	12	3	18	33
Total Volume	10	80	72	162	11	11	16	38	39	99	9	147	81	13	82	176
% App. Total	6.2	49.4	44.4		28.9	28.9	42.1		26.5	67.3	6.1		46	7.4	46.6	
PHF	.625	.870	.692	.779	.458	.688	.444	.528	.813	.825	.450	.817	.653	.464	.759	.733

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Groups Printed- Passenger Vehicles

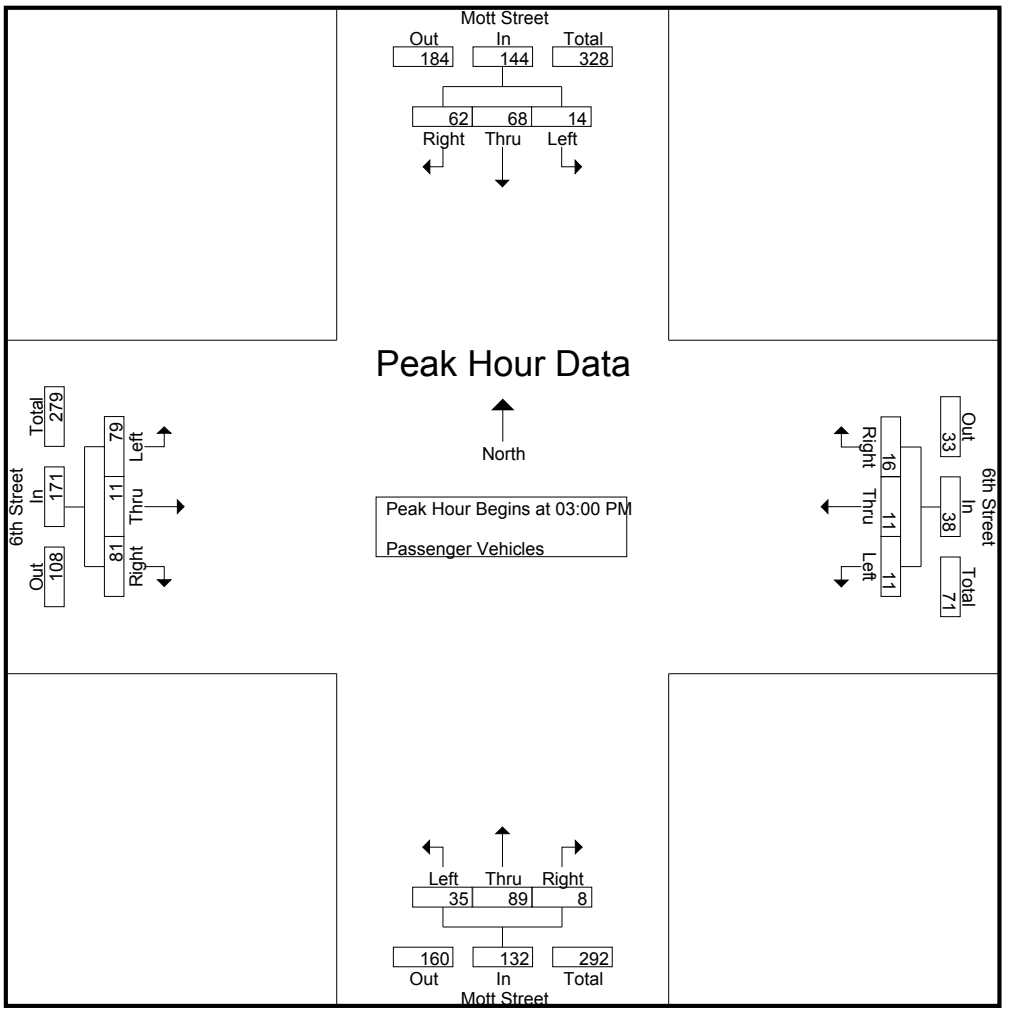
	Mott Street Southbound				6th Street Westbound				Mott Street Northbound				6th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
03:00 PM	5	22	22	49	6	3	9	18	10	31	5	46	30	0	26	56	169
03:15 PM	4	16	10	30	2	4	2	8	10	22	1	33	17	7	23	47	118
03:30 PM	0	19	12	31	1	3	2	6	8	14	1	23	20	1	14	35	95
03:45 PM	5	11	18	34	2	1	3	6	7	22	1	30	12	3	18	33	103
Total	14	68	62	144	11	11	16	38	35	89	8	132	79	11	81	171	485
04:00 PM	5	16	6	27	1	3	0	4	4	19	1	24	13	1	11	25	80
04:15 PM	2	15	8	25	1	2	2	5	7	23	0	30	12	4	13	29	89
04:30 PM	1	17	13	31	0	1	0	1	11	19	1	31	12	2	10	24	87
04:45 PM	1	19	14	34	3	2	2	7	6	19	2	27	10	1	14	25	93
Total	9	67	41	117	5	8	4	17	28	80	4	112	47	8	48	103	349
05:00 PM	3	17	13	33	0	4	3	7	12	27	2	41	12	2	11	25	106
05:15 PM	0	19	13	32	0	2	1	3	10	18	0	28	15	1	20	36	99
05:30 PM	3	23	26	52	2	1	1	4	10	30	5	45	22	1	9	32	133
05:45 PM	4	21	20	45	1	0	3	4	7	24	2	33	16	2	13	31	113
Total	10	80	72	162	3	7	8	18	39	99	9	147	65	6	53	124	451
Grand Total	33	215	175	423	19	26	28	73	102	268	21	391	191	25	182	398	1285
Apprch %	7.8	50.8	41.4		26	35.6	38.4		26.1	68.5	5.4		48	6.3	45.7		
Total %	2.6	16.7	13.6	32.9	1.5	2	2.2	5.7	7.9	20.9	1.6	30.4	14.9	1.9	14.2	31	

	Mott Street Southbound				6th Street Westbound				Mott Street Northbound				6th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 03:00 PM to 03:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 03:00 PM																	
03:00 PM	**5**	**22**	**22**	**49**	**6**	3	**9**	**18**	**10**	**31**	**5**	**46**	**30**	0	**26**	**56**	**169**
03:15 PM	4	16	10	30	2	**4**	2	8	10	22	1	33	17	**7**	23	47	118
03:30 PM	0	19	12	31	1	3	2	6	8	14	1	23	20	1	14	35	95
03:45 PM	5	11	18	34	2	1	3	6	7	22	1	30	12	3	18	33	103
Total Volume	14	68	62	144	11	11	16	38	35	89	8	132	79	11	81	171	485
% App. Total	9.7	47.2	43.1		28.9	28.9	42.1		26.5	67.4	6.1		46.2	6.4	47.4		
PHF	.700	.773	.705	.735	.458	.688	.444	.528	.875	.718	.400	.717	.658	.393	.779	.763	.717

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Peak Hour Analysis From 03:00 PM to 03:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	03:00 PM				03:00 PM				03:00 PM				03:00 PM			
+0 mins.	**5**	**22**	**22**	**49**	**6**	3	**9**	**18**	**10**	**31**	**5**	**46**	**30**	0	**26**	**56**
+15 mins.	4	16	10	30	2	**4**	2	8	10	22	1	33	17	**7**	23	47
+30 mins.	0	19	12	31	1	3	2	6	8	14	1	23	20	1	14	35
+45 mins.	5	11	18	34	2	1	3	6	7	22	1	30	12	3	18	33
Total Volume	14	68	62	144	11	11	16	38	35	89	8	132	79	11	81	171
% App. Total	9.7	47.2	43.1		28.9	28.9	42.1		26.5	67.4	6.1		46.2	6.4	47.4	
PHF	.700	.773	.705	.735	.458	.688	.444	.528	.875	.718	.400	.717	.658	.393	.779	.763

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Site Code : 04116347
Start Date : 6/2/2016

Groups Printed- Dual Wheeled

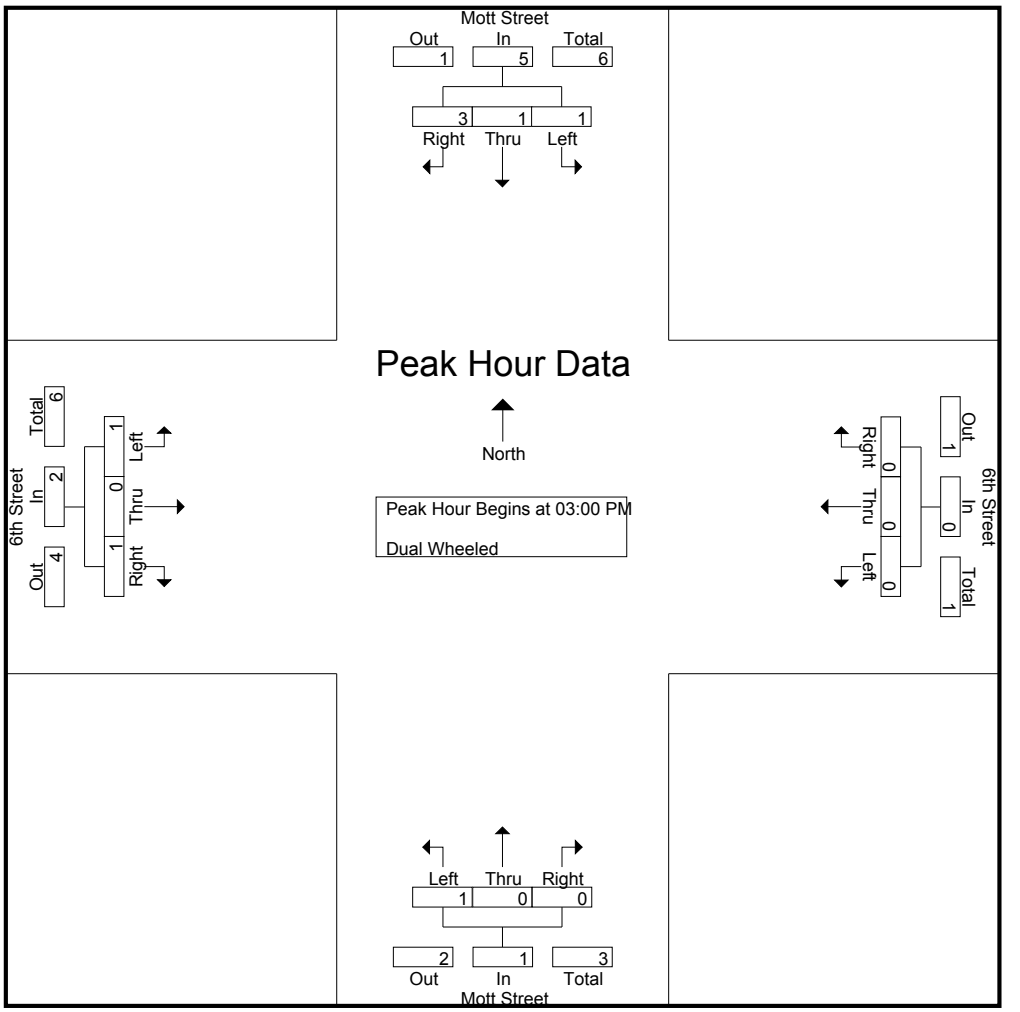
	Mott Street Southbound				6th Street Westbound				Mott Street Northbound				6th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
03:00 PM	0	1	3	4	0	0	0	0	0	0	0	0	0	0	1	1	5
03:15 PM	1	0	0	1	0	0	0	0	0	0	0	0	1	0	0	1	2
03:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:45 PM	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	1
Total	1	1	3	5	0	0	0	0	1	0	0	1	1	0	1	2	8
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
Total	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
Grand Total	2	1	3	6	0	0	0	0	1	0	0	1	2	0	1	3	10
Apprch %	33.3	16.7	50		0	0	0		100	0	0		66.7	0	33.3		
Total %	20	10	30	60	0	0	0	0	10	0	0	10	20	0	10	30	

	Mott Street Southbound				6th Street Westbound				Mott Street Northbound				6th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 03:00 PM to 03:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 03:00 PM																	
03:00 PM	0	**1**	**3**	**4**	0	0	0	0	0	0	0	0	0	0	**1**	**1**	**5**
03:15 PM	**1**	0	0	1	0	0	0	0	0	0	0	0	**1**	0	0	1	2
03:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:45 PM	0	0	0	0	0	0	0	0	**1**	0	0	**1**	0	0	0	0	1
Total Volume	1	1	3	5	0	0	0	0	1	0	0	1	1	0	1	2	8
% App. Total	20	20	60		0	0	0		100	0	0		50	0	50		
PHF	.250	.250	.250	.313	.000	.000	.000	.000	.250	.000	.000	.250	.250	.000	.250	.500	.400

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Start Date : 6/2/2016
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Peak Hour Analysis From 03:00 PM to 03:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	03:00 PM				03:00 PM				03:00 PM				03:00 PM			
+0 mins.	0	**1**	**3**	**4**	0	0	0	0	0	0	0	0	0	0	**1**	**1**
+15 mins.	**1**	0	0	1	0	0	0	0	0	0	0	0	**1**	0	0	1
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	**1**	0	0	**1**	0	0	0	0
Total Volume	1	1	3	5	0	0	0	0	1	0	0	1	1	0	1	2
% App. Total	20	20	60		0	0	0		100	0	0		50	0	50	
PHF	.250	.250	.250	.313	.000	.000	.000	.000	.250	.000	.000	.250	.250	.000	.250	.500

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Groups Printed- Buses

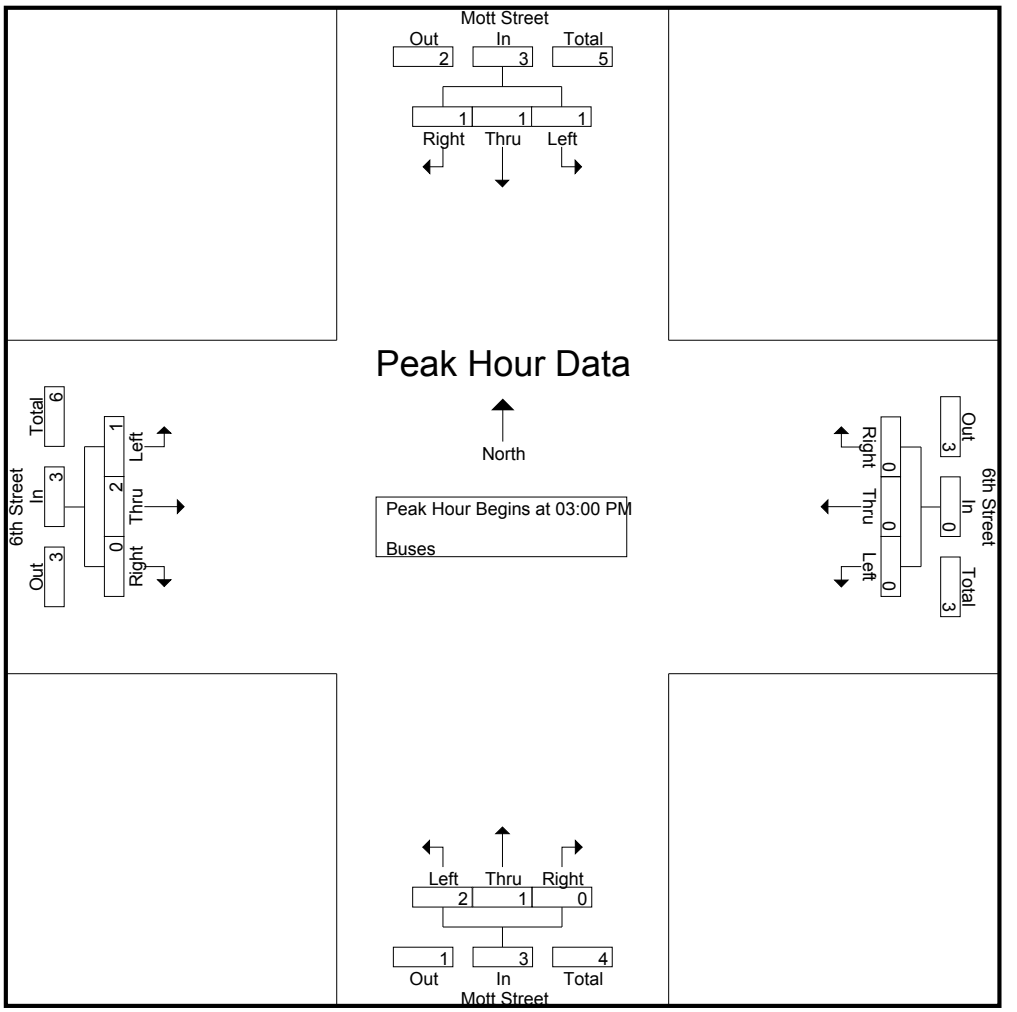
	Mott Street Southbound				6th Street Westbound				Mott Street Northbound				6th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
03:00 PM	0	0	1	1	0	0	0	0	1	1	0	2	1	2	0	3	6
03:15 PM	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
03:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:45 PM	0	1	0	1	0	0	0	0	1	0	0	1	0	0	0	0	2
Total	1	1	1	3	0	0	0	0	2	1	0	3	1	2	0	3	9
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	2	2
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	2	2
Grand Total	1	1	1	3	0	0	0	0	2	1	0	3	2	3	1	6	12
Apprch %	33.3	33.3	33.3		0	0	0		66.7	33.3	0		33.3	50	16.7		
Total %	8.3	8.3	8.3	25	0	0	0	0	16.7	8.3	0	25	16.7	25	8.3	50	

	Mott Street Southbound				6th Street Westbound				Mott Street Northbound				6th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 03:00 PM to 03:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 03:00 PM																	
03:00 PM	0	0	**1**	**1**	0	0	0	0	**1**	**1**	0	**2**	**1**	**2**	0	**3**	**6**
03:15 PM	**1**	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
03:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:45 PM	0	**1**	0	1	0	0	0	0	1	0	0	1	0	0	0	0	2
Total Volume	1	1	1	3	0	0	0	0	2	1	0	3	1	2	0	3	9
% App. Total	33.3	33.3	33.3		0	0	0		66.7	33.3	0		33.3	66.7	0		
PHF	.250	.250	.250	.750	.000	.000	.000	.000	.500	.250	.000	.375	.250	.250	.000	.250	.375

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Peak Hour Analysis From 03:00 PM to 03:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	03:00 PM				03:00 PM				03:00 PM				03:00 PM			
+0 mins.	0	0	**1**	**1**	0	0	0	0	**1**	**1**	0	**2**	**1**	**2**	0	**3**
+15 mins.	**1**	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	**1**	0	1	0	0	0	0	1	0	0	1	0	0	0	0
Total Volume	1	1	1	3	0	0	0	0	2	1	0	3	1	2	0	3
% App. Total	33.3	33.3	33.3		0	0	0		66.7	33.3	0		33.3	66.7	0	
PHF	.250	.250	.250	.750	.000	.000	.000	.000	.500	.250	.000	.375	.250	.250	.000	.250

APPENDIX B
Intersection Analysis Worksheets – Existing Conditions

LAUSD Roosevelt HS Improvements
Existing Conditions
AM Peak Hour

Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #1 Soto/4th

Cycle (sec):	100	Critical Vol./Cap.(X):	0.854
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	127	Level Of Service:	D

Street Name:	Soto Street						4th Street					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Prot+Permit			Permitted		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0 2	0 1	1	0 2	0 1	1	0 1	1 0	1	0 1	1 0
Volume Module:												
Base Vol:	89	578	70	140	855	120	66	415	77	110	1184	85
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	89	578	70	140	855	120	66	415	77	110	1184	85
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	89	578	70	140	855	120	66	415	77	110	1184	85
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	89	578	70	140	855	120	66	415	77	110	1184	85
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	89	578	70	140	855	120	66	415	77	110	1184	85
Saturation Flow Module:												
Sat/Lane:	1425	1425	1425	1425	1425	1425	1425	1425	1425	1425	1425	1425
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.69	0.31	1.00	1.87	0.13
Final Sat.:	1425	2850	1425	1425	2850	1425	1425	2404	446	1425	2659	191
Capacity Analysis Module:												
Vol/Sat:	0.06	0.20	0.05	0.10	0.30	0.08	0.05	0.17	0.17	0.08	0.45	0.45
Crit Volume:	89			428			66			635		
Crit Moves:	****			****			****			****		

LAUSD Roosevelt HS Improvements
Existing Conditions
AM Peak Hour

Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #2 Mathews/4th

Cycle (sec):	100	Critical Vol./Cap.(X):	0.567
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	33	Level Of Service:	A

Street Name:	Mathews St						4th St					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0 1! 0	0	0	0 1! 0	0	1	0 1	1 0	1	0 1	1 0
Volume Module:												
Base Vol:	35	53	76	10	85	40	20	435	127	121	1288	26
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	35	53	76	10	85	40	20	435	127	121	1288	26
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	35	53	76	10	85	40	20	435	127	121	1288	26
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	35	53	76	10	85	40	20	435	127	121	1288	26
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	35	53	76	10	85	40	20	435	127	121	1288	26
Saturation Flow Module:												
Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.21	0.32	0.47	0.07	0.63	0.30	1.00	1.55	0.45	1.00	1.96	0.04
Final Sat.:	320	485	695	111	944	444	1500	2322	678	1500	2941	59
Capacity Analysis Module:												
Vol/Sat:	0.11	0.11	0.11	0.09	0.09	0.09	0.01	0.19	0.19	0.08	0.44	0.44
Crit Volume:			164		10		20					657
Crit Moves:			****	****			****					****

LAUSD Roosevelt HS Improvements
Existing Conditions
AM Peak Hour

Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #3 Mott/4th

Cycle (sec):	100	Critical Vol./Cap.(X):	0.653
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	42	Level Of Service:	B

Street Name:	Mott Street						4th Street					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	1! 0	0	0	1! 0	1	0	1 1	0	1	0 1 0
Volume Module:												
Base Vol:	52	124	41	47	129	53	39	393	42	61	1266	54
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	52	124	41	47	129	53	39	393	42	61	1266	54
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	52	124	41	47	129	53	39	393	42	61	1266	54
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	52	124	41	47	129	53	39	393	42	61	1266	54
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	52	124	41	47	129	53	39	393	42	61	1266	54
Saturation Flow Module:												
Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.24	0.57	0.19	0.21	0.56	0.23	1.00	1.81	0.19	1.00	1.92	0.08
Final Sat.:	359	857	283	308	845	347	1500	2710	290	1500	2877	123
Capacity Analysis Module:												
Vol/Sat:	0.14	0.14	0.14	0.15	0.15	0.15	0.03	0.14	0.15	0.04	0.44	0.44
Crit Volume:	52					229	39					660
Crit Moves:	****					****	****					****

LAUSD Roosevelt HS Improvements
Existing Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #4 Mathews/6th

Cycle (sec):	100	Critical Vol./Cap.(X):	0.395
Loss Time (sec):	0	Average Delay (sec/veh):	10.1
Optimal Cycle:	0	Level Of Service:	B

Street Name:	Mathews St									6th St					
Approach:	North Bound			South Bound			East Bound			West Bound					
Movement:	L	T	R	L	T	R	L	T	R	L	T	R			
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign					
Rights:	Include			Include			Include			Include					
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0			
Lanes:	0	0	1! 0	0	0	1! 0	0	1	0 0	0	0	0 1			
Volume Module:															
Base Vol:	0	0	0	113	0	118	79	208	0	0	145	86			
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Initial Bse:	0	0	0	113	0	118	79	208	0	0	145	86			
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
PHF Volume:	0	0	0	113	0	118	79	208	0	0	145	86			
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0			
Reduced Vol:	0	0	0	113	0	118	79	208	0	0	145	86			
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
FinalVolume:	0	0	0	113	0	118	79	208	0	0	145	86			
Saturation Flow Module:															
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Lanes:	0.00	1.00	0.00	0.49	0.00	0.51	0.28	0.72	0.00	0.00	0.63	0.37			
Final Sat.:	0	589	0	340	0	355	200	526	0	0	471	279			
Capacity Analysis Module:															
Vol/Sat:	xxxx	0.00	xxxx	0.33	xxxx	0.33	0.40	0.40	xxxx	xxxx	0.31	0.31			
Crit Moves:		****		****				****				****			
Delay/Veh:	0.0	0.0	0.0	10.0	0.0	10.0	10.7	10.7	0.0	0.0	9.5	9.5			
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
AdjDel/Veh:	0.0	0.0	0.0	10.0	0.0	10.0	10.7	10.7	0.0	0.0	9.5	9.5			
LOS by Move:	*	*	*	B	*	B	B	B	*	*	A	A			
ApproachDel:	xxxxxx			10.0			10.7			9.5					
Delay Adj:	xxxxx			1.00			1.00			1.00					
ApprAdjDel:	xxxxxx			10.0			10.7			9.5					
LOS by Appr:	*			B			B			A					
AllWayAvgQ:	0.0	0.0	0.0	0.4	0.4	0.4	0.6	0.6	0.6	0.4	0.4	0.4			

Note: Queue reported is the number of cars per lane.

LAUSD Roosevelt HS Improvements
Existing Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #5 Mott/6th

Cycle (sec):	100	Critical Vol./Cap.(X):	0.372
Loss Time (sec):	0	Average Delay (sec/veh):	9.9
Optimal Cycle:	0	Level Of Service:	A

Street Name:	Mott St							6th St							
Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Stop Sign					Stop Sign				
Rights:	Include					Include					Include					Include				
Min. Green:	0	0	0			0	0	0			0	0	0			0	0	0		
Lanes:	0	0	1!	0	0	0	0	1!	0	0	0	0	1!	0	0	0	0	1!	0	0
Volume Module:																				
Base Vol:	105		76		6	8		114		117	128		11		122	11		44		21
Growth Adj:	1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00
Initial Bse:	105		76		6	8		114		117	128		11		122	11		44		21
User Adj:	1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00
PHF Adj:	1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00
PHF Volume:	105		76		6	8		114		117	128		11		122	11		44		21
Reduct Vol:	0		0		0	0		0		0	0		0		0	0		0		0
Reduced Vol:	105		76		6	8		114		117	128		11		122	11		44		21
PCE Adj:	1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00
MLF Adj:	1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00
FinalVolume:	105		76		6	8		114		117	128		11		122	11		44		21
Saturation Flow Module:																				
Adjustment:	1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00
Lanes:	0.56	0.41		0.03	0.03	0.48	0.49		0.49	0.04	0.47	0.14		0.58	0.28					
Final Sat.:	373		270		21	24		345		355	344		30		328	92		369		176
Capacity Analysis Module:																				
Vol/Sat:	0.28	0.28		0.28	0.33	0.33	0.33		0.37	0.37	0.37	0.12		0.12	0.12					
Crit Moves:		****				****				****					****					
Delay/Veh:	10.0	10.0		10.0	9.8	9.8	9.8		10.4	10.4	10.4	8.8		8.8	8.8					
Delay Adj:	1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00					
AdjDel/Veh:	10.0	10.0		10.0	9.8	9.8	9.8		10.4	10.4	10.4	8.8		8.8	8.8					
LOS by Move:	A		A		A	A		A		A	B		B		B	A		A		A
ApproachDel:	10.0					9.8					10.4					8.8				
Delay Adj:	1.00					1.00					1.00					1.00				
ApprAdjDel:	10.0					9.8					10.4					8.8				
LOS by Appr:	A					A					B					A				
AllWayAvgQ:	0.3	0.3		0.3	0.4	0.4	0.4		0.5	0.5	0.5	0.1		0.1	0.1					

Note: Queue reported is the number of cars per lane.

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LAUSD Roosevelt HS Improvements
Existing Conditions
PM Peak Hour

Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #1 Soto/4th

Cycle (sec):	100	Critical Vol./Cap.(X):	0.895
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	177	Level Of Service:	D

Street Name:	Soto Street						4th Street					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Prot+Permit			Permitted		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0 2	0 1	1	0 2	0 1	1	0 1	1 0	1	0 1	1 0
Volume Module:												
Base Vol:	149	824	134	88	622	72	195	1137	181	116	517	76
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	149	824	134	88	622	72	195	1137	181	116	517	76
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	149	824	134	88	622	72	195	1137	181	116	517	76
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	149	824	134	88	622	72	195	1137	181	116	517	76
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	149	824	134	88	622	72	195	1137	181	116	517	76
Saturation Flow Module:												
Sat/Lane:	1425	1425	1425	1425	1425	1425	1425	1425	1425	1425	1425	1425
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.73	0.27	1.00	1.74	0.26
Final Sat.:	1425	2850	1425	1425	2850	1425	1425	2459	391	1425	2485	365
Capacity Analysis Module:												
Vol/Sat:	0.10	0.29	0.09	0.06	0.22	0.05	0.14	0.46	0.46	0.08	0.21	0.21
Crit Volume:		412			88			659		116		
Crit Moves:		****			****			****		****		

LAUSD Roosevelt HS Improvements
Existing Conditions
PM Peak Hour

Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #2 Mathews/4th

Cycle (sec):	100	Critical Vol./Cap.(X):	0.575
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	34	Level Of Service:	A

Street Name:	Mathews St						4th St					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0 1! 0	0	0	0 1! 0	0	1	0 1	1 0	1	0 1	1 0
Volume Module:												
Base Vol:	39	27	64	14	36	26	27	1186	117	67	636	21
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	39	27	64	14	36	26	27	1186	117	67	636	21
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	39	27	64	14	36	26	27	1186	117	67	636	21
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	39	27	64	14	36	26	27	1186	117	67	636	21
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	39	27	64	14	36	26	27	1186	117	67	636	21
Saturation Flow Module:												
Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.30	0.21	0.49	0.18	0.48	0.34	1.00	1.82	0.18	1.00	1.94	0.06
Final Sat.:	450	312	738	276	711	513	1500	2731	269	1500	2904	96
Capacity Analysis Module:												
Vol/Sat:	0.09	0.09	0.09	0.05	0.05	0.05	0.02	0.43	0.43	0.04	0.22	0.22
Crit Volume:		130			14			652		67		
Crit Moves:		****			****			****		****		

LAUSD Roosevelt HS Improvements
Existing Conditions
PM Peak Hour

Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #3 Mott/4th

Cycle (sec):	100	Critical Vol./Cap.(X):	0.556
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	32	Level Of Service:	A

Street Name:	Mott Street						4th Street					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	1 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	34	87	47	79	75	47	100	1045	62	34	609	62
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	34	87	47	79	75	47	100	1045	62	34	609	62
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	34	87	47	79	75	47	100	1045	62	34	609	62
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	34	87	47	79	75	47	100	1045	62	34	609	62
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	34	87	47	79	75	47	100	1045	62	34	609	62
Saturation Flow Module:												
Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.20	0.52	0.28	0.40	0.37	0.23	1.00	1.89	0.11	1.00	1.82	0.18
Final Sat.:	304	777	420	590	560	351	1500	2832	168	1500	2723	277
Capacity Analysis Module:												
Vol/Sat:	0.11	0.11	0.11	0.13	0.13	0.13	0.07	0.37	0.37	0.02	0.22	0.22
Crit Volume:		168			79				554	34		
Crit Moves:		****			****				****	****		

LAUSD Roosevelt HS Improvements
Existing Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #4 Mathews/6th

Cycle (sec):	100	Critical Vol./Cap.(X):	0.222
Loss Time (sec):	0	Average Delay (sec/veh):	8.1
Optimal Cycle:	0	Level Of Service:	A

Street Name:	Mathews St								6th St					
Approach:	North Bound			South Bound			East Bound			West Bound				
Movement:	L	T	R	L	T	R	L	T	R	L	T	R		
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign				
Rights:	Include			Include			Include			Include				
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0		
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 1	0	0 0	0	0	1 0		
Volume Module:														
Base Vol:	0	0	0	44	0	67	43	84	0	0	107	88		
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
Initial Bse:	0	0	0	44	0	67	43	84	0	0	107	88		
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
PHF Volume:	0	0	0	44	0	67	43	84	0	0	107	88		
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0		
Reduced Vol:	0	0	0	44	0	67	43	84	0	0	107	88		
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
FinalVolume:	0	0	0	44	0	67	43	84	0	0	107	88		
Saturation Flow Module:														
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
Lanes:	0.00	1.00	0.00	0.40	0.00	0.60	0.34	0.66	0.00	0.00	0.55	0.45		
Final Sat.:	0	714	0	314	0	478	270	527	0	0	481	396		
Capacity Analysis Module:														
Vol/Sat:	xxxx	0.00	xxxx	0.14	xxxx	0.14	0.16	0.16	xxxx	xxxx	0.22	0.22		
Crit Moves:		****		****				****			****			
Delay/Veh:	0.0	0.0	0.0	7.9	0.0	7.9	8.2	8.2	0.0	0.0	8.1	8.1		
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
AdjDel/Veh:	0.0	0.0	0.0	7.9	0.0	7.9	8.2	8.2	0.0	0.0	8.1	8.1		
LOS by Move:	*	*	*	A	*	A	A	A	*	*	A	A		
ApproachDel:	xxxxxx			7.9			8.2			8.1				
Delay Adj:	xxxxx			1.00			1.00			1.00				
ApprAdjDel:	xxxxxx			7.9			8.2			8.1				
LOS by Appr:	*			A			A			A				
AllWayAvgQ:	0.0	0.0	0.0	0.1	0.1	0.1	0.2	0.2	0.2	0.3	0.3	0.3		

Note: Queue reported is the number of cars per lane.

LAUSD Roosevelt HS Improvements
Existing Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #5 Mott/6th

Cycle (sec):	100	Critical Vol./Cap.(X):	0.228
Loss Time (sec):	0	Average Delay (sec/veh):	8.4
Optimal Cycle:	0	Level Of Service:	A

Street Name:	Mott St							6th St							
Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign				Stop Sign				Stop Sign				Stop Sign			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Lanes:	0	0	1!	0	0	0	0	1!	0	0	0	0	1!	0	0	0
Volume Module:																
Base Vol:	38		91		8	16		71		67	82		13		83	11		11		16
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	38		91		8	16		71		67	82		13		83	11		11		16
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	38		91		8	16		71		67	82		13		83	11		11		16
Reduct Vol:	0		0		0	0		0		0	0		0		0	0		0		0
Reduced Vol:	38		91		8	16		71		67	82		13		83	11		11		16
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	38		91		8	16		71		67	82		13		83	11		11		16
Saturation Flow Module:																
Adjustment:	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.28	0.66	0.06		0.10	0.46	0.44	0.46	0.07	0.47	0.29	0.29	0.42			
Final Sat.:	209		501		44	83		369		348	359		57		363	214		214		311
Capacity Analysis Module:																
Vol/Sat:	0.18	0.18	0.18		0.19	0.19	0.19	0.23	0.23	0.23	0.05	0.05	0.05			
Crit Moves:			****			****			****				****			
Delay/Veh:	8.5	8.5	8.5		8.3	8.3	8.3	8.6	8.6	8.6	7.8	7.8	7.8			
Delay Adj:	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
AdjDel/Veh:	8.5	8.5	8.5		8.3	8.3	8.3	8.6	8.6	8.6	7.8	7.8	7.8			
LOS by Move:	A		A		A	A		A		A	A		A			
ApproachDel:	8.5				8.3			8.6			7.8					
Delay Adj:	1.00				1.00			1.00			1.00					
ApprAdjDel:	8.5				8.3			8.6			7.8					
LOS by Appr:	A				A			A			A					
AllWayAvgQ:	0.2	0.2	0.2		0.2	0.2	0.2	0.3	0.3	0.3	0.0	0.0	0.0			

Note: Queue reported is the number of cars per lane.

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APPENDIX C
Intersection Analysis Worksheets – Future Conditions

LAUSD Roosevelt HS Improvements
Future without Project Conditions
AM Peak Hour

Level Of Service Computation Report
Circular 212 Planning Method (Future Volume Alternative)

Intersection #1 Soto/4th

Cycle (sec):	100	Critical Vol./Cap.(X):	0.940
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	180	Level Of Service:	E

Street Name:	Soto Street						4th Street					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Prot+Permit			Permitted		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0	2 0 1	1	0	2 0 1	1	0	1 1 0	1	0	1 1 0
Volume Module:												
Base Vol:	89	578	70	140	855	120	66	415	77	110	1184	85
Growth Adj:	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
Initial Bse:	93	607	74	147	898	126	69	436	81	116	1243	89
Added Vol:	0	74	2	6	72	0	0	50	0	7	43	7
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	93	681	76	153	970	126	69	486	81	123	1286	96
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	93	681	76	153	970	126	69	486	81	123	1286	96
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	93	681	76	153	970	126	69	486	81	123	1286	96
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	93	681	76	153	970	126	69	486	81	123	1286	96
Saturation Flow Module:												
Sat/Lane:	1425	1425	1425	1425	1425	1425	1425	1425	1425	1425	1425	1425
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.71	0.29	1.00	1.86	0.14
Final Sat.:	1425	2850	1425	1425	2850	1425	1425	2443	407	1425	2652	198
Capacity Analysis Module:												
Vol/Sat:	0.07	0.24	0.05	0.11	0.34	0.09	0.05	0.20	0.20	0.09	0.49	0.49
Crit Volume:	93				485		69				691	
Crit Moves:	****				****		****				****	

LAUSD Roosevelt HS Improvements
Future without Project Conditions
AM Peak Hour

Level Of Service Computation Report
Circular 212 Planning Method (Future Volume Alternative)

Intersection #2 Mathews/4th

Cycle (sec):	100	Critical Vol./Cap.(X):	0.614
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	37	Level Of Service:	B

Street Name:	Mathews St						4th St					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	1! 0 0	0	0	1! 0 0	1	0	1 1 0	1	0	1 1 0
Volume Module:												
Base Vol:	35	53	76	10	85	40	20	435	127	121	1288	26
Growth Adj:	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
Initial Bse:	37	56	80	11	89	42	21	457	133	127	1352	27
Added Vol:	0	0	0	0	0	0	0	59	0	0	56	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	37	56	80	11	89	42	21	516	133	127	1408	27
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	37	56	80	11	89	42	21	516	133	127	1408	27
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	37	56	80	11	89	42	21	516	133	127	1408	27
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	37	56	80	11	89	42	21	516	133	127	1408	27
Saturation Flow Module:												
Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.21	0.32	0.47	0.07	0.63	0.30	1.00	1.59	0.41	1.00	1.96	0.04
Final Sat.:	320	485	695	111	944	444	1500	2384	616	1500	2943	57
Capacity Analysis Module:												
Vol/Sat:	0.11	0.11	0.11	0.09	0.09	0.09	0.01	0.22	0.22	0.08	0.48	0.48
Crit Volume:			172	11			21					718
Crit Moves:			****	****			****					****

LAUSD Roosevelt HS Improvements
Future without Project Conditions
AM Peak Hour

Level Of Service Computation Report
Circular 212 Planning Method (Future Volume Alternative)

Intersection #3 Mott/4th

Cycle (sec):	100	Critical Vol./Cap.(X):	0.705
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	49	Level Of Service:	C

Street Name:	Mott Street						4th Street					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	1! 0	0	0	1! 0	1	0	1 1	0	1	0 1 0
Volume Module:												
Base Vol:	52	124	41	47	129	53	39	393	42	61	1266	54
Growth Adj:	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
Initial Bse:	55	130	43	49	135	56	41	413	44	64	1329	57
Added Vol:	0	0	0	0	0	0	0	59	0	0	56	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	55	130	43	49	135	56	41	472	44	64	1385	57
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	55	130	43	49	135	56	41	472	44	64	1385	57
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	55	130	43	49	135	56	41	472	44	64	1385	57
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	55	130	43	49	135	56	41	472	44	64	1385	57
Saturation Flow Module:												
Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.24	0.57	0.19	0.21	0.56	0.23	1.00	1.83	0.17	1.00	1.92	0.08
Final Sat.:	359	857	283	308	845	347	1500	2743	257	1500	2882	118
Capacity Analysis Module:												
Vol/Sat:	0.15	0.15	0.15	0.16	0.16	0.16	0.03	0.17	0.17	0.04	0.48	0.48
Crit Volume:	55					240	41				721	
Crit Moves:	****					****	****				****	

LAUSD Roosevelt HS Improvements
Future without Project Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #4 Mathews/6th

Cycle (sec):	100	Critical Vol./Cap.(X):	0.511
Loss Time (sec):	0	Average Delay (sec/veh):	11.7
Optimal Cycle:	0	Level Of Service:	B

Street Name:	Mathews St						6th St					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0	1! 0	0	0	1! 0	0	1	0 0	0	0	0 1 0
Volume Module:												
Base Vol:	0	0	0	113	0	118	79	208	0	0	145	86
Growth Adj:	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
Initial Bse:	0	0	0	119	0	124	83	218	0	0	152	90
Added Vol:	0	0	0	0	0	0	0	59	0	0	56	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	119	0	124	83	277	0	0	208	90
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	119	0	124	83	277	0	0	208	90
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	119	0	124	83	277	0	0	208	90
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	119	0	124	83	277	0	0	208	90
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.00	0.00	0.49	0.00	0.51	0.23	0.77	0.00	0.00	0.70	0.30
Final Sat.:	0	525	0	316	0	330	162	543	0	0	502	218
Capacity Analysis Module:												
Vol/Sat:	xxxx	0.00	xxxx	0.38	xxxx	0.38	0.51	0.51	xxxx	xxxx	0.41	0.41
Crit Moves:		****				****		****			****	
Delay/Veh:	0.0	0.0	0.0	11.0	0.0	11.0	12.7	12.7	0.0	0.0	11.0	11.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	11.0	0.0	11.0	12.7	12.7	0.0	0.0	11.0	11.0
LOS by Move:	*	*	*	B	*	B	B	B	*	*	B	B
ApproachDel:	xxxxxx			11.0			12.7			11.0		
Delay Adj:	xxxxx			1.00			1.00			1.00		
ApprAdjDel:	xxxxxx			11.0			12.7			11.0		
LOS by Appr:	*			B			B			B		
AllWayAvgQ:	0.0	0.0	0.0	0.5	0.5	0.5	0.9	0.9	0.9	0.6	0.6	0.6

LAUSD Roosevelt HS Improvements
Future without Project Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #5 Mott/6th

Cycle (sec):	100	Critical Vol./Cap.(X):	0.499
Loss Time (sec):	0	Average Delay (sec/veh):	11.4
Optimal Cycle:	0	Level Of Service:	B

Street Name:	Mott St							6th St							
Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Stop Sign				Stop Sign				Stop Sign				Stop Sign			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0	1!	0 0	0	0	1!	0 0	0	0	1!	0 0	0	0	1!	0 0
Volume Module:																
Base Vol:	105		76	6	8		114	117	128		11	122	11		44	21
Growth Adj:	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
Initial Bse:	110		80	6	8		120	123	134		12	128	12		46	22
Added Vol:	0		0	0	0		0	0	0		59	0	0		56	0
PasserByVol:	0		0	0	0		0	0	0		0	0	0		0	0
Initial Fut:	110		80	6	8		120	123	134		71	128	12		102	22
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	110		80	6	8		120	123	134		71	128	12		102	22
Reduct Vol:	0		0	0	0		0	0	0		0	0	0		0	0
Reduced Vol:	110		80	6	8		120	123	134		71	128	12		102	22
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	110		80	6	8		120	123	134		71	128	12		102	22
Saturation Flow Module:																
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.56	0.41	0.03	0.03	0.48	0.49	0.41	0.21	0.38	0.09	0.75	0.16				
Final Sat.:	337		244	19	22		312	320	269		141	257	51		450	97
Capacity Analysis Module:																
Vol/Sat:	0.33	0.33	0.33	0.38	0.38	0.38	0.50	0.50	0.50	0.23	0.23	0.23				
Crit Moves:	****				****				****							****
Delay/Veh:	11.0	11.0	11.0	10.9	10.9	10.9	12.6	12.6	12.6	9.9	9.9	9.9				
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
AdjDel/Veh:	11.0	11.0	11.0	10.9	10.9	10.9	12.6	12.6	12.6	9.9	9.9	9.9				
LOS by Move:	B		B	B	B		B	B		B	A	A	A			
ApproachDel:	11.0				10.9				12.6				9.9			
Delay Adj:	1.00				1.00				1.00				1.00			
ApprAdjDel:	11.0				10.9				12.6				9.9			
LOS by Appr:	B				B				B				A			
AllWayAvgQ:	0.4	0.4	0.4	0.5	0.5	0.5	0.8	0.8	0.8	0.2	0.2	0.2				

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LAUSD Roosevelt HS Improvements
Future without Project Conditions
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Level Of Service Computation Report
Circular 212 Planning Method (Future Volume Alternative)

Intersection #1 Soto/4th

Cycle (sec):	100	Critical Vol./Cap.(X):	0.916
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	180	Level Of Service:	E

Street Name:	Soto Street						4th Street					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Prot+Permit			Permitted		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0 2	0 1	1	0 2	0 1	1	0 1	1 0	1	0 1	1 0
Volume Module:												
Base Vol:	149	824	134	88	622	72	195	1137	181	116	517	76
Growth Adj:	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
Initial Bse:	156	865	141	92	653	76	205	1194	190	122	543	80
Added Vol:	0	99	9	9	97	0	0	60	0	4	66	9
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	156	964	150	101	750	76	205	1254	190	126	609	89
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	156	964	150	101	750	76	205	1254	190	126	609	89
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	156	964	150	101	750	76	205	1254	190	126	609	89
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	156	964	150	101	750	76	205	1254	190	126	609	89
Saturation Flow Module:												
Sat/Lane:	1425	1425	1425	1425	1425	1425	1425	1425	1425	1425	1425	1425
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.74	0.26	1.00	1.75	0.25
Final Sat.:	1425	2850	1425	1425	2850	1425	1425	2475	375	1425	2487	363
Capacity Analysis Module:												
Vol/Sat:	0.11	0.34	0.11	0.07	0.26	0.05	0.14	0.51	0.51	0.09	0.24	0.24
Crit Volume:		482			101			722			349	
Crit Moves:		****			****			****				

LAUSD Roosevelt HS Improvements
Future without Project Conditions
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Level Of Service Computation Report
Circular 212 Planning Method (Future Volume Alternative)

Intersection #2 Mathews/4th

Cycle (sec):	100	Critical Vol./Cap.(X):	0.629
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	39	Level Of Service:	B

Street Name:	Mathews St						4th St					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0 1! 0	0	0	0 1! 0	0	1	0 1	1 0	1	0 1	1 0
Volume Module:												
Base Vol:	39	27	64	14	36	26	27	1186	117	67	636	21
Growth Adj:	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
Initial Bse:	41	28	67	15	38	27	28	1245	123	70	668	22
Added Vol:	0	0	0	0	0	0	0	77	0	0	78	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	41	28	67	15	38	27	28	1322	123	70	746	22
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	41	28	67	15	38	27	28	1322	123	70	746	22
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	41	28	67	15	38	27	28	1322	123	70	746	22
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	41	28	67	15	38	27	28	1322	123	70	746	22
Saturation Flow Module:												
Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.30	0.21	0.49	0.18	0.48	0.34	1.00	1.83	0.17	1.00	1.94	0.06
Final Sat.:	450	312	738	276	711	513	1500	2745	255	1500	2914	86
Capacity Analysis Module:												
Vol/Sat:	0.09	0.09	0.09	0.05	0.05	0.05	0.02	0.48	0.48	0.05	0.26	0.26
Crit Volume:		137			15			723			70	
Crit Moves:		****			****			****			****	

LAUSD Roosevelt HS Improvements
Future without Project Conditions
PM Peak Hour

Level Of Service Computation Report
Circular 212 Planning Method (Future Volume Alternative)

Intersection #3 Mott/4th

Cycle (sec):	100	Critical Vol./Cap.(X):	0.610
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	37	Level Of Service:	B

Street Name:	Mott Street						4th Street					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0 1!	0	0	0 1!	0	1	0 1	1 0	1	0 1	1 0
Volume Module:												
Base Vol:	34	87	47	79	75	47	100	1045	62	34	609	62
Growth Adj:	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
Initial Bse:	36	91	49	83	79	49	105	1097	65	36	639	65
Added Vol:	0	0	0	0	0	0	0	77	0	0	78	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	36	91	49	83	79	49	105	1174	65	36	717	65
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	36	91	49	83	79	49	105	1174	65	36	717	65
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	36	91	49	83	79	49	105	1174	65	36	717	65
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	36	91	49	83	79	49	105	1174	65	36	717	65
Saturation Flow Module:												
Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.20	0.52	0.28	0.40	0.37	0.23	1.00	1.89	0.11	1.00	1.83	0.17
Final Sat.:	304	777	420	590	560	351	1500	2842	158	1500	2750	250
Capacity Analysis Module:												
Vol/Sat:	0.12	0.12	0.12	0.14	0.14	0.14	0.07	0.41	0.41	0.02	0.26	0.26
Crit Volume:		176			83				620	36		
Crit Moves:		****			****				****	****		

LAUSD Roosevelt HS Improvements
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Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #4 Mathews/6th

Cycle (sec):	100	Critical Vol./Cap.(X):	0.338
Loss Time (sec):	0	Average Delay (sec/veh):	9.1
Optimal Cycle:	0	Level Of Service:	A

Street Name:	Mathews St						6th St					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0 1!	0	0	0 1!	0	0	1 0	0	0	0 1	0
Volume Module:												
Base Vol:	0	0	0	44	0	67	43	84	0	0	107	88
Growth Adj:	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
Initial Bse:	0	0	0	46	0	70	45	88	0	0	112	92
Added Vol:	0	0	0	0	0	0	0	77	0	0	78	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	46	0	70	45	165	0	0	190	92
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	46	0	70	45	165	0	0	190	92
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	46	0	70	45	165	0	0	190	92
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	46	0	70	45	165	0	0	190	92
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.00	0.00	0.40	0.00	0.60	0.21	0.79	0.00	0.00	0.67	0.33
Final Sat.:	0	638	0	284	0	432	167	611	0	0	563	273
Capacity Analysis Module:												
Vol/Sat:	xxxx	0.00	xxxx	0.16	xxxx	0.16	0.27	0.27	xxxx	xxxx	0.34	0.34
Crit Moves:		****		****				****			****	
Delay/Veh:	0.0	0.0	0.0	8.5	0.0	8.5	9.1	9.1	0.0	0.0	9.3	9.3
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	8.5	0.0	8.5	9.1	9.1	0.0	0.0	9.3	9.3
LOS by Move:	*	*	*	A	*	A	A	A	*	*	A	A
ApproachDel:	xxxxxx			8.5			9.1			9.3		
Delay Adj:	xxxxx			1.00			1.00			1.00		
ApprAdjDel:	xxxxxx			8.5			9.1			9.3		
LOS by Appr:	*			A			A			A		
AllWayAvgQ:	0.0	0.0	0.0	0.2	0.2	0.2	0.3	0.3	0.3	0.5	0.5	0.5

LAUSD Roosevelt HS Improvements
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Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #5 Mott/6th

Cycle (sec):	100	Critical Vol./Cap.(X):	0.358
Loss Time (sec):	0	Average Delay (sec/veh):	9.4
Optimal Cycle:	0	Level Of Service:	A

Street Name:	Mott St								6th St							
Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Stop Sign				Stop Sign				Stop Sign				Stop Sign			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Lanes:	0	0	1!	0 0	0	0	1!	0 0	0	0	1!	0 0	0	0	1!	0 0
Volume Module:																
Base Vol:	38	91	8		16	71	67		82	13	83		11	11	16	
Growth Adj:	1.05	1.05	1.05		1.05	1.05	1.05		1.05	1.05	1.05		1.05	1.05	1.05	
Initial Bse:	40	96	8		17	75	70		86	14	87		12	12	17	
Added Vol:	0	0	0		0	0	0		0	77	0		0	78	0	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	40	96	8		17	75	70		86	91	87		12	90	17	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	40	96	8		17	75	70		86	91	87		12	90	17	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	40	96	8		17	75	70		86	91	87		12	90	17	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	40	96	8		17	75	70		86	91	87		12	90	17	
Saturation Flow Module:																
Adjustment:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Lanes:	0.28	0.66	0.06		0.10	0.46	0.44		0.33	0.34	0.33		0.10	0.76	0.14	
Final Sat.:	186	445	39		73	326	308		241	253	244		67	522	98	
Capacity Analysis Module:																
Vol/Sat:	0.21	0.21	0.21		0.23	0.23	0.23		0.36	0.36	0.36		0.17	0.17	0.17	
Crit Moves:		****					****			****				****		
Delay/Veh:	9.3	9.3	9.3		9.0	9.0	9.0		10.0	10.0	10.0		8.8	8.8	8.8	
Delay Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
AdjDel/Veh:	9.3	9.3	9.3		9.0	9.0	9.0		10.0	10.0	10.0		8.8	8.8	8.8	
LOS by Move:	A	A	A		A	A	A		B	B	B		A	A	A	
ApproachDel:	9.3				9.0				10.0				8.8			
Delay Adj:	1.00				1.00				1.00				1.00			
ApprAdjDel:	9.3				9.0				10.0				8.8			
LOS by Appr:	A				A				B				A			
AllWayAvgQ:	0.2	0.2	0.2		0.3	0.3	0.3		0.5	0.5	0.5		0.2	0.2	0.2	

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APPENDIX D
Intersection Analysis Worksheets – Future with Construction Conditions

LAUSD Roosevelt HS Improvements
Future w Project Construction Conditions
AM Peak Hour

Level Of Service Computation Report
Circular 212 Planning Method (Future Volume Alternative)

Intersection #1 Soto/4th

Cycle (sec):	100	Critical Vol./Cap.(X):	0.949
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	180	Level Of Service:	E

Street Name:	Soto Street						4th Street					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Prot+Permit			Permitted		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0	2 0 1	1	0	2 0 1	1	0	1 1 0	1	0	1 1 0
Volume Module:												
Base Vol:	89	578	70	140	855	120	66	415	77	110	1184	85
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	90	584	71	141	864	121	67	419	78	111	1196	86
Added Vol:	12	99	9	9	97	0	0	110	13	4	115	9
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	102	683	80	150	961	121	67	529	91	115	1311	95
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	102	683	80	150	961	121	67	529	91	115	1311	95
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	102	683	80	150	961	121	67	529	91	115	1311	95
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	102	683	80	150	961	121	67	529	91	115	1311	95
Saturation Flow Module:												
Sat/Lane:	1425	1425	1425	1425	1425	1425	1425	1425	1425	1425	1425	1425
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.71	0.29	1.00	1.87	0.13
Final Sat.:	1425	2850	1425	1425	2850	1425	1425	2433	417	1425	2658	192
Capacity Analysis Module:												
Vol/Sat:	0.07	0.24	0.06	0.11	0.34	0.09	0.05	0.22	0.22	0.08	0.49	0.49
Crit Volume:	102				480		67					703
Crit Moves:	****				****		****					****

LAUSD Roosevelt HS Improvements
Future w Project Construction Conditions
AM Peak Hour

Level Of Service Computation Report
Circular 212 Planning Method (Future Volume Alternative)

Intersection #2 Mathews/4th

Cycle (sec):	100	Critical Vol./Cap.(X):	0.618
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	38	Level Of Service:	B

Street Name:	Mathews St						4th St					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	1! 0 0	0	0	1! 0 0	1	0	1 1 0	1	0	1 1 0
Volume Module:												
Base Vol:	35	53	76	10	85	40	20	435	127	121	1288	26
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	35	54	77	10	86	40	20	439	128	122	1301	26
Added Vol:	6	0	0	0	0	0	0	121	6	0	122	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	41	54	77	10	86	40	20	560	134	122	1423	26
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	41	54	77	10	86	40	20	560	134	122	1423	26
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	41	54	77	10	86	40	20	560	134	122	1423	26
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	41	54	77	10	86	40	20	560	134	122	1423	26
Saturation Flow Module:												
Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.24	0.31	0.45	0.07	0.63	0.30	1.00	1.61	0.39	1.00	1.96	0.04
Final Sat.:	361	468	671	111	944	444	1500	2420	580	1500	2946	54
Capacity Analysis Module:												
Vol/Sat:	0.11	0.11	0.11	0.09	0.09	0.09	0.01	0.23	0.23	0.08	0.48	0.48
Crit Volume:			172	10			20				725	
Crit Moves:			****	****			****				****	

LAUSD Roosevelt HS Improvements
Future w Project Construction Conditions
AM Peak Hour

Level Of Service Computation Report
Circular 212 Planning Method (Future Volume Alternative)

Intersection #3 Mott/4th

Cycle (sec):	100	Critical Vol./Cap.(X):	0.715
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	50	Level Of Service:	C

Street Name:	Mott Street						4th Street					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0 1!	0	0	0 1!	0	1	0 1	1 0	1	0 1	1 0
Volume Module:												
Base Vol:	52	124	41	47	129	53	39	393	42	61	1266	54
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	53	125	41	47	130	54	39	397	42	62	1279	55
Added Vol:	43	0	0	0	0	0	0	77	44	0	78	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	96	125	41	47	130	54	39	474	86	62	1357	55
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	96	125	41	47	130	54	39	474	86	62	1357	55
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	96	125	41	47	130	54	39	474	86	62	1357	55
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	96	125	41	47	130	54	39	474	86	62	1357	55
Saturation Flow Module:												
Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.36	0.48	0.16	0.21	0.56	0.23	1.00	1.69	0.31	1.00	1.92	0.08
Final Sat.:	547	717	237	308	845	347	1500	2537	463	1500	2884	116
Capacity Analysis Module:												
Vol/Sat:	0.17	0.17	0.17	0.15	0.15	0.15	0.03	0.19	0.19	0.04	0.47	0.47
Crit Volume:	96					231	39				706	
Crit Moves:	****					****	****				****	

LAUSD Roosevelt HS Improvements
Future w Project Construction Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #4 Mathews/6th

Cycle (sec):	100	Critical Vol./Cap.(X):	0.542
Loss Time (sec):	0	Average Delay (sec/veh):	12.3
Optimal Cycle:	0	Level Of Service:	B

Street Name:	Mathews St						6th St					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0 1!	0	0	0 1!	0	0	1 0	0	0	1 0	0
Volume Module:												
Base Vol:	0	0	0	113	0	118	79	208	0	0	145	86
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	0	0	0	114	0	119	80	210	0	0	146	87
Added Vol:	0	0	0	6	0	0	0	90	0	0	91	6
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	120	0	119	80	300	0	0	237	93
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	120	0	119	80	300	0	0	237	93
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	120	0	119	80	300	0	0	237	93
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	120	0	119	80	300	0	0	237	93
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.00	0.00	0.50	0.00	0.50	0.21	0.79	0.00	0.00	0.72	0.28
Final Sat.:	0	506	0	315	0	313	147	553	0	0	514	201
Capacity Analysis Module:												
Vol/Sat:	xxxx	0.00	xxxx	0.38	xxxx	0.38	0.54	0.54	xxxx	xxxx	0.46	0.46
Crit Moves:		****		****				****			****	
Delay/Veh:	0.0	0.0	0.0	11.2	0.0	11.2	13.4	13.4	0.0	0.0	11.7	11.7
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	11.2	0.0	11.2	13.4	13.4	0.0	0.0	11.7	11.7
LOS by Move:	*	*	*	B	*	B	B	B	*	*	B	B
ApproachDel:	xxxxxx			11.2			13.4			11.7		
Delay Adj:	xxxxx			1.00			1.00			1.00		
ApprAdjDel:	xxxxxx			11.2			13.4			11.7		
LOS by Appr:	*			B			B			B		
AllWayAvgQ:	0.0	0.0	0.0	0.5	0.5	0.5	1.1	1.1	1.1	0.8	0.8	0.8

LAUSD Roosevelt HS Improvements
Future w Project Construction Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #5 Mott/6th

Cycle (sec):	100	Critical Vol./Cap.(X):	0.510
Loss Time (sec):	0	Average Delay (sec/veh):	11.5
Optimal Cycle:	0	Level Of Service:	B

Street Name:	Mott St							6th St							
Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Stop Sign					Stop Sign				
Rights:	Include					Include					Include					Include				
Min. Green:	0	0	0			0	0	0			0	0	0			0	0	0		
Lanes:	0	0	1!	0	0	0	0	1!	0	0	0	0	1!	0	0	0	0	1!	0	0
Volume Module:																				
Base Vol:	105		76		6	8		114		117	128		11		122	11		44		21
Growth Adj:	1.01	1.01		1.01	1.01	1.01	1.01		1.01	1.01	1.01	1.01		1.01	1.01	1.01	1.01		1.01	1.01
Initial Bse:	106		77		6	8		115		118	129		11		123	11		44		21
Added Vol:	0		0		0	0		0		0	0		77		0	0		78		0
PasserByVol:	0		0		0	0		0		0	0		0		0	0		0		0
Initial Fut:	106		77		6	8		115		118	129		88		123	11		122		21
User Adj:	1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00
PHF Adj:	1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00
PHF Volume:	106		77		6	8		115		118	129		88		123	11		122		21
Reduct Vol:	0		0		0	0		0		0	0		0		0	0		0		0
Reduced Vol:	106		77		6	8		115		118	129		88		123	11		122		21
PCE Adj:	1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00
MLF Adj:	1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00
FinalVolume:	106		77		6	8		115		118	129		88		123	11		122		21
Saturation Flow Module:																				
Adjustment:	1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00
Lanes:	0.56	0.41		0.03	0.03	0.48	0.49		0.38	0.26	0.36	0.07		0.79	0.14					
Final Sat.:	331		240		19	22		307		315	254		173		242	43		476		82
Capacity Analysis Module:																				
Vol/Sat:	0.32	0.32		0.32	0.38	0.38	0.38		0.51	0.51	0.51	0.26		0.26	0.26					
Crit Moves:		****				****			****			****								
Delay/Veh:	11.0	11.0		11.0	10.9	10.9	10.9		12.8	12.8	12.8	10.1		10.1	10.1					
Delay Adj:	1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00					
AdjDel/Veh:	11.0	11.0		11.0	10.9	10.9	10.9		12.8	12.8	12.8	10.1		10.1	10.1					
LOS by Move:	B		B		B	B		B		B	B		B		B	B		B		B
ApproachDel:	11.0					10.9					12.8					10.1				
Delay Adj:	1.00					1.00					1.00					1.00				
ApprAdjDel:	11.0					10.9					12.8					10.1				
LOS by Appr:	B					B					B					B				
AllWayAvgQ:	0.4	0.4		0.4	0.5	0.5	0.5		0.9	0.9	0.9	0.3		0.3	0.3					

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LAUSD Roosevelt HS Improvements
Future w Project Construction Conditions
AM Peak Hour

Note: Queue reported is the number of cars per lane.

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LAUSD Roosevelt HS Improvements
Future w Project Construction Conditions
PM Peak Hour

Level Of Service Computation Report
Circular 212 Planning Method (Future Volume Alternative)

Intersection #1 Soto/4th

Cycle (sec):	100	Critical Vol./Cap.(X):	0.991
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	180	Level Of Service:	E

Street Name:	Soto Street						4th Street					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Prot+Permit			Permitted		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0 2	0 1	1	0 2	0 1	1	0 1	1 0	1	0 1	1 0
Volume Module:												
Base Vol:	149	824	134	88	622	72	195	1137	181	116	517	76
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	150	832	135	89	628	73	197	1148	183	117	522	77
Added Vol:	12	99	9	9	97	0	0	110	13	4	115	9
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	162	931	144	98	725	73	197	1258	196	121	637	86
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	162	931	144	98	725	73	197	1258	196	121	637	86
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	162	931	144	98	725	73	197	1258	196	121	637	86
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	162	931	144	98	725	73	197	1258	196	121	637	86
Saturation Flow Module:												
Sat/Lane:	1425	1425	1425	1425	1425	1425	1425	1425	1425	1425	1425	1425
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.73	0.27	1.00	1.76	0.24
Final Sat.:	1425	2850	1425	1425	2850	1425	1425	2466	384	1425	2512	338
Capacity Analysis Module:												
Vol/Sat:	0.11	0.33	0.10	0.07	0.25	0.05	0.14	0.51	0.51	0.09	0.25	0.25
Crit Volume:		466			98			727			121	
Crit Moves:		****			****			****			****	

LAUSD Roosevelt HS Improvements
Future w Project Construction Conditions
PM Peak Hour

Level Of Service Computation Report
Circular 212 Planning Method (Future Volume Alternative)

Intersection #2 Mathews/4th

Cycle (sec):	100	Critical Vol./Cap.(X):	0.627
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	39	Level Of Service:	B

Street Name:	Mathews St						4th St					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0 1! 0	0	0	0 1! 0	0	1	0 1	1 0	1	0 1	1 0
Volume Module:												
Base Vol:	39	27	64	14	36	26	27	1186	117	67	636	21
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	39	27	65	14	36	26	27	1198	118	68	642	21
Added Vol:	6	0	0	0	0	0	0	121	6	0	122	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	45	27	65	14	36	26	27	1319	124	68	764	21
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	45	27	65	14	36	26	27	1319	124	68	764	21
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	45	27	65	14	36	26	27	1319	124	68	764	21
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	45	27	65	14	36	26	27	1319	124	68	764	21
Saturation Flow Module:												
Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.33	0.20	0.47	0.18	0.48	0.34	1.00	1.83	0.17	1.00	1.95	0.05
Final Sat.:	496	298	706	276	711	513	1500	2742	258	1500	2919	81
Capacity Analysis Module:												
Vol/Sat:	0.09	0.09	0.09	0.05	0.05	0.05	0.02	0.48	0.48	0.05	0.26	0.26
Crit Volume:		137			14				722	68		
Crit Moves:		****			****				****	****		

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Future w Project Construction Conditions
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Level Of Service Computation Report
Circular 212 Planning Method (Future Volume Alternative)

Intersection #3 Mott/4th

Cycle (sec):	100	Critical Vol./Cap.(X):	0.631
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	39	Level Of Service:	B

Street Name:	Mott Street						4th Street					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	1 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	34	87	47	79	75	47	100	1045	62	34	609	62
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	34	88	47	80	76	47	101	1055	63	34	615	63
Added Vol:	43	0	0	0	0	0	0	77	44	0	78	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	77	88	47	80	76	47	101	1132	107	34	693	63
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	77	88	47	80	76	47	101	1132	107	34	693	63
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	77	88	47	80	76	47	101	1132	107	34	693	63
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	77	88	47	80	76	47	101	1132	107	34	693	63
Saturation Flow Module:												
Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.36	0.42	0.22	0.40	0.37	0.23	1.00	1.83	0.17	1.00	1.83	0.17
Final Sat.:	545	620	335	590	560	351	1500	2742	258	1500	2751	249
Capacity Analysis Module:												
Vol/Sat:	0.14	0.14	0.14	0.14	0.14	0.14	0.07	0.41	0.41	0.02	0.25	0.25
Crit Volume:		213			80				620	34		
Crit Moves:		****			****				****	****		

LAUSD Roosevelt HS Improvements
Future w Project Construction Conditions
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Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #4 Mathews/6th

Cycle (sec):	100	Critical Vol./Cap.(X):	0.353
Loss Time (sec):	0	Average Delay (sec/veh):	9.2
Optimal Cycle:	0	Level Of Service:	A

Street Name:	Mathews St						6th St					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 1	0	0 0	0	1	0
Volume Module:												
Base Vol:	0	0	0	44	0	67	43	84	0	0	107	88
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	0	0	0	44	0	68	43	85	0	0	108	89
Added Vol:	0	0	0	6	0	0	0	90	0	0	91	6
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	50	0	68	43	175	0	0	199	95
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	50	0	68	43	175	0	0	199	95
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	50	0	68	43	175	0	0	199	95
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	50	0	68	43	175	0	0	199	95
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.00	0.00	0.43	0.00	0.57	0.20	0.80	0.00	0.00	0.68	0.32
Final Sat.:	0	630	0	301	0	404	154	621	0	0	564	269
Capacity Analysis Module:												
Vol/Sat:	xxxx	0.00	xxxx	0.17	xxxx	0.17	0.28	0.28	xxxx	xxxx	0.35	0.35
Crit Moves:		****		****				****			****	
Delay/Veh:	0.0	0.0	0.0	8.6	0.0	8.6	9.2	9.2	0.0	0.0	9.4	9.4
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	8.6	0.0	8.6	9.2	9.2	0.0	0.0	9.4	9.4
LOS by Move:	*	*	*	A	*	A	A	A	*	*	A	A
ApproachDel:	xxxxxx			8.6			9.2			9.4		
Delay Adj:	xxxxx			1.00			1.00			1.00		
ApprAdjDel:	xxxxxx			8.6			9.2			9.4		
LOS by Appr:	*			A			A			A		
AllWayAvgQ:	0.0	0.0	0.0	0.2	0.2	0.2	0.4	0.4	0.4	0.5	0.5	0.5

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Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #5 Mott/6th

Cycle (sec):	100	Critical Vol./Cap.(X):	0.345
Loss Time (sec):	0	Average Delay (sec/veh):	9.3
Optimal Cycle:	0	Level Of Service:	A

Street Name:	Mott St								6th St							
Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Stop Sign				Stop Sign				Stop Sign				Stop Sign			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Lanes:	0	0	1!	0 0	0	0	1!	0 0	0	0	1!	0 0	0	0	1!	0 0
Volume Module:																
Base Vol:	38	91	8		16	71	67		82	13	83		11	11	16	
Growth Adj:	1.01	1.01	1.01		1.01	1.01	1.01		1.01	1.01	1.01		1.01	1.01	1.01	
Initial Bse:	38	92	8		16	72	68		83	13	84		11	11	16	
Added Vol:	0	0	0		0	0	0		0	77	0		0	78	0	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	38	92	8		16	72	68		83	90	84		11	89	16	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	38	92	8		16	72	68		83	90	84		11	89	16	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	38	92	8		16	72	68		83	90	84		11	89	16	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	38	92	8		16	72	68		83	90	84		11	89	16	
Saturation Flow Module:																
Adjustment:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Lanes:	0.28	0.66	0.06		0.10	0.46	0.44		0.32	0.35	0.33		0.09	0.77	0.14	
Final Sat.:	187	448	39		74	329	310		240	261	243		66	532	96	
Capacity Analysis Module:																
Vol/Sat:	0.21	0.21	0.21		0.22	0.22	0.22		0.34	0.34	0.34		0.17	0.17	0.17	
Crit Moves:		****			****					****				****		
Delay/Veh:	9.2	9.2	9.2		8.9	8.9	8.9		9.9	9.9	9.9		8.7	8.7	8.7	
Delay Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
AdjDel/Veh:	9.2	9.2	9.2		8.9	8.9	8.9		9.9	9.9	9.9		8.7	8.7	8.7	
LOS by Move:	A	A	A		A	A	A		A	A	A		A	A	A	
ApproachDel:	9.2				8.9				9.9				8.7			
Delay Adj:	1.00				1.00				1.00				1.00			
ApprAdjDel:	9.2				8.9				9.9				8.7			
LOS by Appr:	A				A				A				A			
AllWayAvgQ:	0.2	0.2	0.2		0.2	0.2	0.2		0.5	0.5	0.5		0.2	0.2	0.2	

Traffix 8.0.0715 (c) 2008 Dowling Assoc. Licensed to KOA CORP, MONTEREY PK

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Note: Queue reported is the number of cars per lane.

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APPENDIX 4.0

DLR Group Comprehensive Modernization Project, January 2016 and DLR Group Building 1 Seismic Analysis, October 2017

ROOSEVELT HIGH SCHOOL

456 S. MATHEWS STREET, LOS ANGELES CA 90033

LOS ANGELES UNIFIED SCHOOL DISTRICT



DLR Group

COMPREHENSIVE MODERNIZATION PROJECT

DRAFT
01.19.2016

3130 Wilshire Boulevard
Sixth Floor
Santa Monica, CA 90403

PROJECT NUMBER
75-15239-00

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0.1 PROJECT DIRECTORY

CLIENT

LAUSD Board of Education

Marguerite LaMotte
Board District 1

Monica Garcia
Board District 2

Tamar Galatzan
Board District 3

Steve Zimmer
Board District 4

Bennett Kayser
Board District 5

Monica Ratliff
Board District 6

Richard Vladovic
Board District 7
Board President

LAUSD FSD Asset Management
333 South Beaudry Avenue
23rd Floor, Room 23-155-02
Los Angeles, CA 90017
T (213) 241-4130

Alix O'Brien
Asset Development Director

Julia Hawkinson
Sr. Facilities Development Manager

Scott Singletary
Facilities Development Manager

Russell McCarley
Senior Design Development Manager

Eric Amber
Design Manager

Jerry Flores
Complex Project Manager (CPM)

Alfredo Montes
Operations Coordinator

Roosevelt High School
456 S. Matthews Street
Los Angeles, CA 90033
T (323) 780-6500

Bruce Bivins
Principal

Name
Plant Manager

Roosevelt Math Science Technology Center

Jose Espinoza
Principal

Roosevelt STEM Education Program

Name
Principal

Boyle Heights Continuing Education High School

Leigh Orr
Principal

Roosevelt Infant and Early Education Center

Name
Principal

ARCHITECTURAL

DLR Group
3130 Wilshire Boulevard
Sixth Floor
Santa Monica, CA 90403
T (310) 828-0040

Brett A. Hobza
Principal In Charge

Andrea Cohen Gehring
Design Principal

David Sakaguchi
Technical Principal

Ben Levin
Project Manager

STRUCTURAL

Saiful Bouquet
155 N. Lake Ave
Pasadena, CA 91101
T (626) 304-2616

Robert Randall
Structural Engineer

MECHANICAL/PLUMBING/FIRE PROTECTION

Maroko & Shwe, Inc.
1106 W Magnolia Blvd
Burbank, CA 91506
T (818) 840-0280

James Shwe
Principal In Charge

ELECTRICAL/SIGNAL/DATA/FIRE ALARM

ROSHANIAN
6404 Wilshire Blvd. Ste. 610
Los Angeles, CA 90048
T (323) 933-5252

Alan Roshanian
Principal In Charge

CIVIL

VCA Engineers
3951 Medford Street
Los Angeles, CA 90063
T (323) 729-6098

Virgil Aoanan
Principal In Charge

COST ESTIMATE

C P O'Halloran
2659 Townsgate Road
Suite 213
West Village, CA 91362
T (805) 494-3703

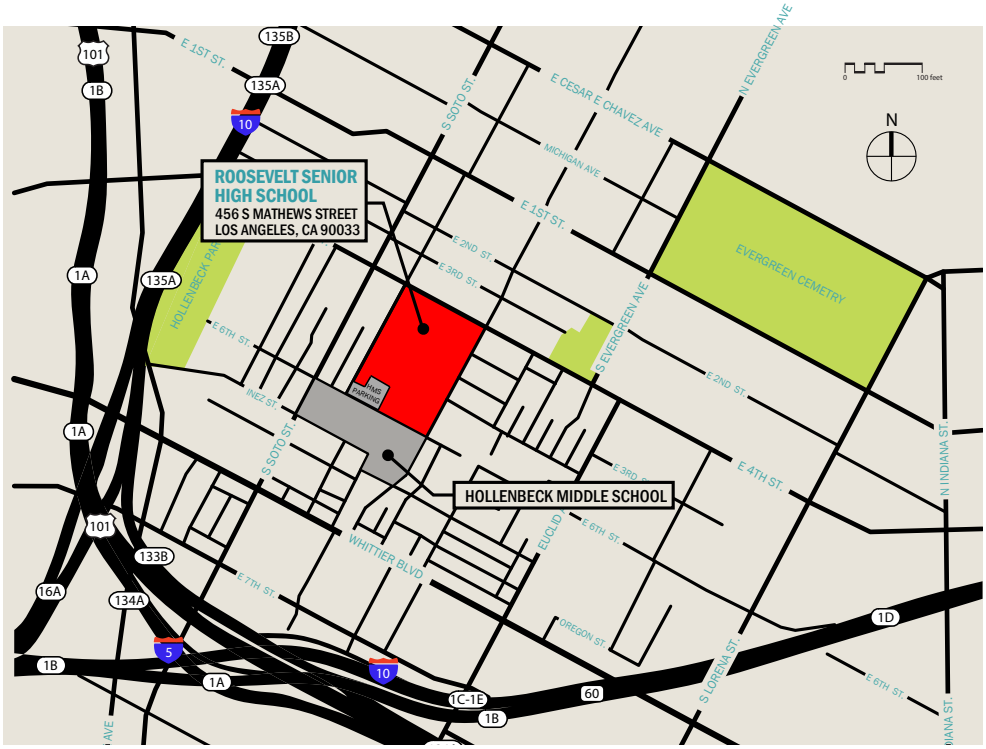
Ciaran O'Halloran
Cost Estimator

1.0 EXECUTIVE SUMMARY

1.1 SITE OVERVIEW



Aerial View of Roosevelt High School



Vicinity Map

Roosevelt High School is located in the neighborhood of Boyle Heights City of Los Angeles on a 22.7 acre site bounded by East Fourth Street to the north, East Sixth Street to the south, Mathews Street to the west, and Mott Street to the east. The immediate neighborhood is primarily residential with low-rise and mixed-use commercial properties on either side of East Fourth Street, East Sixth Street, and Soto Street a few blocks to the west. The Interstate 5 and Interstate 10 Freeways intersect nearby to the northwest. Several small parks, recreation centers, and libraries are within a few miles in all directions including Hollenbeck Park to the west, Boyle Heights Sports Center Facility to the south, Evergreen Recreation Center to the northeast, and Franklin Library to the northwest. An Olympic-sized swimming pool, which was constructed as a joint-use facility with the City of Los Angeles, is located at the north corner of the property. Hollenbeck Middle School is located on the south side of East Sixth Street and shares use of the surface parking lots at the south end of the property on the north side of East Sixth Street.

Hollenbeck Middle School holds 6th grade through 8th grade, approximately half of their enrolled students attend Roosevelt High School and the rest are distributed among other High Schools on site including STEM pilot school and Math/Science Magnet. Although a future partnership with Roosevelt High School will be desirable in the future.

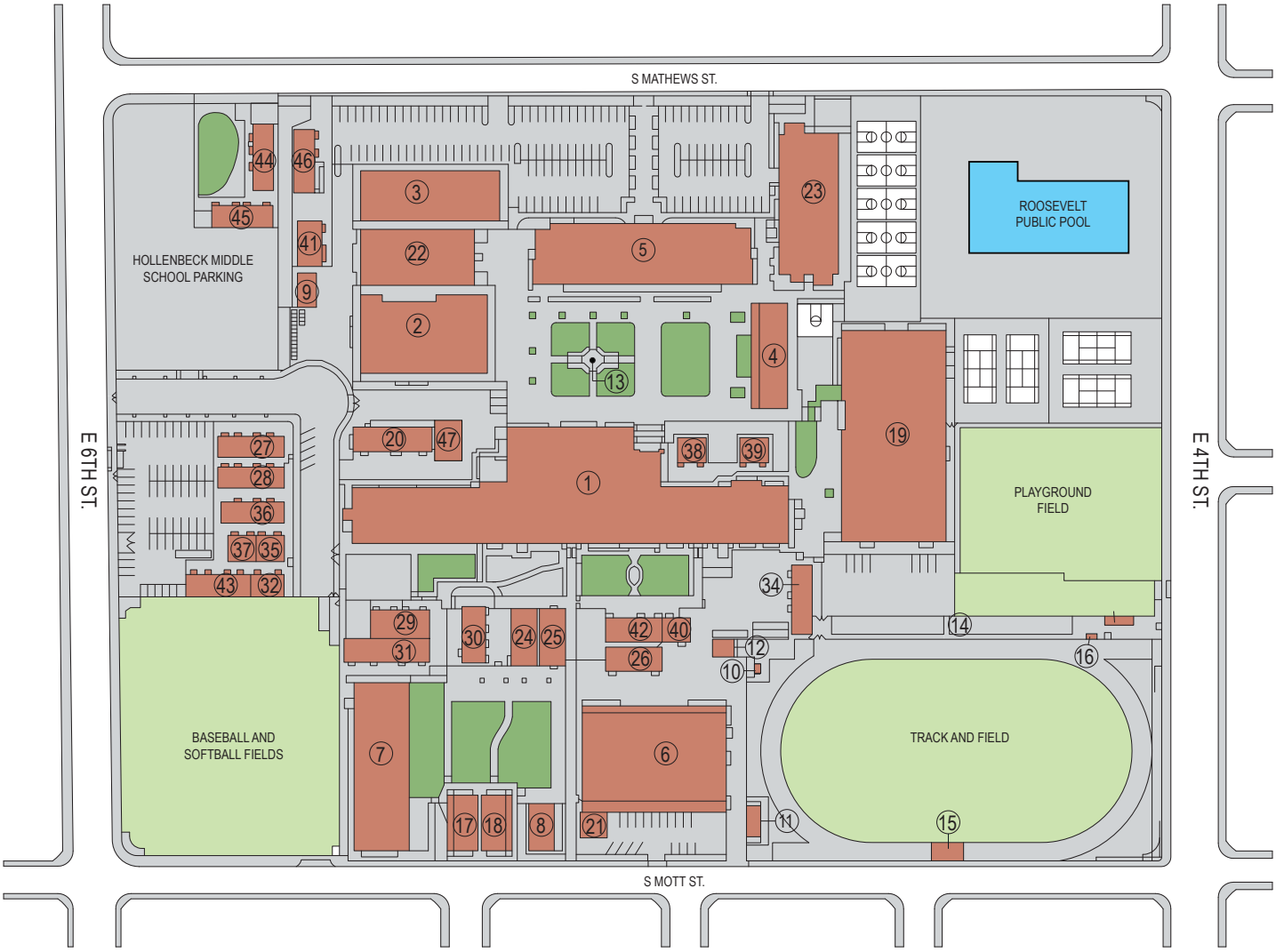
Roosevelt High School serves 9th through 12th grades on a single track calendar. The education program is organized around a 9th Grade Academy, which is comprised of several Houses, and four Academic Pathways for 10th through 12th grades: ACE; Health and Medical Sciences; Law and Public Service; and STEaM. A health clinic is housed in the Auditorium and Classroom Building (1). Roosevelt High School is operated by the Partnership for Los Angeles Schools (PLAS). Four other schools operate on the property as well:

- The Math, Science, and Technology Magnet Academy at Roosevelt High School currently occupies the Library and Classroom Building (23) near the northwest corner of the property. The administrative functions for this magnet school are housed in three relocatable structures (Buildings 26, 40 and 42) located to the east of the Auditorium and Classroom Building (1).
- A new STEM pilot school began operation in Fall 2015 within the Classroom Building (7) near the southeast corner of the property.
- Boyle Heights Continuing Education High School occupies two relocatable structures (Buildings 44 and 45) near the southwest corner of the property.
- An Infant and Early Education Center occupies two relocatable structures (Buildings 41 and 46) near the southwest corner of the property, just north of the continuation school.

The campus also currently provides administrative space and shared classrooms for the Boyle Heights Adult Education School. The adult school only functions during evenings or otherwise outside of regular school hours.

In the beginning of 1993, the school was required to operate on a multi-track calendar until it received overcrowding relief in 2009. Over the course of the last 18 years, approximately $34 million in bond funding has been invested in improving the school's facilities, including the implementation of Academic Pathways, general repairs and upgrades to campus infrastructure.

1.2 BUILDINGS - EXISTING STRUCTURES OVERVIEW



BUILDING INDEX

10' 25' 50' 100' 250'

BUILDING INDEX

1. AUDITORIUM AND CLASSROOM
2. CAFETERIA
3. WEST CLASSROOM
4. MUSIC
5. ADMINISTRATION AND CLASSROOM
6. INDUSTRIAL ARTS
7. EAST CLASSROOM
8. INSTRUMENTAL MUSIC
9. GARAGE / STORAGE - INFANT CARE
10. FLAMMABLE STORAGE
11. FIELD SANITARY
12. EQUIPMENT FIELD STORAGE
13. GAZEBO
14. HOME BLEACHERS
15. VISITORS BLEACHERS
16. FIELD LIGHT CONTROLS
17. CLASSROOM
18. CLASSROOM
19. PHYSICAL EDUCATION
20. UTILITY
21. AUTO SERVICE
22. ARCADE / LUNCH SHELTER
23. LIBRARY AND CLASSROOM
24. TWO / THREE UNIT RELOCATABLE
25. TWO / THREE UNIT RELOCATABLE
26. TWO / THREE UNIT RELOCATABLE
27. TWO / THREE UNIT RELOCATABLE
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34. TWO / THREE UNIT RELOCATABLE
35. SINGLE UNIT RELOCATABLE
36. TWO / THREE UNIT RELOCATABLE
37. SINGLE UNIT RELOCATABLE
38. SINGLE UNIT RELOCATABLE
39. SINGLE UNIT RELOCATABLE
40. SINGLE UNIT RELOCATABLE
41. SINGLE UNIT RELOCATABLE - INFANT CARE
42. TWO / THREE UNIT RELOCATABLE
43. CLASSROOM RELO-DOH / PARENT CENTER
44. TWO / THREE UNIT RELOCATABLE (BOYLE HEIGHTS CONT.)
45. TWO / THREE UNIT RELOCATABLE (BOYLE HEIGHTS CONT.)
46. TWO / THREE UNIT RELOCATABLE - INFANTCARE
47. CHILLER YARD

The Auditorium and Classroom Building (1, 1922) is a three-story structure at the center of the campus; it fronts onto what was once S. Fickett Street but is now the east edge of the central campus commons. The commons is further bounded to the north by the one-story Music Building (4, 1977) and the one-story Physical Education and Gymnasium Building (19, 1968); to the northwest by the three-story Library and Classroom Building (23); to the west by the three-story Administration and Classroom Building (5, 1972); to the south and southwest by the one-story Classroom Building (3, 1977), the open-air arcade Covered Lunch Area (Building 22, 1977), and the one-story Cafeteria (Building 2, 1977); and to the southwest by the one-story Plant Manager and Utility Building (20, 1968). At the center of the commons is the open-air Gazebo (Building 13, 1977).

A number of relocatable structures occupy the site around Building 1: Buildings 38 and 39 to the northwest, where they also form the northeast edge of the commons; Buildings 24, 25, 26, 29, 30, 31, 34, 40 and 42 to the east; and Buildings 27, 28, 32, 35, 36, 37 and 43 to the south. The relocatable structures for the Boyle Heights Continuing Education High School (Buildings 44 and 45) and the Infant and Early Education Center (Buildings 41 and 46) are located near the southwest corner of the property just west of the one-story Garage Building (9, 1972). All of the relocatable structures date from the late 1940s through the early 1970s.

To the east beyond Building 1 and the relocatables are several other academic structures, including the two-story Industrial Arts Building (6, 1968), which includes a one-story automotive shop, service yard, and Auto Service Building (21, 1975); the one-story Instrumental Music Building (8, 1959); the two two-story "federal" Classroom Buildings (17 and 18, 1964) with exterior corridor access; and the two-story Classroom Building (7, 1937) with central corridor access.

A baseball/softball field and small garden are located just south of Building 7 at the southeast corner of the property. A second, smaller "quad" is located north of Building 7, west of Buildings 16, 17 and 18, south of Building 6, and east of Buildings 24, 25 and 30. A "Peace Garden" and various patio/courtyard spaces occupy the interstitial spaces along the east side of Building 1 and the covered walkway/arcade along the west side of the "central" relocatable structures.

The northeast corner of the property contains the non-regulation football field and track "stadium," which includes the one-story Field Storage Building (12, 1941); the one-story Flammable Storage Building (10, 1953); the one-story Field Sanitary Building (11, 1958); the one-story Field Light Controls (Building 16, 1949); and a relocatable Sanitary Portable (Building 33, 1975). The facility also has relatively new Home Bleachers (Building 14, 2008) and Visitor Bleachers (Building 15, 2008). The Gymnasium (Building 19) is surrounded by additional outdoor athletic facilities, including handball courts, a "utility" or practice field, tennis courts, and basketball courts. The northwest corner of the property contains the Roosevelt Pool, a joint-use facility operated by the City of Los Angeles and open to the public outside of school hours and functions.

Short remains of S. Fickett Street (north of East Sixth Street) and Lanfranco Street (west of S. Mott Street) intersect at the southeastern portion of the property, separating relocatable structures and surface parking lots from the main part of the campus. These portions of streets are gated and controlled as school property.

1.3 SCHOOL'S EDUCATIONAL VISION

Roosevelt High School offers 91 years of tradition, a strong alumni support, and a wealth of community partnerships, and supports a current enrollment of 1,600 students. Roosevelt High School has a strong presence in sports, extra-curricular, and club activities including Robotics, Cyber Patriot, Theater Performing Arts, Engineering programs, and Advanced Placement courses.

One of the High School's visions is that all 9th graders will be able to select an area of focus by choosing a College & Career Pathway for their 10th through 12th grade years in either ACE, STEaM, Health & Medical, or Law & Public Service.

Roosevelt High School's mission is to ensure that all students are prepared with the skills, knowledge, and passion needed to graduate from a four-year university, and/or successfully pursue the career of their choice.

- Provide a stable, safe, nurturing environment with access to resources for lifelong learning.
- Encourage all members to realize their full potential through risk-taking, critical thinking, problem solving, and effective communication.
- Integrate technology throughout the learning community.
- Promote individual and community responsibility, respect for diversity, and global awareness.
- Establish and maintain high expectations and standards for all community members.
- Value parent involvement and encourage a dynamic, reciprocal relationship with the community at large.

With half of Hollenbeck Middle School's enrolled students attending Roosevelt High School and the rest distributed among other High Schools including STEM, reinforcing a partnership between both schools is highly desirable.

Roosevelt High School, with Science Technology Engineering and Math (STEM) Academy and Mendez High School, are part of the LAUSD Zone of Choice Boyle Heights Program. The Zone of Choice program includes not only schools but also Small Learning Communities (SLC) for incoming 9th grade students as schools options within a geographic area. The school options in each Zone are open to all resident students and represent the demographics of the local area. All school options within the Zone of Choice offer college preparatory curriculum, A-G standards-based instruction, and preparation for college and careers.

1.4 MODERNIZATION GOALS

The goal of the Comprehensive Modernization Preliminary Site Analysis and Program Development phase is to provide information to the district in order to develop a final scope, budget and schedule for a Comprehensive Modernization Project at Roosevelt High School addressing Critical Physical Conditions and Educational Requirements which are unique to the school's campus.

CRITICAL PHYSICAL CONDITIONS

The Project is being developed to focus on the most critical issues — failing buildings and / or building systems and buildings deemed through a detailed seismic evaluation to require seismic upgrades. The Modernization Project will also enhance student and staff safety by providing safe controlled campus access and adequate pedestrian circulation. The Modernization project will improve the relationship between the residential streets and student drop-off/pick up as well as parking access.

Roosevelt High School's physical conditions priority items are the following:

- Address Seismic condition in buildings as required for student safety
- Failing Building Components
- Controlled entry access point
- Safe student drop off/pick up, entries, access points
- Improved Physical Education Space
- Student gathering areas on campus to be supervised and observed by minimal number of staff with greatest area of observation, eliminate areas that not easily supervised by staff
- Removal of relocatable structures
- Joint use requirements that might impact access and use of athletic facilities, auditorium, library and other school functions

EDUCATIONAL REQUIREMENTS

Roosevelt's High School campus houses the following:

- PLAS Roosevelt High School
- Math, Science, and Technology Magnet Academy
- Roosevelt STEM Pilot Program
- Boyle Heights Continuation High School
- Roosevelt Infant/Early Education Center
- Wellness Clinic

Connectivity between Roosevelt High School Academic Programs and Hollenbeck Middle School is highly desirable to reinforce the concept of a 6th -12th grade educational complex. With a total of 4 Pathways: ACE, STEaM, Health & Medical, or Law & Public Service it would make them flexible in order to support both Roosevelt High School and Hollenbeck Middle School to build a bonded culture, partnership, and continuation in curriculum. Cross-pollination should be encouraged by sharing best practices, collaboration spaces, and supporting professional development.

The intention is to have a programmatic separation between PLAS Roosevelt High School the Math, Science, and Technology Magnet Academy and Pilot School but still share the facilities and campus and support spaces. Independent access for the Wellness Clinic, Infant/Early Education Center and Boyle Heights Continuation High School program will be allocated.

COMMUNITY OUTREACH

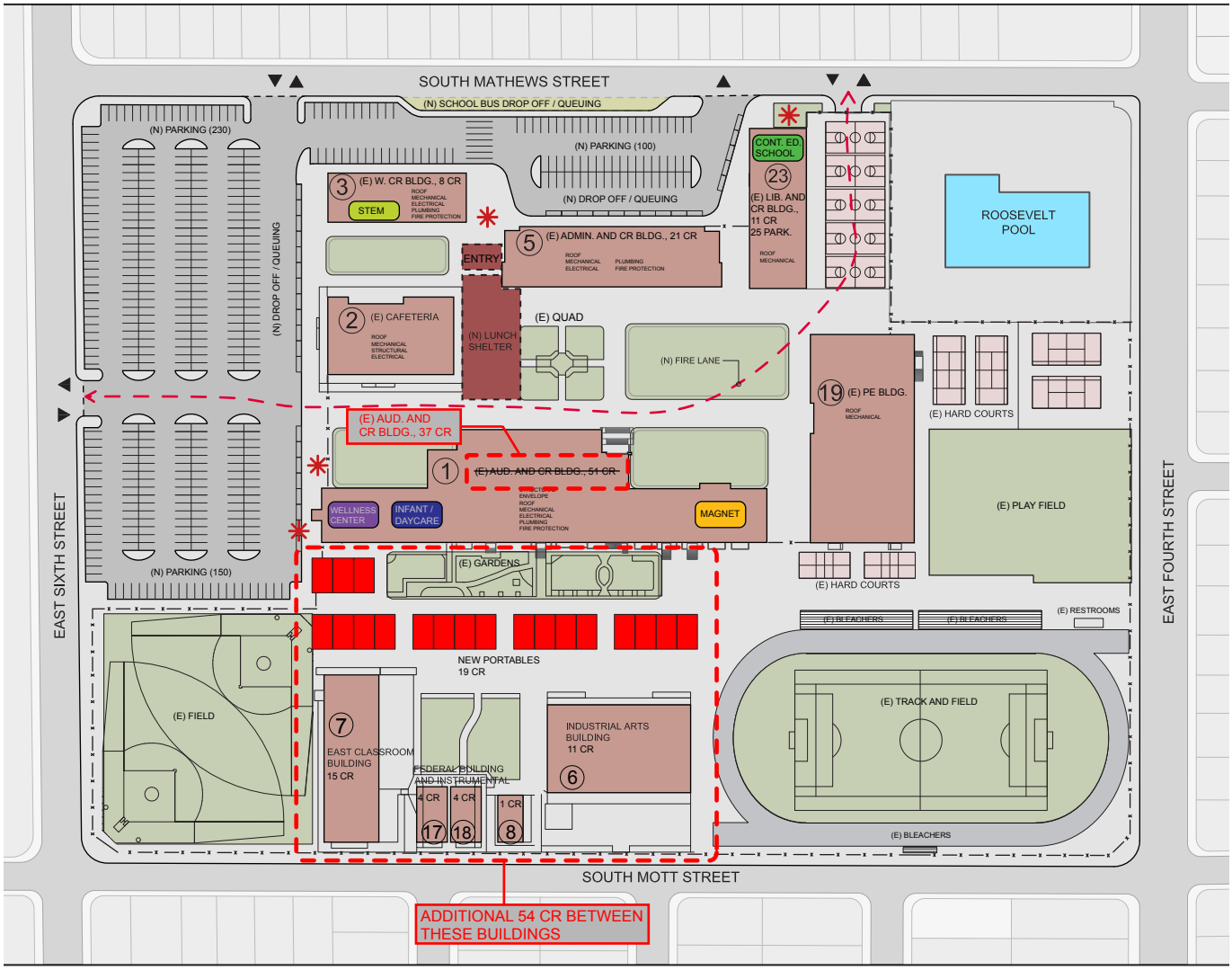
An important aspect of Roosevelt's High School curriculum is to support Service Learning Projects by Roosevelt Students; as well to provide learning environments and services that support the local community.

The Service Leaning Projects are intended to raise awareness and impacting the community through a partnership between Roosevelt High School Students and community groups. Among the community groups who partner with Roosevelt High School Students are: Politics & Pedagogy Collective, ESRI, and i.am.angel Foundation.

For instance, Roosevelt STEM Education Program Students in partnership with ESRI and i.am. angel Foundation utilize the American Psychological Association (APA) style of research and Geographic Information Systems to research a problem they observe in their community. These top-level mapping tools are used to show how social inequalities impact residents' health and wellness. As well, in partnership with Politics & Pedagogy Collective, Roosevelt STEM Education Program Students host The East Side Stories Conference in order to challenge injustices facing students and communities, inequitable access to education resources, as well discuss and discourage youth criminalization.

The Roosevelt Community Adult School provides a short-term career, and technical training accessible to the public. The Roosevelt Wellness Center as well the Infant Center are a campus based separate entities, accessible to Roosevelt High School Students and provide support to the community of Boyle Heights.

1.5 SUMMARY OF DEVELOPMENTAL OPTIONS



RETAIN AND MODERNIZE 6 EXISTING CORE BUILDINGS
NEW LUNCH SHELTER
EXISTING UNDERSIZED ATHLETIC FIELDS TO REMAIN

LEGEND

- EXISTING BUILDING TO BE MODERNIZED
- NEW BUILDING
- INFANT / EARLY EDUCATION CENTER
- WELLNESS CENTER
- MATH, SCIENCE, AND TECH. MAGNET ACADEMY
- BOYLE HEIGHTS CONT. EDUCATION HIGH SCHOOL
- SCHOOL ENTRANCES
- SECURITY FENCE
- FIRE LANE

CLASSROOMS / PARKING

• EXISTING CLASSROOMS: 152
EXISTING PARKING: 370 (HMS 140 + RHS 230)
1 CLASSROOM : 1.5 PARKING SPACES (REQ. 342)

• PROPOSED CLASSROOMS: 131
~~PROPOSED PARKING: 505 (HMS 140 + RHS 365)~~
1 CLASSROOM : 4.0 PARKING SPACES (REQ. 205)

SUMMARY

• **BUILDING 22 (LUNCH SHELTER)**
  · REMOVE
    · STRUCTURAL REVIEW INDICATES 'AT RISK'

• **BUILDING 23 (CR. BLDG.)**
  · RETAIN EXISTING PARKING IN LIEU OF MORE CLASSROOMS

• **MODULAR BUILDINGS**
  · REMOVE ALL
    · BEYOND USEFUL LIFE (40 TO 60 YEARS OLD)
    · LIMITED COLLABORATIVE CONFIGURATIONS

• **BASEBALL AND SOFTBALL FIELDS**
  · RETAIN EXISTING UNDERSIZED FIELDS

• **FOOTBALL FIELD AND TRACK**
  · RETAIN EXISTING UNDERSIZED FIELD AND TRACK

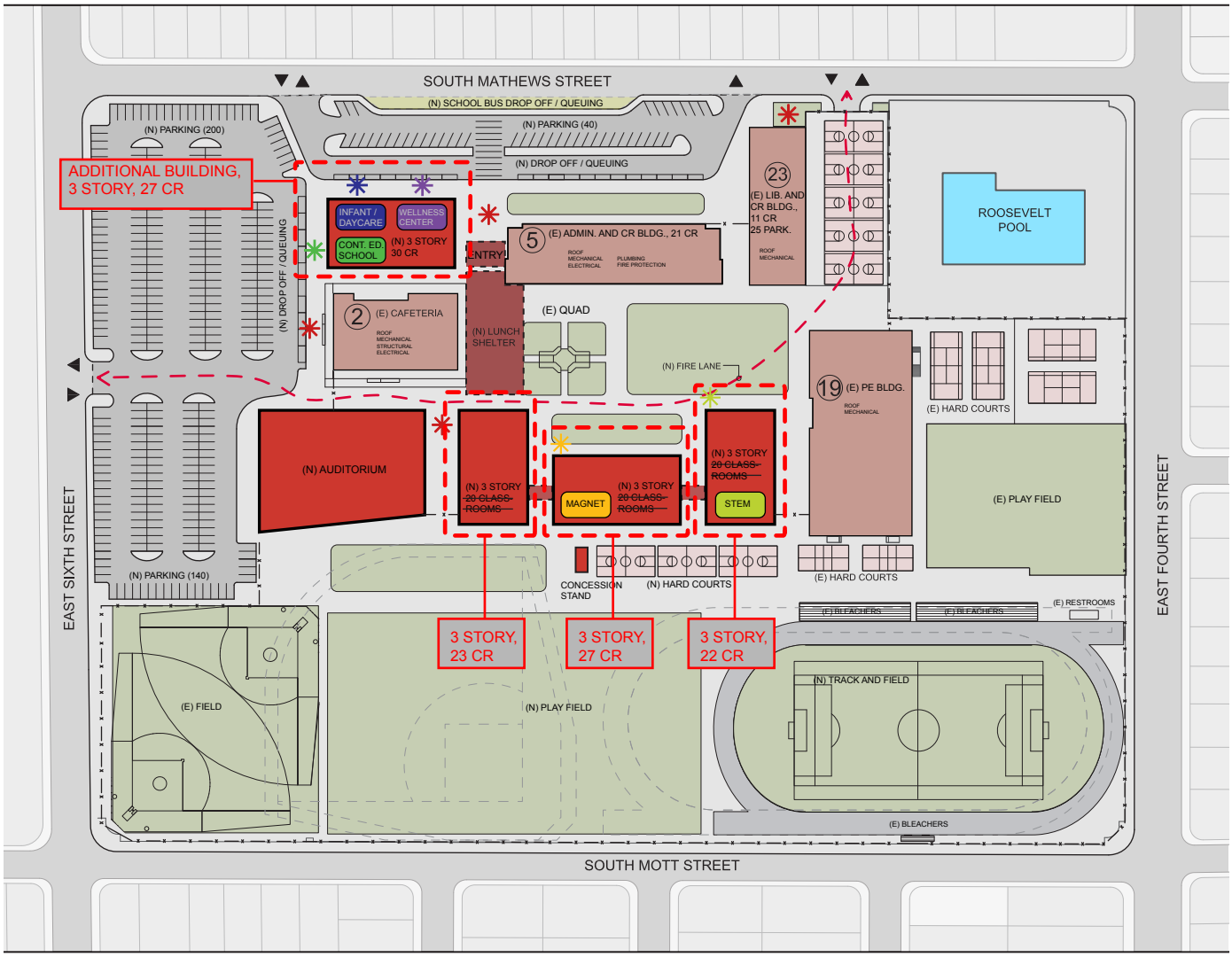
• NEW NON-REGULATION PLAY FIELD

• CONTINUOUS L-SHAPED ATHLETIC ZONE

• **NEW DROP AREAS**
  · NEW DROP OFF AREA ON MATHEWS ST. FOR SCHOOL BUSES WITH OVERFLOW PARKING OUTSIDE DROP OFF TIMES

  · NEW DROP OFF / QUEUING AREA FOR RHS AND HMS IN PARKING LOT ALONG E. 6TH ST.

  · NEW DROP OFF / QUEUING AREA FOR WELLNESS CENTER AND INFANT / EARLY ED. IN PARKING LOT ALONG E. 6TH ST.



RETAIN AND MODERNIZE 4 EXISTING CORE BUILDINGS
3 NEW ACADEMIC BUILDINGS, NEW LUNCH SHELTER
EXISTING UNDERSIZED ATHLETIC FIELDS TO REMAIN

LEGEND

- EXISTING BUILDING TO BE MODERNIZED
- NEW BUILDING
- INFANT / EARLY EDUCATION CENTER
- WELLNESS CENTER
- MATH, SCIENCE, AND TECH. MAGNET ACADEMY
- BOYLE HEIGHTS CONT. EDUCATION HIGH SCHOOL
- SCHOOL ENTRANCES
- SECURITY FENCE
- FIRE LANE

CLASSROOMS / PARKING

• EXISTING CLASSROOMS: 152
EXISTING PARKING: 370 (HMS 140 + RHS 230)
1 CLASSROOM : 1.5 PARKING SPACES (REQ. 342)

• PROPOSED CLASSROOMS: 131
PROPOSED PARKING: 405 (HMS 140 + RHS 265)
1 CLASSROOM : 2.9 PARKING SPACES (REQ. 207)

SUMMARY

• **BUILDING 1 (AUD. AND CR. BLDG.)**
  · REMOVE
    · MAJOR STRUCTURAL REHABILITATION REQUIRED
    · UNDERSIZE CLASSROOMS, CANNOT EASILY BE ENLARGED

• **BUILDING 3 (WEST CR. BLDG.)**
  · REMOVE

• **BUILDING 22 (LUNCH SHELTER)**
  · REMOVE
    · STRUCTURAL REVIEW INDICATES 'AT RISK'

• **BUILDING 23 (CR. BLDG.)**
  · RETAIN EXISTING PARKING IN LIEU OF MORE CLASSROOMS

• **MODULAR BUILDINGS**
  · REMOVE ALL
    · BEYOND USEFUL LIFE (40 TO 60 YEARS OLD)
    · LIMITED COLLABORATIVE CONFIGURATIONS

• **BASEBALL AND SOFTBALL FIELDS**
  · RETAIN EXISTING UNDERSIZED FIELDS

• **FOOTBALL FIELD AND TRACK**
  · RETAIN EXISTING UNDERSIZED FIELD AND TRACK

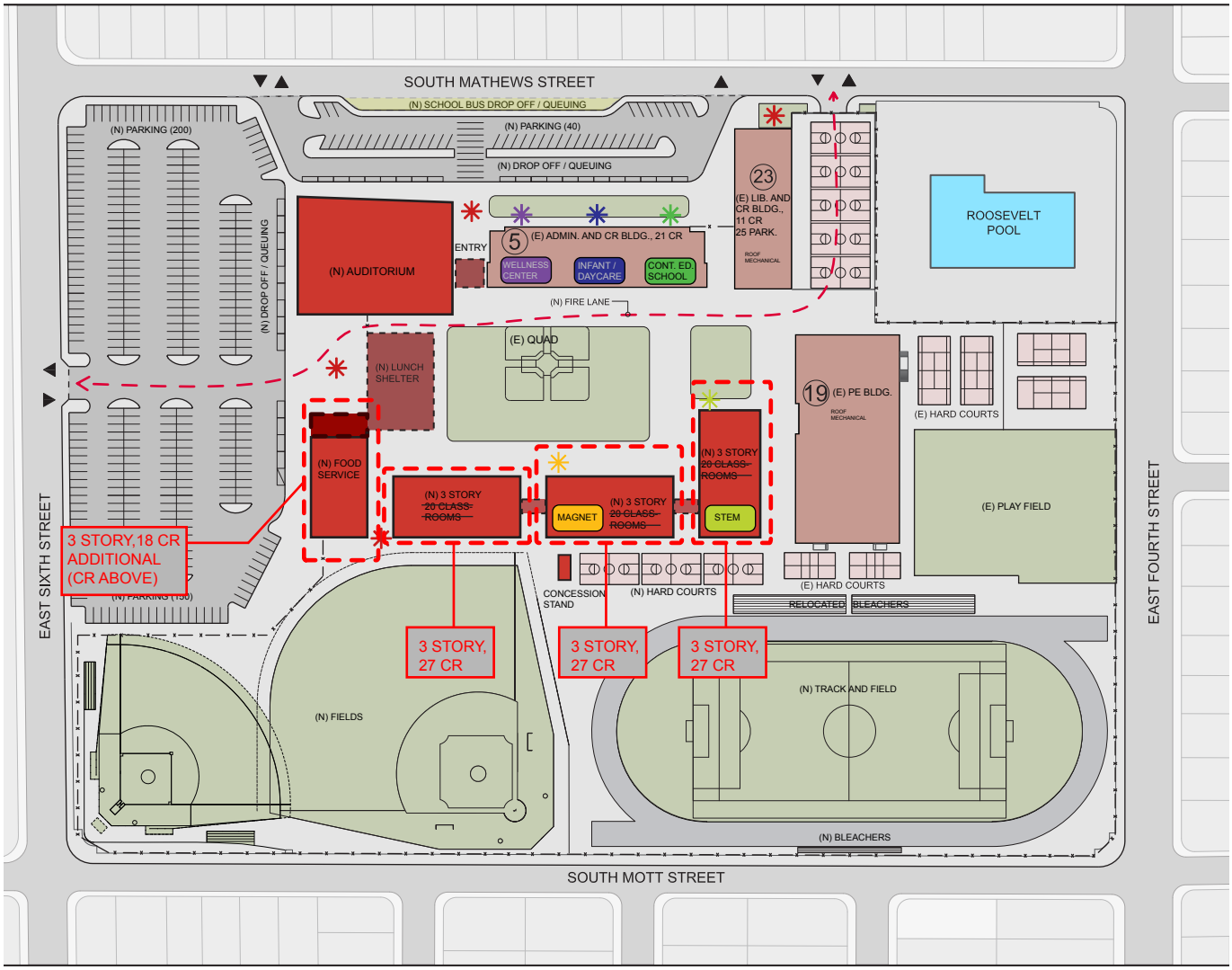
• NEW NON-REGULATION PLAY FIELD

• CONTINUOUS L-SHAPED ATHLETIC ZONE

• **NEW DROP AREAS**
  · NEW DROP OFF AREA ON MATHEWS ST. FOR SCHOOL BUSES WITH OVERFLOW PARKING OUTSIDE DROP OFF TIMES

  · NEW DROP OFF / QUEUING AREA FOR RHS AND HMS IN PARKING LOT ALONG E. 6TH ST.

  · NEW DROP OFF / QUEUING AREA FOR WELLNESS CENTER AND INFANT / EARLY ED. IN PARKING LOT ALONG E. 6TH ST.



RETAIN AND MODERNIZE 3 EXISTING CORE BUILDINGS
3 NEW ACADEMIC BUILDINGS, NEW FOOD SERVICE BUILDINGS, NEW AUDITORIUM
NEW REGULATION-SIZED ATHLETIC FIELDS

LEGEND

- EXISTING BUILDING TO BE MODERNIZED
- NEW BUILDING
- INFANT / EARLY EDUCATION CENTER
- WELLNESS CENTER
- MATH, SCIENCE, AND TECH. MAGNET ACADEMY
- BOYLE HEIGHTS CONT. EDUCATION HIGH SCHOOL
- SCHOOL ENTRANCES
- SECURITY FENCE
- FIRE LANE

CLASSROOMS / PARKING

• EXISTING CLASSROOMS: 152
EXISTING PARKING: 370 (HMS 140 + RHS 230)
1 CLASSROOM : 1.5 PARKING SPACES (REQ. 342)

• PROPOSED CLASSROOMS: 131
PROPOSED PARKING: 415 (HMS 140 + RHS 275)
1 CLASSROOM : 3.0 PARKING SPACES (REQ. 207)

SUMMARY

• **BUILDING 1 (AUD. AND CR. BLDG.)**
  · REMOVE
    · MAJOR STRUCTURAL REHABILITATION REQUIRED
    · UNDERSIZE CLASSROOMS, CANNOT EASILY BE ENLARGED
    · RELIEVES SITE LAYOUT PRESSURE ON NEW FIELDS

• **BUILDING 2 (CAFETERIA)**
  · REMOVE
    · STRUCTURAL REVIEW INDICATES 'AT RISK'

• **BUILDING 3 (WEST CR. BLDG.)**
  · REMOVE

• **BUILDING 22 (LUNCH SHELTER)**
  · REMOVE
    · STRUCTURAL REVIEW INDICATES 'AT RISK'

• **BUILDING 23 (CR. BLDG.)**
  · RETAIN EXISTING PARKING IN LIEU OF MORE CLASSROOMS

• **MODULAR BUILDINGS**
  · REMOVE ALL
    · BEYOND USEFUL LIFE (40 TO 60 YEARS OLD)
    · LIMITED COLLABORATIVE CONFIGURATIONS

• **BASEBALL AND SOFTBALL FIELDS**
  · NEW REGULATION-SIZED FIELDS

• **FOOTBALL FIELD AND TRACK**
  · NEW REGULATION-SIZED FIELDS

• **NEW DROP AREAS**
  · NEW DROP OFF AREA ON MATHEWS ST. FOR SCHOOL BUSES WITH OVERFLOW PARKING OUTSIDE DROP OFF TIMES

  · NEW DROP OFF / QUEUING AREA FOR RHS AND HMS IN PARKING LOT ALONG E. 6TH ST.

  · NEW DROP OFF / QUEUING AREA FOR WELLNESS CENTER AND INFANT / EARLY ED. IN PARKING LOT ALONG E. 6TH ST.

2.0 EXISTING SITE SURVEY AND INVESTIGATION

2.1 SPECIAL CAMPUS FEATURES



Building 1 Main Entrance



Fountain on east side of Building 1



Garden of Peace



Mural on Building 1

According to LAUSD's architectural historian consultants, the Roosevelt High School campus is ineligible for listing in either the State or National Register of Historic Places.

Built in 1922, the Auditorium and Classroom Building (1) is the oldest building on the campus. It once featured elaborate exterior ornamentation style. However, a renovation in 1924 altered some of the building's aesthetics, and most of what remained of the ornamental features was removed or permanently covered by structural gunite as part of Field Act seismic renovations in 1936 and 1954. The only remaining element of potential significance is the main entrance to the Auditorium Lobby, which is architectural from a 1936 remodel of the original 1922 entrance.

The 1937 Classroom Building (7) did not feature significant ornamentation in its original design. Subsequent alterations have rendered it a plain building with no significance.

Some non-building aesthetic features include the many murals and other artistic expressions located around campus and in several buildings. These include a large mural along the second floor landing of Building 1; an ornate mosaic tile fountain to the east of Building 1; exterior murals on the south end of Building 5, the north face of Building 19, and the west end of Building 8; and custom carved bench seat backs in the secondary quad between Buildings 6 and 7.

2.2 SITE USE



SCHOOLS ON SITE CAMPUS PLAN

10' 25' 50' 100' 250'

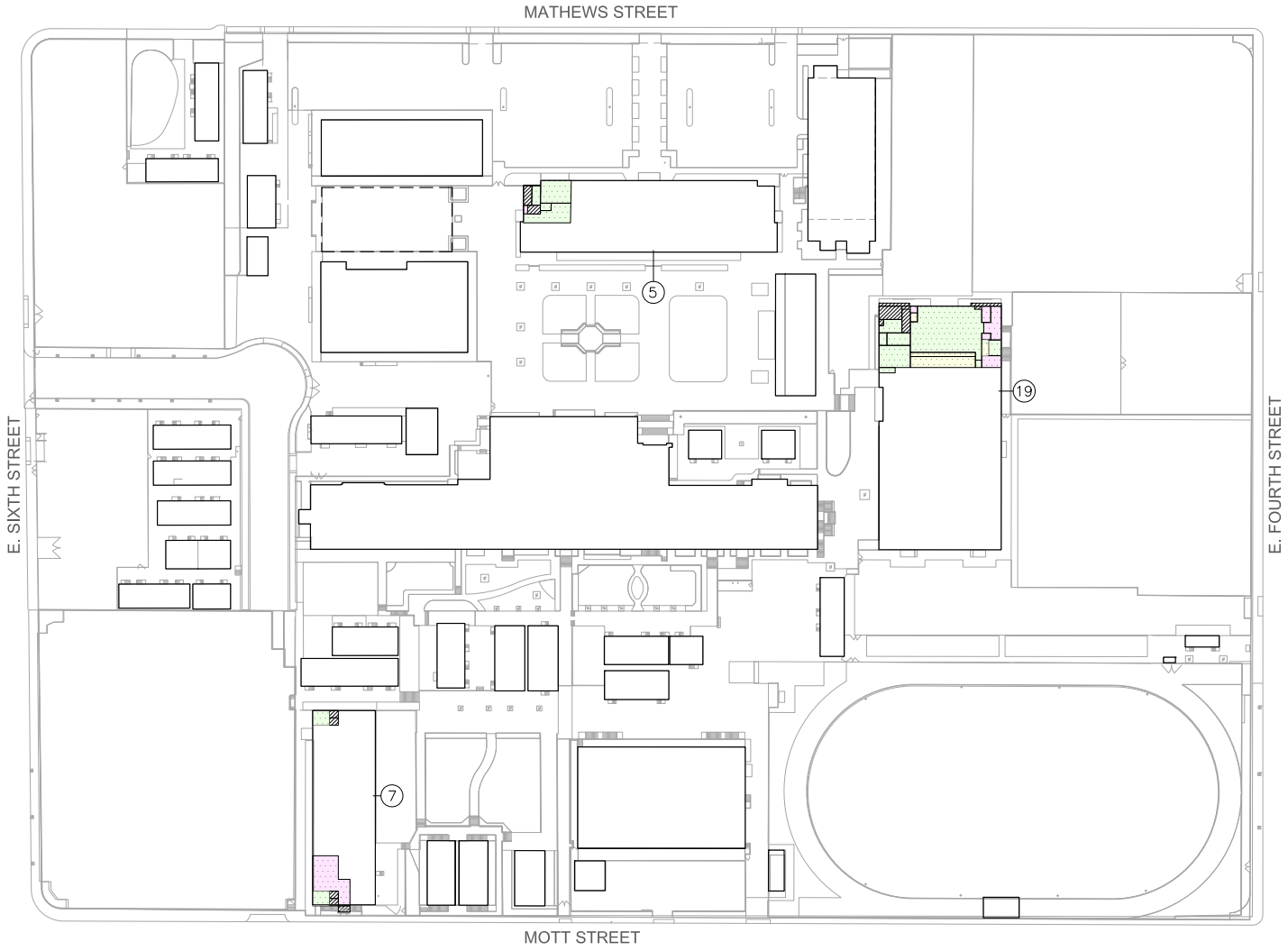
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45. TWO / THREE UNIT RELOCATABLE (BOYLE HEIGHTS CONT.)
46. TWO / THREE UNIT RELOCATABLE - INFANTCARE
47. CHILLER YARD

LEGEND

- PLAS - ROOSEVELT HIGH SCHOOL
- MATH, SCIENCE & TECHNOLOGY, MAGNET ACADEMY
- ROOSEVELT STEM EDUCATION PROGRAM
- BOYLE HEIGHTS CONTINUING EDUCATION HIGH SCHOOL
- ROOSEVELT INFANT / EARLY EDUCATION CENTER
- ADULT EDUCATION NIGHT PROGRAM
- STORAGE
- SANITARY
- CHILLER YARD
- PERIMETER FENCE
- INTERIOR FENCE

2.3 BUILDING - ROOM USE



BASEMENT

10' 25' 50' 100' 250'

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40. SINGLE UNIT RELOCATABLE
41. SINGLE UNIT RELOCATABLE - INFANT CARE
42. TWO / THREE UNIT RELOCATABLE
43. CLASSROOM RELO-DOH / PARENT CENTER
44. TWO / THREE UNIT RELOCATABLE (BOYLE HEIGHTS CONT.)
45. TWO / THREE UNIT RELOCATABLE (BOYLE HEIGHTS CONT.)
46. TWO / THREE UNIT RELOCATABLE - INFANTCARE
47. CHILLER YARD

LEGEND

- BASIC CLASSROOM
- SPECIALITY CLASSROOM
- SCIENCE CLASSROOM
- CHEMISTRY CLASSROOM
- STUDENT SUPPORT

CORE FACILITIES

- FOOD SERVICES
- AUDITORIUM / MULTI - PURPOSE
- PHYSICAL EDUCATION
- OPERATIONAL SUPPORT
- LIBRARY / MEDIA
- ADMINISTRATION
- PARKING

GENERAL

- CIRCULATION
- UNDERSIZED ROOM (<760 SF)
- UNDERSIZED ROOM (>760 SF, <800 SF)



FIRST FLOOR

10' 25' 50' 100' 250'

BUILDING INDEX

1. AUDITORIUM AND CLASSROOM
2. CAFETERIA
3. WEST CLASSROOM
4. MUSIC
5. ADMINISTRATION AND CLASSROOM
6. INDUSTRIAL ARTS
7. EAST CLASSROOM
8. INSTRUMENTAL MUSIC
9. GARAGE / STORAGE - INFANT CARE
10. FLAMMABLE STORAGE
11. FIELD SANITARY
12. EQUIPMENT FIELD STORAGE
13. GAZEBO
14. HOME BLEACHERS
15. VISITORS BLEACHERS
16. FIELD LIGHT CONTROLS
17. CLASSROOM
18. CLASSROOM
19. PHYSICAL EDUCATION
20. UTILITY
21. AUTO SERVICE
22. ARCADE / LUNCH SHELTER
23. LIBRARY AND CLASSROOM
24. TWO / THREE UNIT RELOCATABLE
25. TWO / THREE UNIT RELOCATABLE
26. TWO / THREE UNIT RELOCATABLE
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33. SANITARY RELOCATABLE
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40. SINGLE UNIT RELOCATABLE
41. SINGLE UNIT RELOCATABLE - INFANT CARE
42. TWO / THREE UNIT RELOCATABLE
43. CLASSROOM RELO-DOH / PARENT CENTER
44. TWO / THREE UNIT RELOCATABLE (BOYLE HEIGHTS CONT.)
45. TWO / THREE UNIT RELOCATABLE (BOYLE HEIGHTS CONT.)
46. TWO / THREE UNIT RELOCATABLE - INFANTCARE
47. CHILLER YARD

LEGEND

- BASIC CLASSROOM
- SPECIALITY CLASSROOM
- SCIENCE CLASSROOM
- CHEMISTRY CLASSROOM
- STUDENT SUPPORT
- WELLNESS CENTER

GENERAL

- CIRCULATION
- UNDERSIZED ROOM (<760 SF)
- UNDERSIZED ROOM (>760 SF, <800 SF)

CORE FACILITIES

- FOOD SERVICES
- AUDITORIUM / MULTI - PURPOSE
- PHYSICAL EDUCATION
- OPERATIONAL SUPPORT
- LIBRARY / MEDIA
- ADMINISTRATION
- PARKING



SECOND FLOOR

10' 25' 50' 100' 250'

BUILDING INDEX

1. AUDITORIUM AND CLASSROOM
2. CAFETERIA
3. WEST CLASSROOM
4. MUSIC
5. ADMINISTRATION AND CLASSROOM
6. INDUSTRIAL ARTS
7. EAST CLASSROOM
8. INSTRUMENTAL MUSIC
9. GARAGE / STORAGE - INFANT CARE
10. FLAMMABLE STORAGE
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15. VISITORS BLEACHERS
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18. CLASSROOM
19. PHYSICAL EDUCATION
20. UTILITY
21. AUTO SERVICE
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45. TWO / THREE UNIT RELOCATABLE (BOYLE HEIGHTS CONT.)
46. TWO / THREE UNIT RELOCATABLE - INFANTCARE
47. CHILLER YARD

LEGEND

- BASIC CLASSROOM
- SPECIALITY CLASSROOM
- SCIENCE CLASSROOM
- CHEMISTRY CLASSROOM
- STUDENT SUPPORT

GENERAL

- CIRCULATION
- UNDERSIZED ROOM (<760 SF)
- UNDERSIZED ROOM (>760 SF, <800 SF)

CORE FACILITIES

- FOOD SERVICES
- AUDITORIUM / MULTI - PURPOSE
- PHYSICAL EDUCATION
- OPERATIONAL SUPPORT
- LIBRARY / MEDIA
- ADMINISTRATION
- PARKING



THIRD FLOOR

10' 25' 50' 100' 250'

BUILDING INDEX

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3. WEST CLASSROOM
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5. ADMINISTRATION AND CLASSROOM
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47. CHILLER YARD

LEGEND

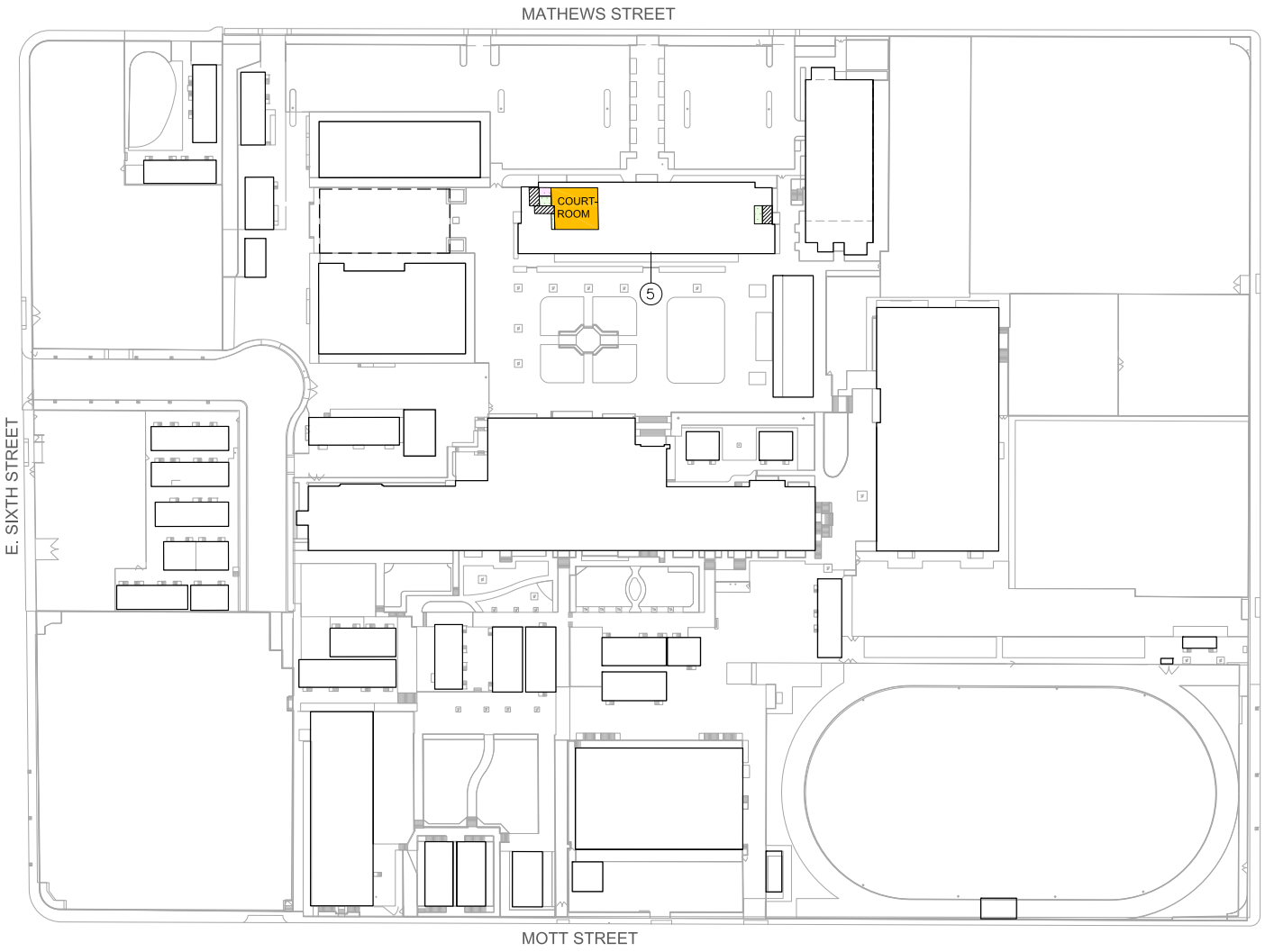
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- SCIENCE CLASSROOM
- CHEMISTRY CLASSROOM
- STUDENT SUPPORT

CORE FACILITIES

- FOOD SERVICES
- AUDITORIUM / MULTI - PURPOSE
- PHYSICAL EDUCATION
- OPERATIONAL SUPPORT
- LIBRARY / MEDIA
- ADMINISTRATION
- PARKING

GENERAL

- CIRCULATION
- UNDERSIZED ROOM (<760 SF)
- UNDERSIZED ROOM (>760 SF, <800 SF)



PENTHOUSE

10' 25' 50' 100' 250'

BUILDING INDEX

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3. WEST CLASSROOM
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47. CHILLER YARD

LEGEND

- BASIC CLASSROOM
- SPECIALITY CLASSROOM
- SCIENCE CLASSROOM
- CHEMISTRY CLASSROOM
- STUDENT SUPPORT

GENERAL

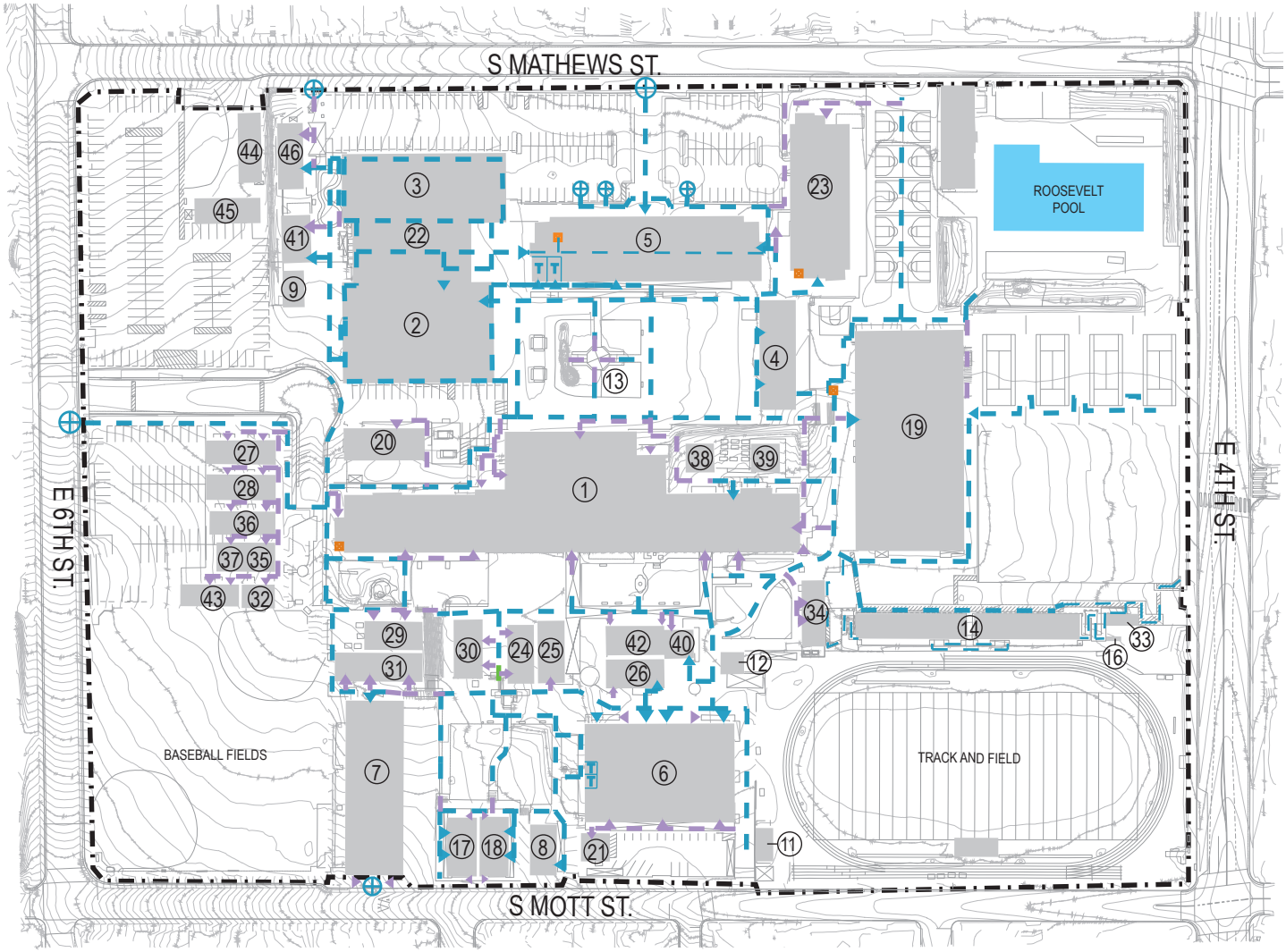
- CIRCULATION
- UNDERSIZED ROOM (<760 SF)
- UNDERSIZED ROOM (>760 SF, <800 SF)

CORE FACILITIES

- FOOD SERVICES
- AUDITORIUM / MULTI - PURPOSE
- PHYSICAL EDUCATION
- OPERATIONAL SUPPORT
- LIBRARY / MEDIA
- ADMINISTRATION
- PARKING

2.4 SITE CONDITION ANALYSIS

2.4.1 SITE ACCESSIBILITY



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45. TWO / THREE UNIT RELOCATABLE (BOYLE HEIGHTS CONT.)
46. TWO / THREE UNIT RELOCATABLE - INFANTCARE
47. CHILLER YARD

ACCESSIBILITY LEGEND

- PROPERTY LINE OR LIMIT OF WORK
- SITE ARRIVAL POINT
- ACCESSIBLE BUILDING ENTRANCE
- ACCESSIBLE P.O.T
- VEHICULAR ENTRY POINT
- VEHICULAR ROUTE
- ELEVATOR / WC LIFT

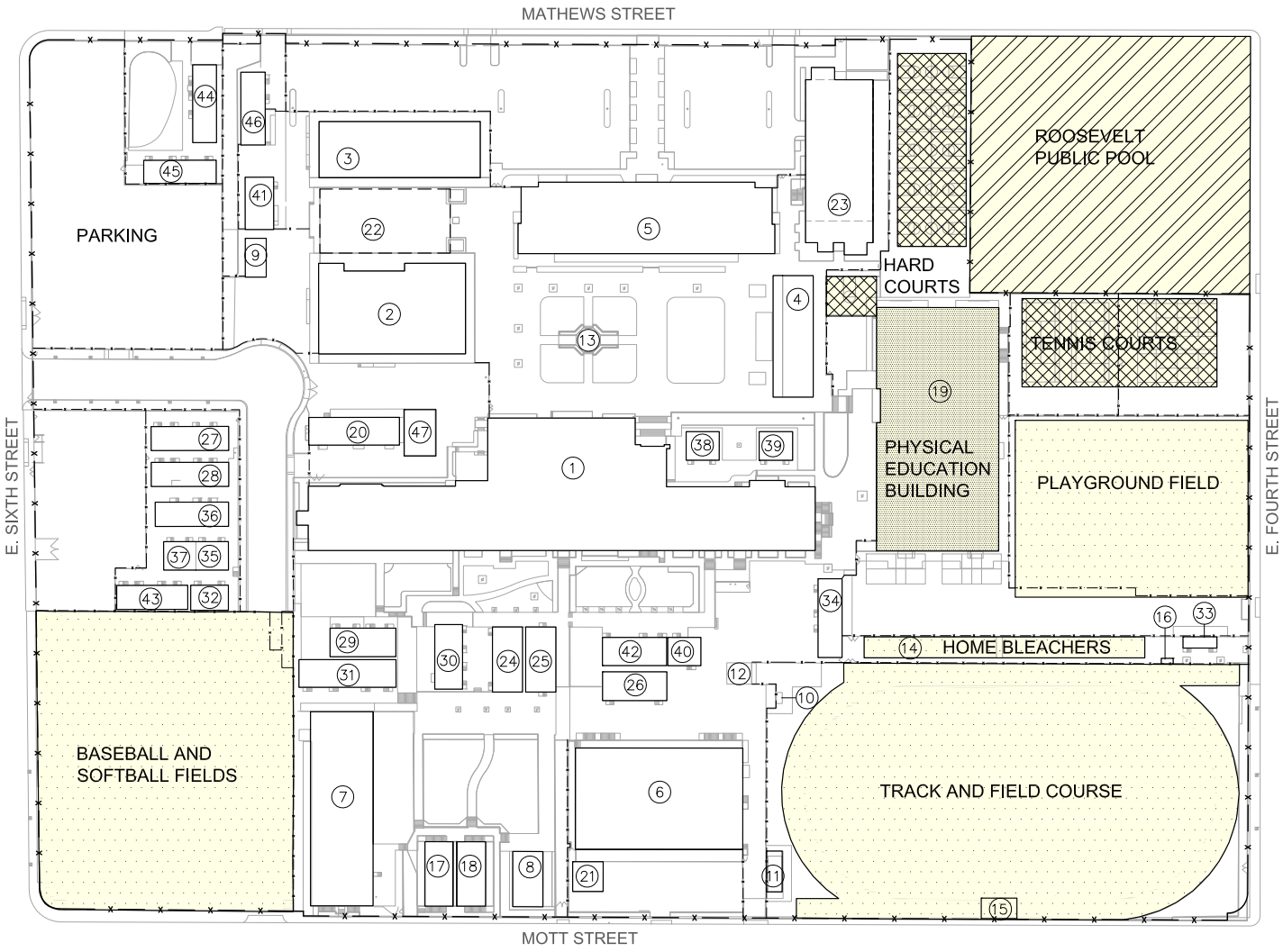
When it was first created in 1922, the main entrance to Roosevelt High School faced Fickett Street, a small residential lane, in the form of stairs leading up from the sidewalk to the lobby of the Auditorium and Classroom Building (1). Most of Fickett Street between East Fourth and East Sixth Streets was abandoned in the late 1960s to make way for the Physical Education Building (19) in 1968. With the construction of the Administrative/Classroom Building (5) in 1972 and the Cafeteria-Classroom Cluster and the Music Building (4) in 1977, the central commons or "Quad" was finally defined.

Accessibility issues abound across Roosevelt High School campus. A grade change of nearly 30 feet from one corner of the site to the diagonally opposite corner creates vertical conditions that are mitigated by building elements (such as "half" or "split" levels and their accompanying stairs or ramps) or by site elements (such as stairs, ramps or sloping walks). Some areas of the site, such as the Quad, are relatively flat, whereas others, such as the cluster of portables, have multiple grade changes by way of ramps and stair. Handrails provided for stairs and ramps are generally not in compliance with accessibility standards because they may be missing, too low, too large, or do not follow compliant design for openings or extensions.

Most building entrances are not accessible due to stairs, non-compliant ramps or thresholds exceeding one-half inch in height. This is particularly common at the relocatable classroom buildings ("portables"). While most multi-story buildings have elevators, they are old and no longer compliant with current accessibility standards. Most of the buildings have knob-type door handles and large, stiff door closers.

Signage, both room identification and wayfinding, is poor. Inconsistent design, missing signs, inaccurate tactile information, and non-compliant finishes are common problems.

2.4.2 PHYSICAL EDUCATION / ATHLETICS



PHYSICAL EDUCATION PLAN

10' 25' 50' 100' 250'

BUILDING INDEX

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45. TWO / THREE UNIT RELOCATABLE (BOYLE HEIGHTS CONT.)
46. TWO / THREE UNIT RELOCATABLE - INFANTCARE
47. CHILLER YARD

LEGEND

- PHYSICAL EDUCATION BUILDING
- ATHLETIC FIELDS
- SPORT COURTS
- ROOSEVELT PUBLIC POOL
- PERIMETER FENCE
- INTERIOR FENCE

Roosevelt High School's indoor and outdoor physical education, athletics and recreation spaces are distributed in scattered and fragmented locations. Physical education, athletics and recreation spaces are mostly located along East Fourth and Mott Streets, primary and secondary arterials respectively.

- INDOOR *Physical Education Building 19* - Has a Gymnasium with designated spaces for Boy's and Girl's Exercise Rooms as well lockers and showers.

- OUTDOOR *Hard Courts* - Located in between the Library and Classroom Building 23 accommodates 10 grouped courts plus 1 stand-alone court.

Tennis Courts - Located between the Roosevelt Pool and the Playing Field accommodates 4 tennis courts.

Playground Field - Located along East Fourth Street, is between hard courts on the west and the Track and Field on the east.

Track and Field - Located on the corner of East Fourth Street and Mott Street, bleachers are located on the west and east of the field. The soccer field end zones extend into the track. The track is impeded by the visiting team bleachers which sit on top.

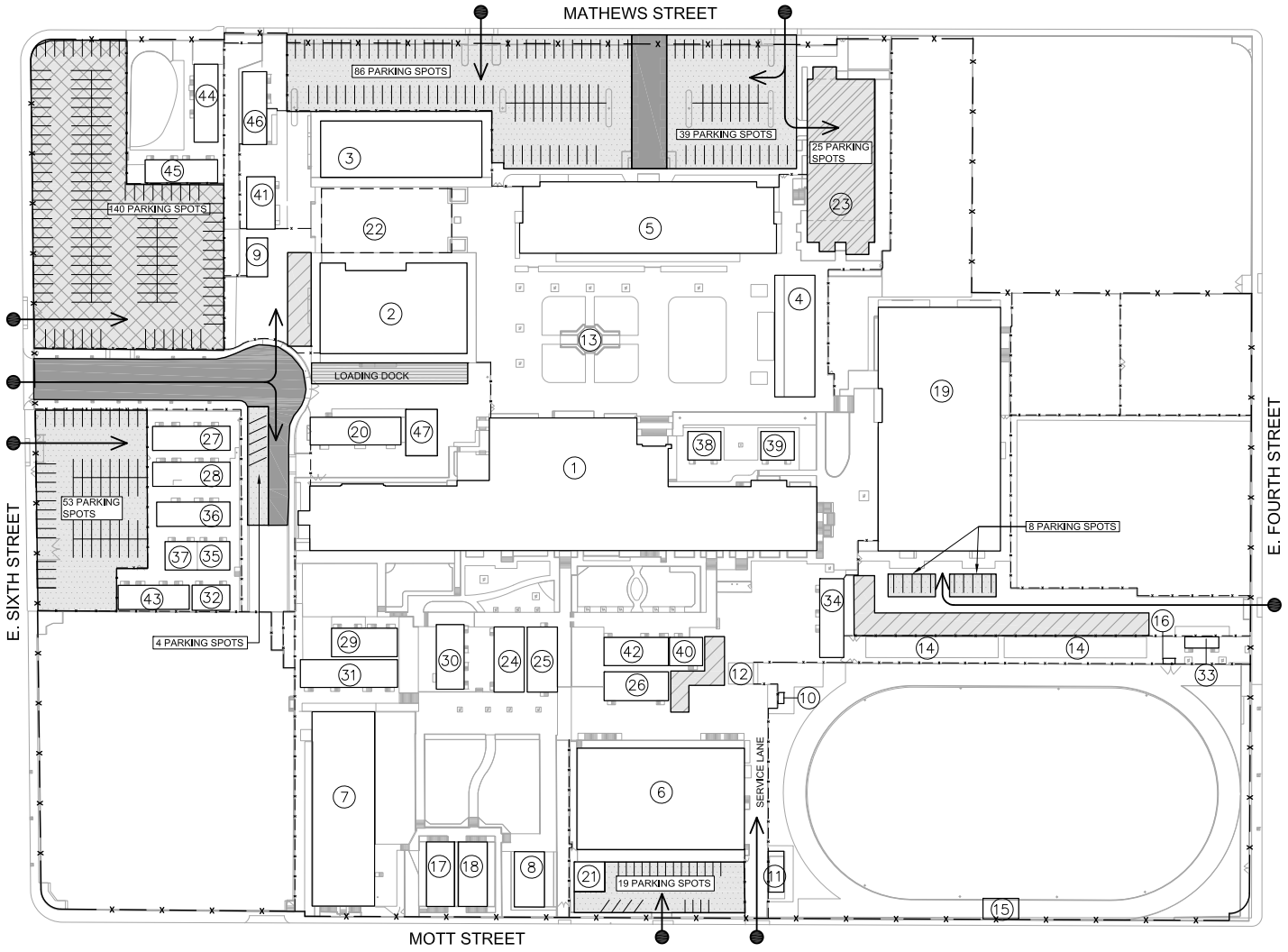
Baseball and Softball Field - Located on the corner of East Sixth Street and Mott Street, portable classrooms cluster on the west and Classroom Building 7 on the north.

- ROOSEVELT PUBLIC POOL Located on the corner of East Fourth Street and Matthews Street, this Olympic-sized pool is open year-round, though the schedule changes during the school year. The pool on High School grounds features long-course swimming with 50 meter length lanes and is uncovered and heated all year-round.

- THE CLASSIC The East Los Angeles Classic is the homecoming football game for both James A Garfield High School and Roosevelt High School. It is known as the East L.A. Classic, because the two schools were among the first schools to be established in the East Los Angeles area. The Classic is one of the most highly acclaimed and attended high-school football games west of the Mississippi and has taken place since 1925. The Classic brings out alumni from all parts of the world, usually fielding crowds in excess of 25,000 per game and has been held at Weingart Stadium, on the campus of East Los Angeles College, in Monterrey Park, California for much of its existence. The event was held at the Los Angeles Memorial Coliseum for a few years before returning to its original location at Weingart Stadium.

- SPORTS The school year sports are divided into 3 seasons: Fall Sports, Winter Sports and Spring Sports. Roosevelt High School has a Baseball, Boy's and Girl's Golf, Boy's and Girls' Volleyball, Softball, Swimming, Boy's and Girl's Water Polo, Boy's and Girls' Soccer, and Cross Country.

2.4.3 PARKING



PARKING PLAN

10' 25' 50' 100' 250'

BUILDING INDEX

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2. CAFETERIA
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46. TWO / THREE UNIT RELOCATABLE - INFANTCARE
47. CHILLER YARD

LEGEND

- HOLLENBECK MIDDLE SCHOOL PARKING
- ROOSEVELT HIGH SCHOOL PARKING
- UNAUTHORIZED PARKING
- LOADING DOCK
- ROOSEVELT MATH / SCIENCE / TECHNOLOGY CENTER (MAGNET) PARKING
- VEHICULAR ENTRANCE
- PERIMETER FENCE
- INTERIOR FENCE

The front of Roosevelt High School's campus faces west onto Mathews Street, a narrow residential street where daily student pick-up and drop-of takes place.

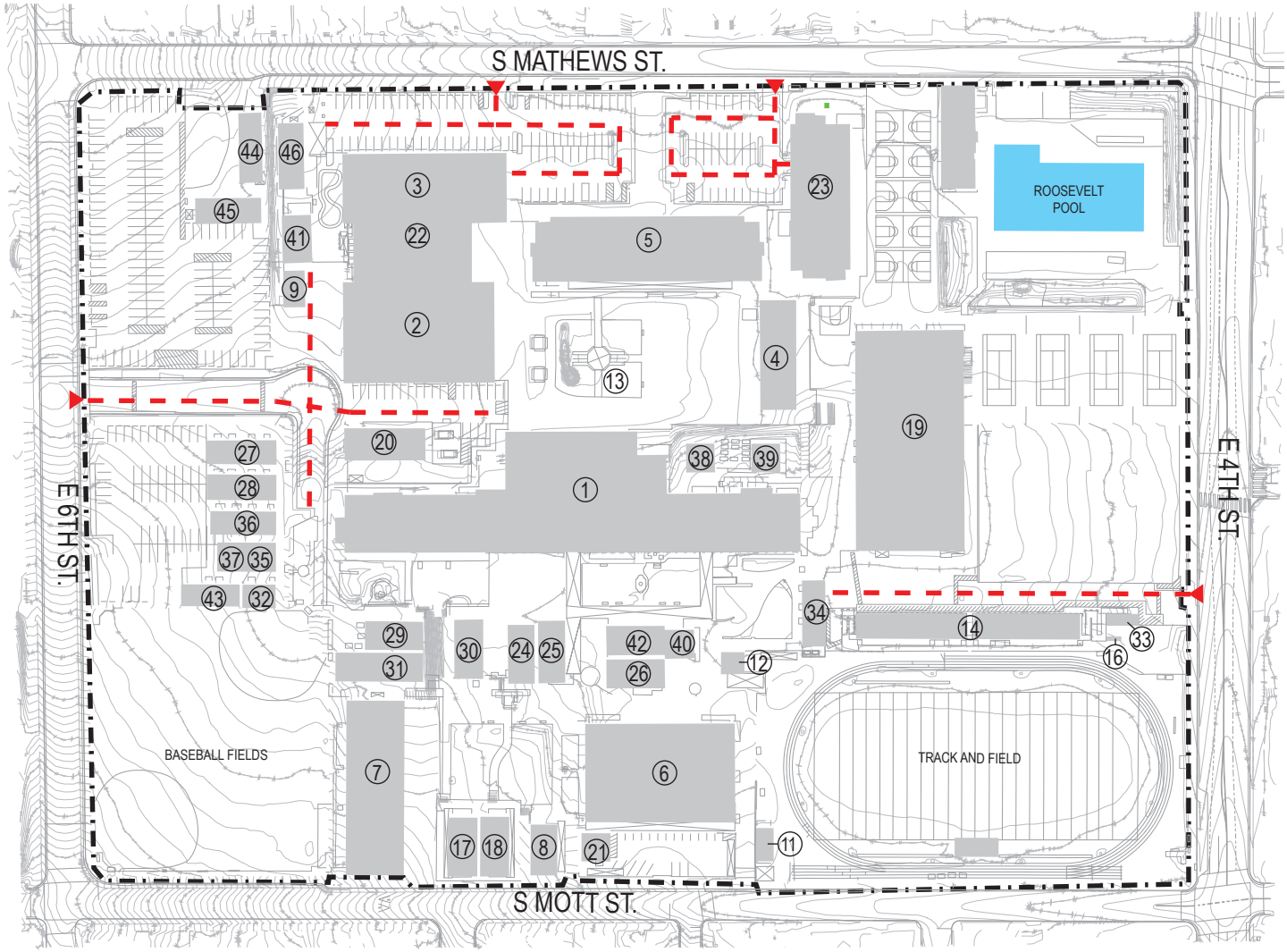
The campus parking is located in two areas off perimeter streets, one along Mathews Street on the west, and the second one along East Sixth Street on the south. The 125-parking space lot off from Mathews Street serves as faculty and staff access into the main parking lot creating congestions. The 57-parking space lot off from East Sixth Street, is located next to a cluster of portables, however topographic conditions along East Sixth Street limit vehicular access to the campus from this street. A loading dock is designated on the east entrance of the Cafeteria Building 2.

The first level of Building 23 has a 25-parking space designated for Roosevelt's Magnet School; which shares its access off of Mathews Street with Roosevelt's High School student and staff parking surface lot. An 8-parking space lot is designated east of Building 19 with access from East Fourth Street. Industrial Arts Building 6 has a 19-parking space lot on the Auto Service Building 13, with access from Mott Street.

Roosevelt High School shares East Sixth Street with Hollenbeck Middle School parking lot entrance, which is located on the southwest corner of campus. Hollenbeck Middle School 140-space parking lot's location is separated from the Boyle Heights Continuation High School and the Roosevelt Infant/Early Education Center.

Additional parking locations occur in the campus, although these are in non-designated parking areas. The location of Physical Education, athletics and recreational spaces along East Fourth Street, which is a primary arterial street, prevent using those frontages for vehicular access to the campus.

2.4.4 PEDESTRIAN / VEHICULAR TRAFFIC



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43. CLASSROOM RELO-DOH / PARENT CENTER
44. TWO / THREE UNIT RELOCATABLE (BOYLE HEIGHTS CONT.)
45. TWO / THREE UNIT RELOCATABLE (BOYLE HEIGHTS CONT.)
46. TWO / THREE UNIT RELOCATABLE - INFANTCARE
47. CHILLER YARD

VEHICULAR FLOW LEGEND

- PROPERTY LINE OR LIMIT OF WORK
- OTHER BUILDING ENTRANCE
- OTHER PEDESTRIAN P.O.T

Roosevelt High School Students who walk to the campus mainly enter through the north gate adjacent to the Stadium complex at the corner of East Fourth Street and Mott Street.

Vehicular related traffic during drop-off and pick-up hours occur on Mathews Street and East Sixth Street, creating a congested traffic zone during these times. These arteries are used as well for staff and faculty access into the campus.

Additional supervised drop-off and pick-up for Hollenbeck Middle School, located across East Sixth Street from Roosevelt High School, occurs as well on East Sixth Street.

Magnet and Special Education buses drop-off and pick-up on East Sixth Street.

Vehicles serving campus operations, Cafeteria Building (2), Utility Building (20), or Auditorium and Classroom Building (1) also enter via East Sixth Street, creating conflicts with passenger vehicles and pedestrians. Vehicles serving the Industrial Arts Cluster enter a separate parking lot and service yard from Mott Street.

Pedestrian circulation areas are interrupted by driveways, unauthorized parking locations and inherent topographic conditions. The latter create changes in elevation of the ground plane at the heart of campus that range from a few inches to several feet, with some locations featuring adjacent grade changes as high as eight feet. While private lots and utility access from East Fourth Street and Mott Street can disrupt pedestrian circulation, these are low-volume vehicular routes that are easy to mitigate through signage and education. In contrast, public access driveways create on-going pedestrian hazards on East Sixth Street and at multiple points along Mathews Street.

2.4.5 SITE UTILITIES - EXISTING CAMPUS

Evaluation of the existing wet utilities include storm drain, sanitary sewer, domestic water, and fire water systems. Information gathered were drawn from three sources:

1)NavigateLA
2)As-built drawings
3)Field observations

Based on this data, an overview of the school's utilities are compiled in Figure 2.4.5.

NavigateLA

The City of Los Angeles web-based mapping application, NavigateLA, provided information for sanitary sewer and storm drain main lines on E 6th Street, S Mathews Street, E 4th Street, and S Mott Street. For connection onto an existing off site main line or lateral, it is recommended that an underground survey be conducted for pipe location and a CCTV of the existing lateral for review of the pipe's condition and potential reuse.

As-Built Drawings

Information for on-site utilities were gathered from as-built drawings provided by the Los Angeles Unified School District (LAUSD). An as-built from the school's construction in 1937 provided an initial piping layout of the main campus. As-builts from various new building and modernization proJects provided supplemental information on existing utilities. The figures demonstrating the underground utilities henceforth are a compilation of all sources. The validity and accuracy of these as-builts should be verified through a conducted unground survey of all existing utilities.

Field Observations

VCA Engineers, Inc. (VCA) visited the campus on two occasions in March and July 2015. VCA collected additional exiisting surface utility data based on observations.

Please note that the utility lines shown in the following figures are based on as-built plans provided by NavigateLA and LAUSD.

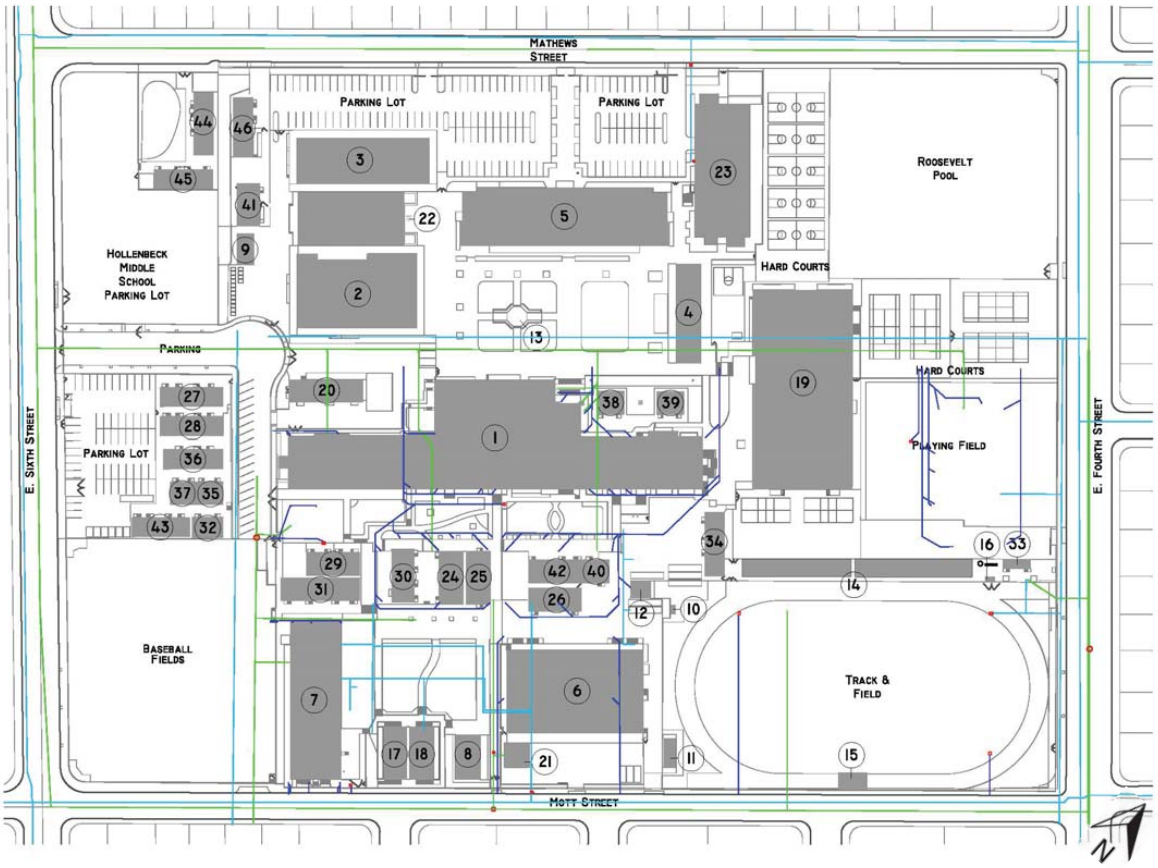


Figure 2.4.5 Map of Existing Utilities

LEGEND

- STORM DRAIN LINES
- SEWER LINES
- DOMESTIC WATER AND FIRE LINES

BUILDING KEY

1 AUDITORIUM & CLASSROOM
2 BUILDING CAFETERIA BUILDING
3 CLASSROOM BUILDING #1 MUSIC
4 BUILDING ADMINISTRATIVE /
5 CLASSROOM BUILDING
6 INDUSTRIAL ARTS BUILDING
7 CLASSROOM BUILDING #2
8 INSTRUMENTAL MUSIC
9 BUILDING GARAGE BUILDING
10 FLAMMABLE STORAGE BUILDING
11 FIELD SANITARY BUILDING
12 EQUIPMENT FIELD STORAGE
13 GAZEBO
14 HOME BLEACHERS
15 VISITORS BLEACHERS
16 FIELD LIGHT CONTROLS
17 CLASSROOM BUILDING
18 CLASSROOM BUILDING PHYSICAL
19 EDUCATION BUILDING UTILITY
20 BUILDING
21 AUTO SERVICE BUILDING ARCADE
22 ARCADE
23 LIBRARY & CLASSROOM
24 BUILDING TWO / THREE UNIT
25 RELOCATABLE TWO / THREE UNIT
26 RELOCATABLE TWO / THREE UNIT
27 RELOCATABLE TWO / THREE UNIT
28 RELOCATABLE TWO / THREE UNIT
29 RELOCATABLE TWO / THREE UNIT
30 RELOCATABLE TWO / THREE UNIT
31 RELOCATABLE TWO / THREE UNIT
32 RELOCATABLE TWO / THREE UNIT
33 RELOCATABLE SANITARY RELOCATABLE
34 TWO / THREE UNIT RELOCATABLE
35 SINGLE UNIT RELOCATABLE
36 TWO / THREE UNIT RELOCATABLE
37 SINGLE UNIT RELOCATABLE
38 SINGLE UNIT RELOCATABLE
39 SINGLE UNIT RELOCATABLE
40 SINGLE UNIT RELOCATABLE
41 SINGLE UNIT RELOCATABLE
42 TWO / THREE UNIT RELOCATABLE
43 2 CLASSROOM RELO-DOH / PARENT CENTER
44 TWO / THREE UNIT RELOCATABLE (BOYLEHEIGHTS CONTINUATION)
45 TWO / THREE UNIT RELOCATABLE (BOYLE HEIGHTS CONTINUATION)
46 TWO / THREE UNIT RELOCATABLE – INFANT / EARLY EDUCATION CENTER

2.4.5.1 SITE CONDITION

Sanitary Sewer

- From the provided as-builts, the majority of the on-site sewer pipes are composed of Vitrified Clay. The existing 8 inch VCP sewer line from 6th street to 4th street is mainly abandoned in place. Figure 22.4.5.1 displays the existing underground sewer lines provided by the available as-builts. A utility survey is recommened to acquire a higher degree of accuracy for existing locations and sizes.

- Since the existing sewer system for the campus is several decades old, it has surpased the life expectancy. It is reccomended that the system inspected using a camera, CCTV, to evaluate the existing piping and material for root intrusion and cracks.

- There are existing yard boxes on the surface that are not labeled, but are in locations in which sewer lines connect, per our review of the available as-builts. Figure1 below is an example of such yard box containing a sewer cleanout.

- Section 2.4.7 contains the site's off-site sewer line plan per NavigateLA.



FIG. 1 YARD BOX WITH NO LABEL

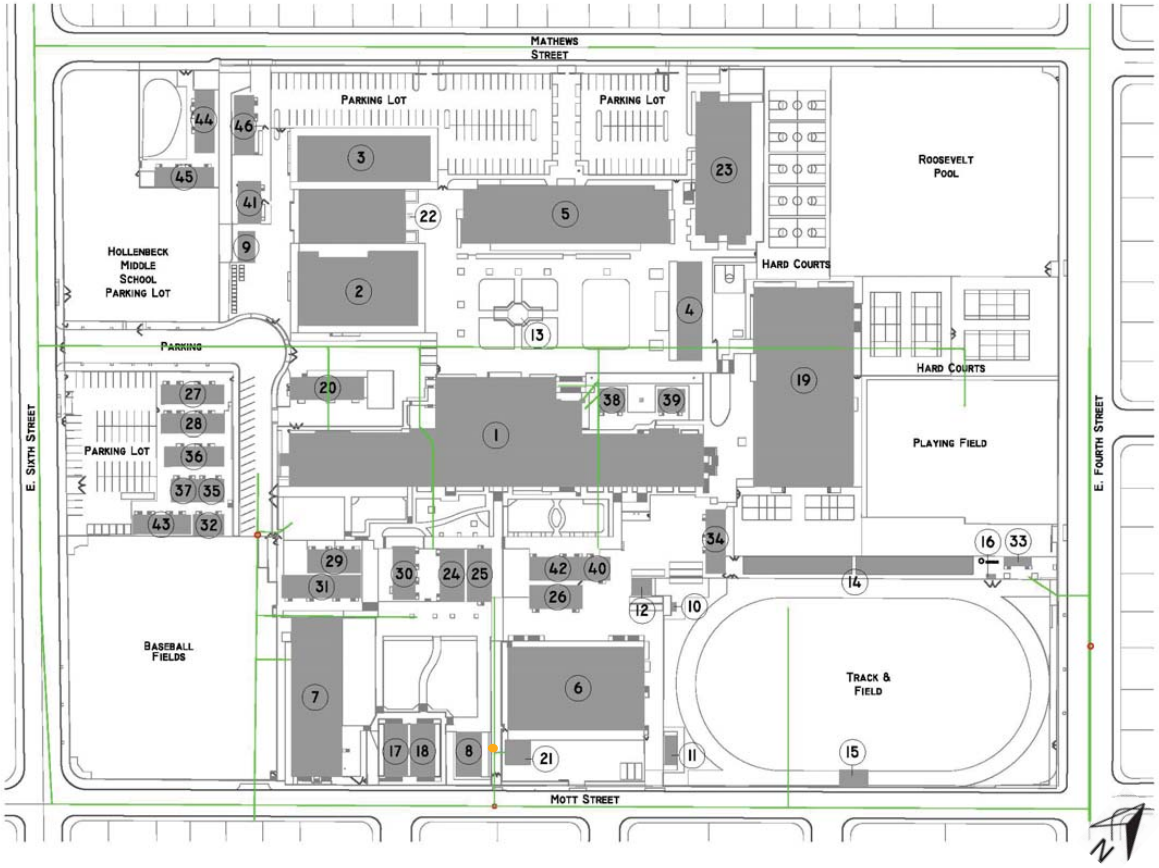


Figure 2.4.5.1 Map of Existing Sanitary Sewer Lines

Domestic and Fire Water

- The domestic water of the site originates from multiple points of connection. These points of connection are further explained in the section 2.4.5.3.
- Section 2.4.7 contains the site's off-site water line as-builts provided by LADWP.

- The site's domestic water pipe sizes were determined based on as builts, but there is no information on the material or condition of the existing pipes. An underground survey is recommended along with borings for higher location accuracy.

- Figure 2.4.5.3 indicates the existing domestic and fire water system including pipelines and points of connection.

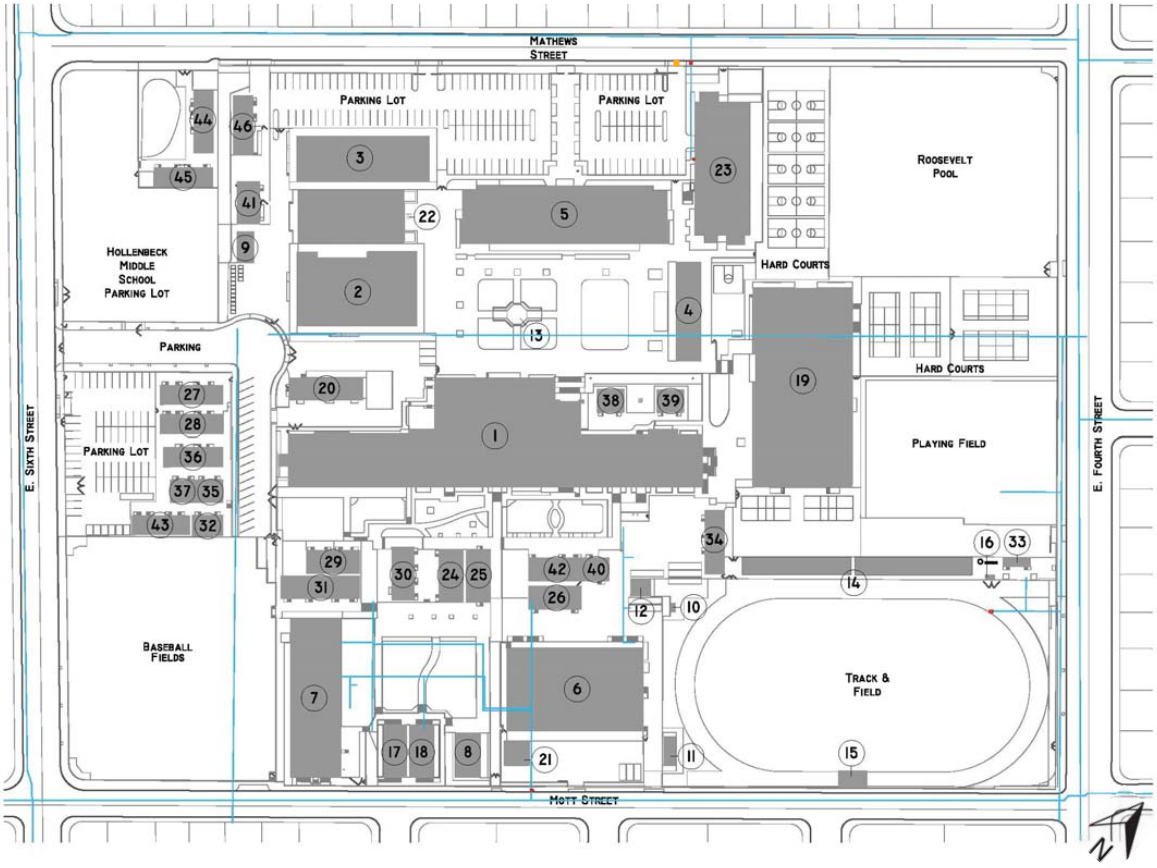


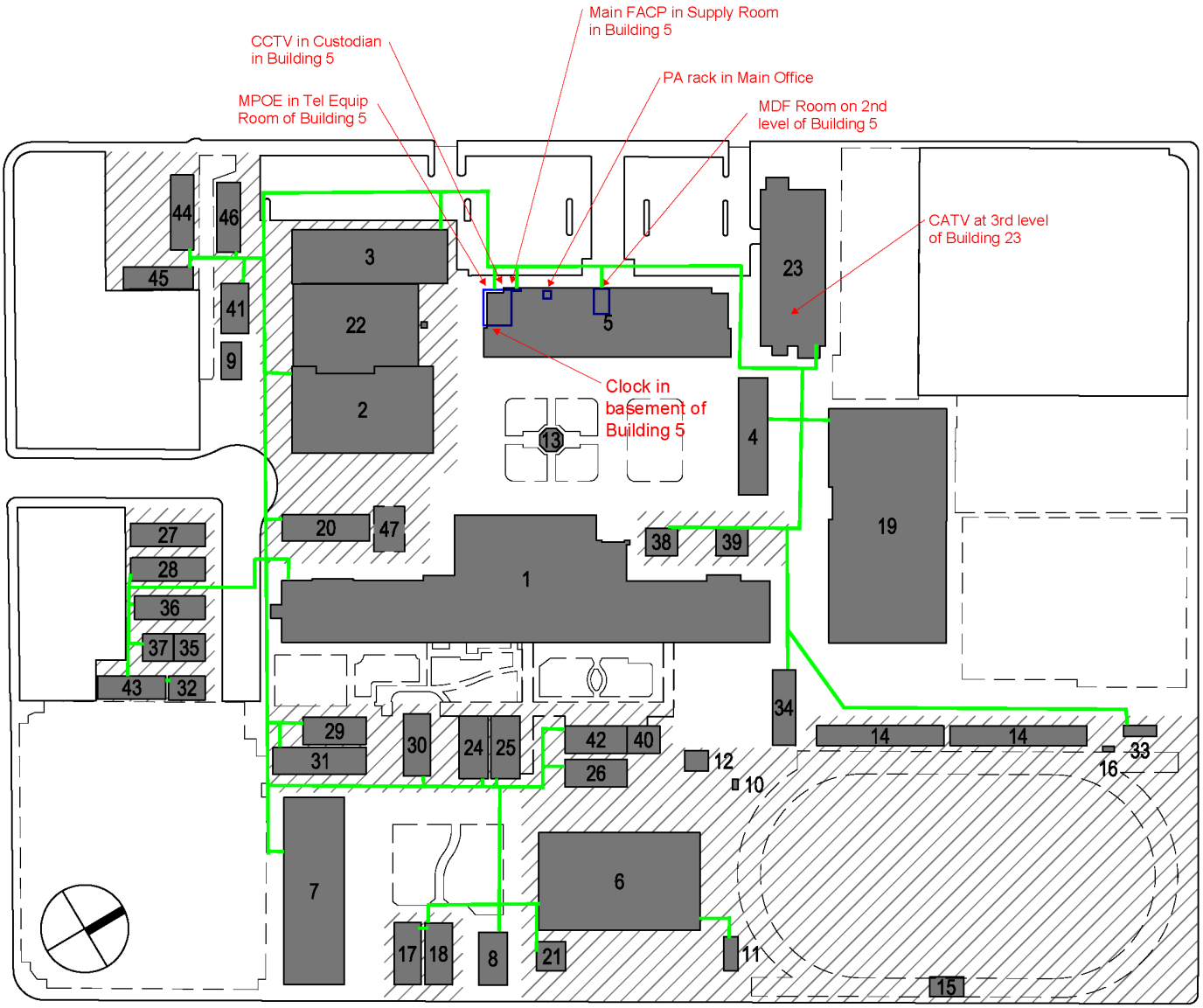
Figure 2.4.5.2 Map of Existing Domestic and Fire Water Lines

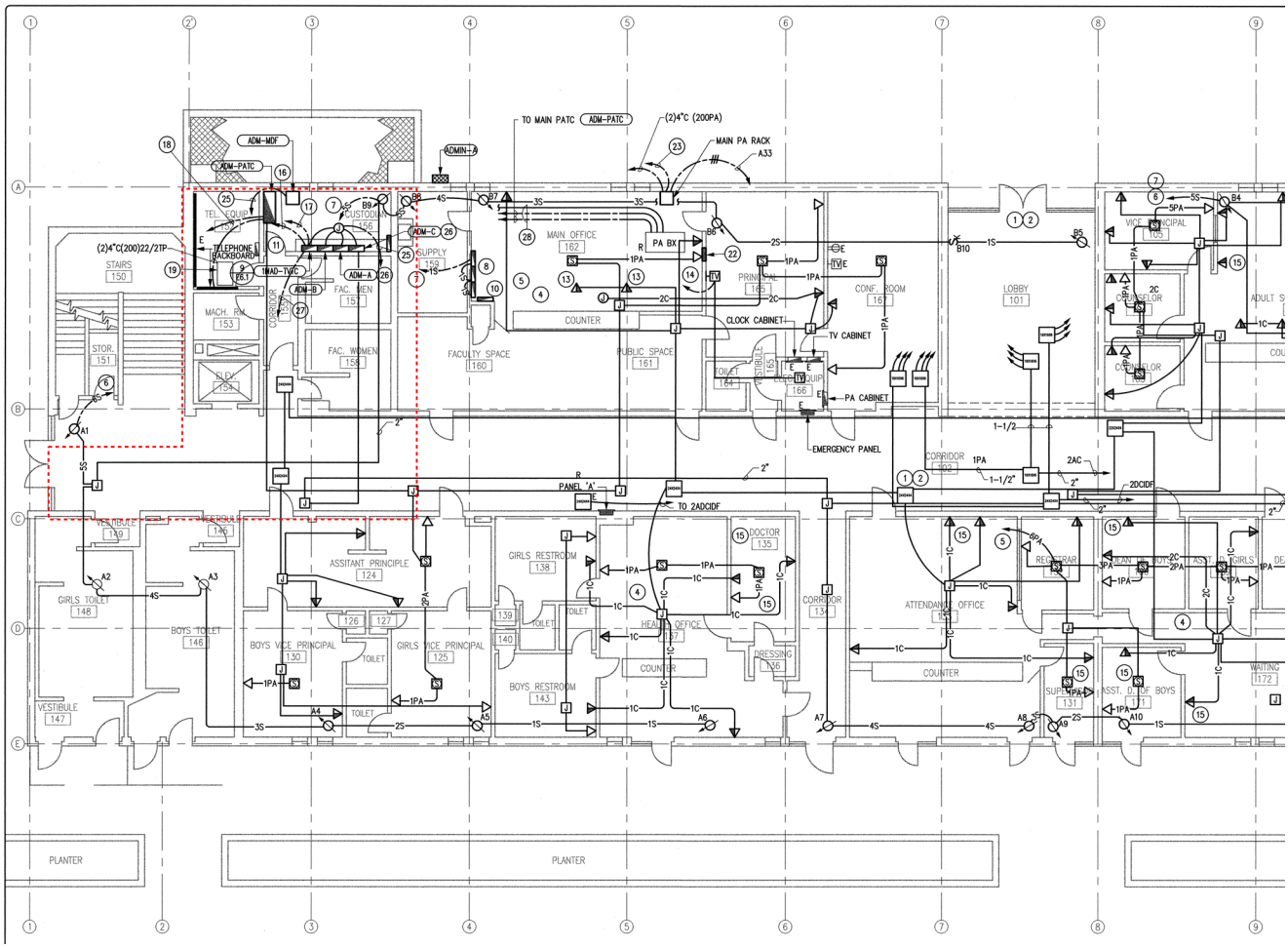
LEGEND

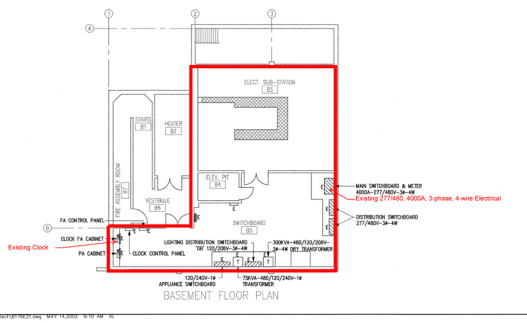
- DOMESTIC WATER AND FIRE LINES
- WATER METER
- FIRE DEPARTMENT CONNECTION
- FIRE HYDRANT

Site Signal Plan

- Most signal head ends are located in Building 5 with the exception of CATV on the third level in Building 23. Telephone MPOE is in the Tel Equip Room on the first level of Building 5. MDF is on the second level of Building 5. Master clock is located in the basement of Building 5. PA Rack is in the Main Office in Building 5. Main FACP is in the Supply Room next to the Main Office in Building 5. CCTV is in Custodian near Main Office in Building 5.







FIRST FLOOR PLAN

SHEET NOTES:

1. REMOVE EXISTING SPEAKERS AND CABLES.
2. NEW PA CABLE AND SPEAKERS. (TYPICAL).
3. REMOVE EXISTING CABLE, CONDUITS TO REMAIN AS SPARE.
4. TO MAIN CONTROLLER (ADM-MDF) TYPICAL.
5. TO MAIN PA TERMINAL CABINET (ADM-PATC) TYPICAL.
6. TO MAIN SECURITY CONTROLLER (ADM-A) TYPICAL.
7. TO (ADM-B) TYPICAL.
8. SECURITY GRAPHIC ANNUNCIATORS
9. FIRE ALARM TERMINAL CABINET SHOWN FOR REFERENCE ONLY.
10. FIRE ALARM ANNUNCIATOR SHOWN FOR REFERENCES ONLY.
11. FIRE ALARM CONTROL PANEL SHOWN FOR REFERENCE ONLY.
12. CONNECT TO SPARE CIRCUIT BREAKERS IN EXISTING PANEL 'A'.
13. LOCATION AND MOUNTING OF COMPUTER OUTLETS TO BE DETERMINED AT SITE.
14. TO MAD TVTC.
15. EXISTING DUPLEX RECEPTACLES NEAR NEW COMPUTER OUTLET NOT SHOWN FOR CLARIFICATION (TYPICAL).
16. TO TELEPHONE SWITCH. PROVIDE CONNECTION TO OUTSIDE LINE FOR DIAL-UP TO LAUSD CENTRAL SECURITY.
17. TO FIRE ALARM CONTROL PANEL. CONNECT TO WATER FLOW SWITCH ZONE.
18. (2) 4"C (200) 22/2 TP TO TELEPHONE BACKBOARD AND TERMINATE ON PUNCH BLOCKS.
19. EXISTING TELEPHONE SWITCH. EXPAND SWITCH TO ACCOMODATE NEW TELEPHONES. CONTACT LUCENT TECHNOLOGIES' TINA CUNNIGAN (818) 304-0107 FOR SUBCONTRACT WORK.
20. PROVIDE NEW 1KVA UPS WITH AUTOMATIC SHUT DOWN FOR PA RACK. SEE 16905 FOR ADDITIONAL EQUIPMENT TO FLOOR THROUGH SEISMIC RESTRAINTS. PROVIDE A DEDICATED 115VAC CIRCUIT WITH A DUPLEX RECEPTACLE ADJACENT TO THE UPS. PROVIDE A SURFACE MOUNT HANDY BOX OR A FLUSH MOUNT BOX WITH AN EXTENDER RING AT TERMINATION FOR THE 3/4" CONDUIT CARRYING POWER TO THE PA RACK. FURNISH A THREE CONDUCTOR #14 AWG SO CORD WITH A MOLDED U-GROUND AC PLUG. ATTACH THIS WITH A CABLE CLAMP THROUGH ONE OF THE KNOCK OUTS IN THE BOX AND CONNECT TO THE TWO #12 AC AND ONE #12 GROUND WIRE TO THE PA RACK. THE PLUG MAY BE INSERTED INTO ONE OF THE RECEPTACLES ON THE BACK OF THE UPS. PROVIDE A SINGLE GANG SURFACE OR A FLUSH MOUNT BOX ADJACENT TO THE UPS FOR CONTROL. PROVIDE A SINGLE GANG PLATE WITH A SWITCHCRAFT DSF RECEPTACLE, AND A MATING PLUG AND CABLES TO THE UPS PROVIDED. 3/4" CONDUIT (2) WEST PENN CL2265 CABLES, 3/4" CONDUIT (3) #12 THHN FOR EMERGENCY POWER AND CONTROL TO PA RACK. MAKE ALL NECESSARY CONNECTIONS.
21. EXISTING SECURITY ANNUNCIATOR TO BE REMOVED AFTER NEW SYSTEM IS INSTALLED AND ENERGIZED
22. EXISTING CLASS PASS CABINET TO BE REMOVED.
23. 8PA TO CLOCK CONTROL PANEL IN BASEMENT. PROVIDE ALL NECESSARY CONNECTIONS.
24. TO SPARE CIRCUIT BREAKERS IN PANEL 'A.'
25. TO SPARE CIRCUIT BREAKERS IN PANEL 'A.'
26. MAIN SECURITY CONTROL PANEL. SEE DETAILS 8/E6.5 AND 8/E6.6.
27. 2"(C)) (ROI) TO (ADMIN-2).
28. REMOVE CABLES AND PATCH FLOOR OPENINGS.
29. PROVIDE 2000 WHCKAGED MOUNTED ABOVE EXISTING POWER PLUGMOLD.
30. UP THROUGH FLOOR TO 4000 WIRE MOLD IN COMPUTER LAB.

AS BUILT

REVIEW THE ENTIRE SHEET FOR REVISIONS

8829.39

ADMINISTRATION BASEMENT AND FIRST F POWER AND SIGNAL PI

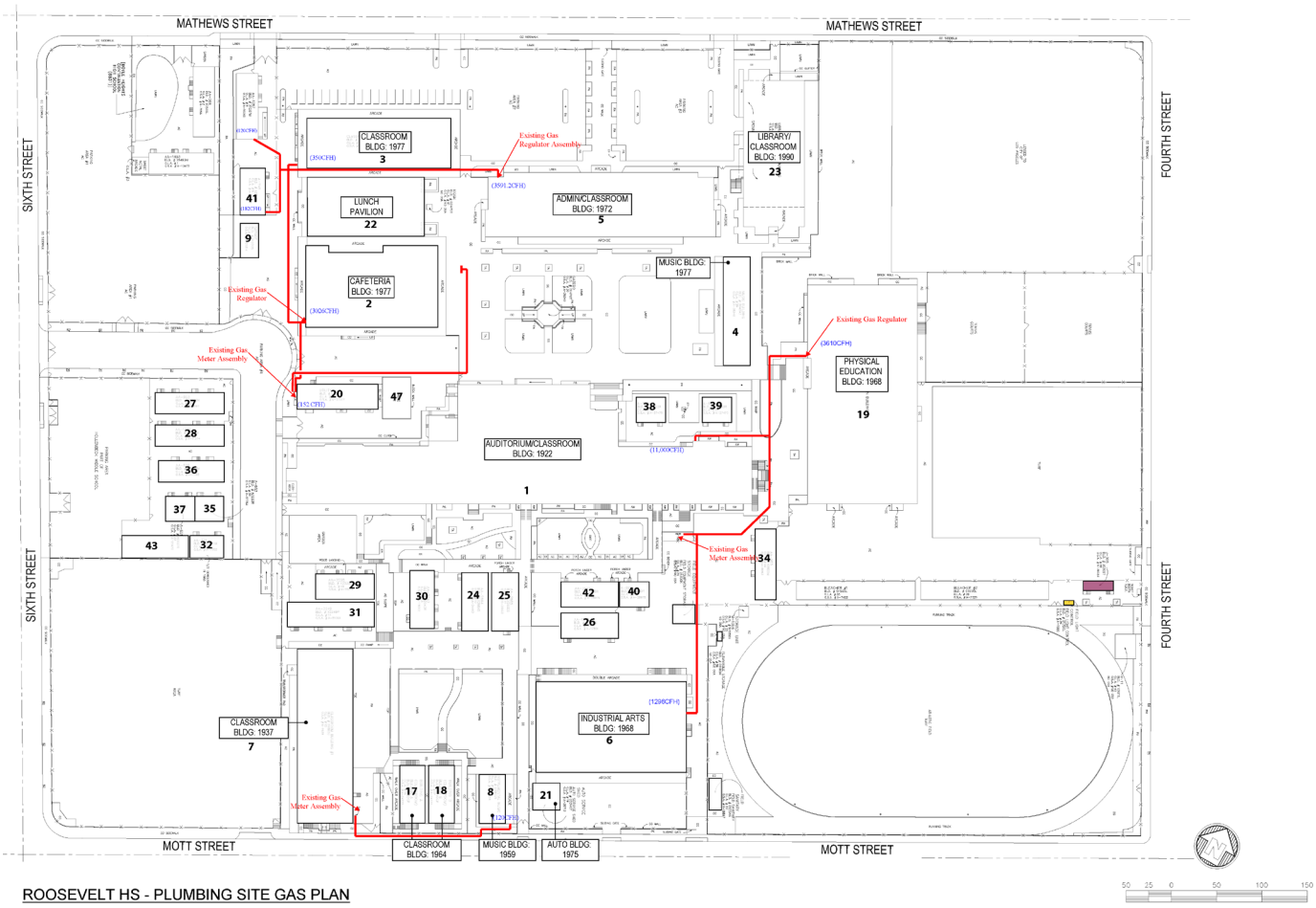
E2.1

Gas Site Plan

- There are three existing gas meters in the school campus. The site gas piping are running at medium pressure gas and step down to low pressure gas inside each building with gas regulator directly located outside of each building. The existing gas meters are located at following locations:

#1 SW of Utility Building (20)
#2 SE of Auditorium/Classroom Building (1) and
#3 E of Classroom Building (7).

- The existing gas meter #1 serves total gas capacity of 6,919 CFH for Admin./Classroom Building (5), Classroom Building (3), Building (41), Cafeteria Building (2) and Utility Building (20). There is one future connection at East of Cafeteria Building.
- The existing gas meter #2 serves total gas capacity of 15,906 CFH for Boiler Room in Physical Education Building (19), Boiler Room in Auditorium/Classroom Building (1) and Industrial Arts Building (6).
- The existing gas meter #3 serves Music Building (8) and Classroom Building (7).



ROOSEVELT HS - PLUMBING SITE GAS PLAN

2.4.5.2 CAPACITY

-Capacity for sanitary sewer, fire water and domestic water would need further information to be properly anaylzed.

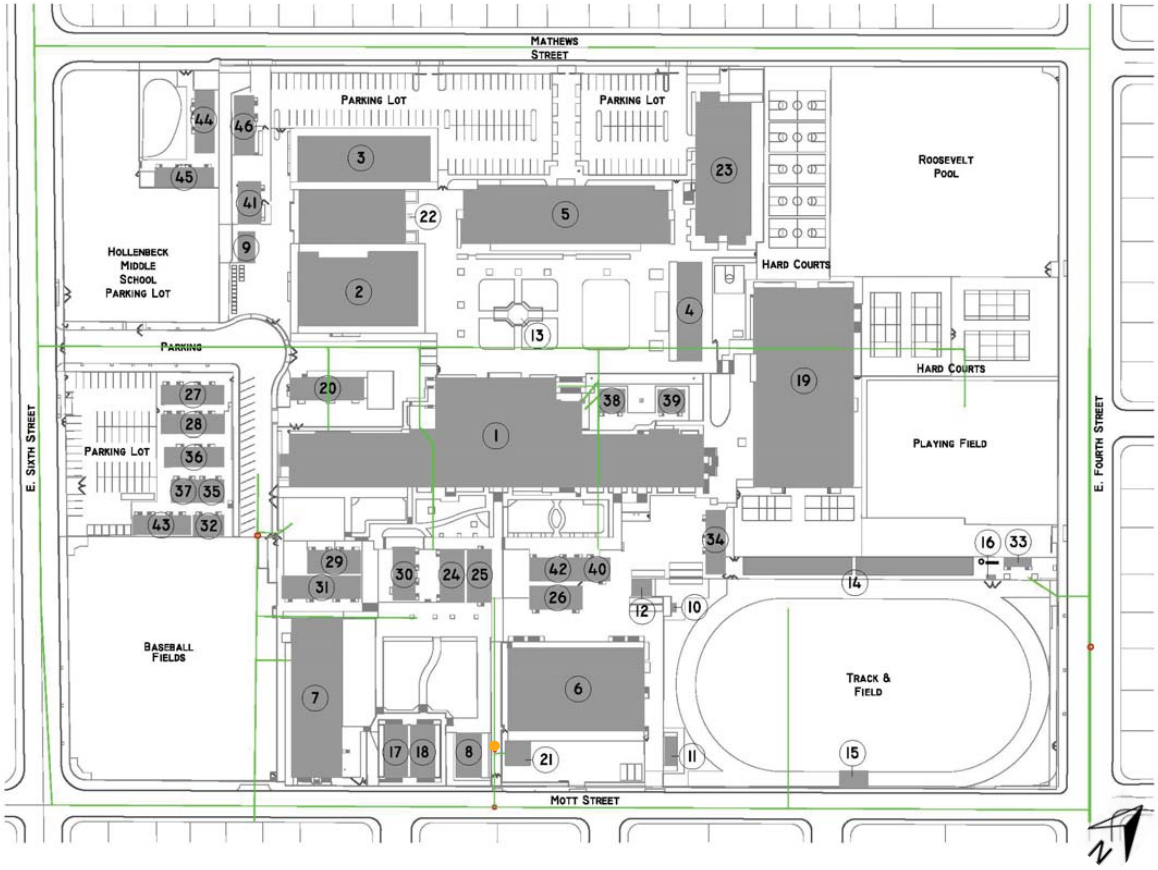
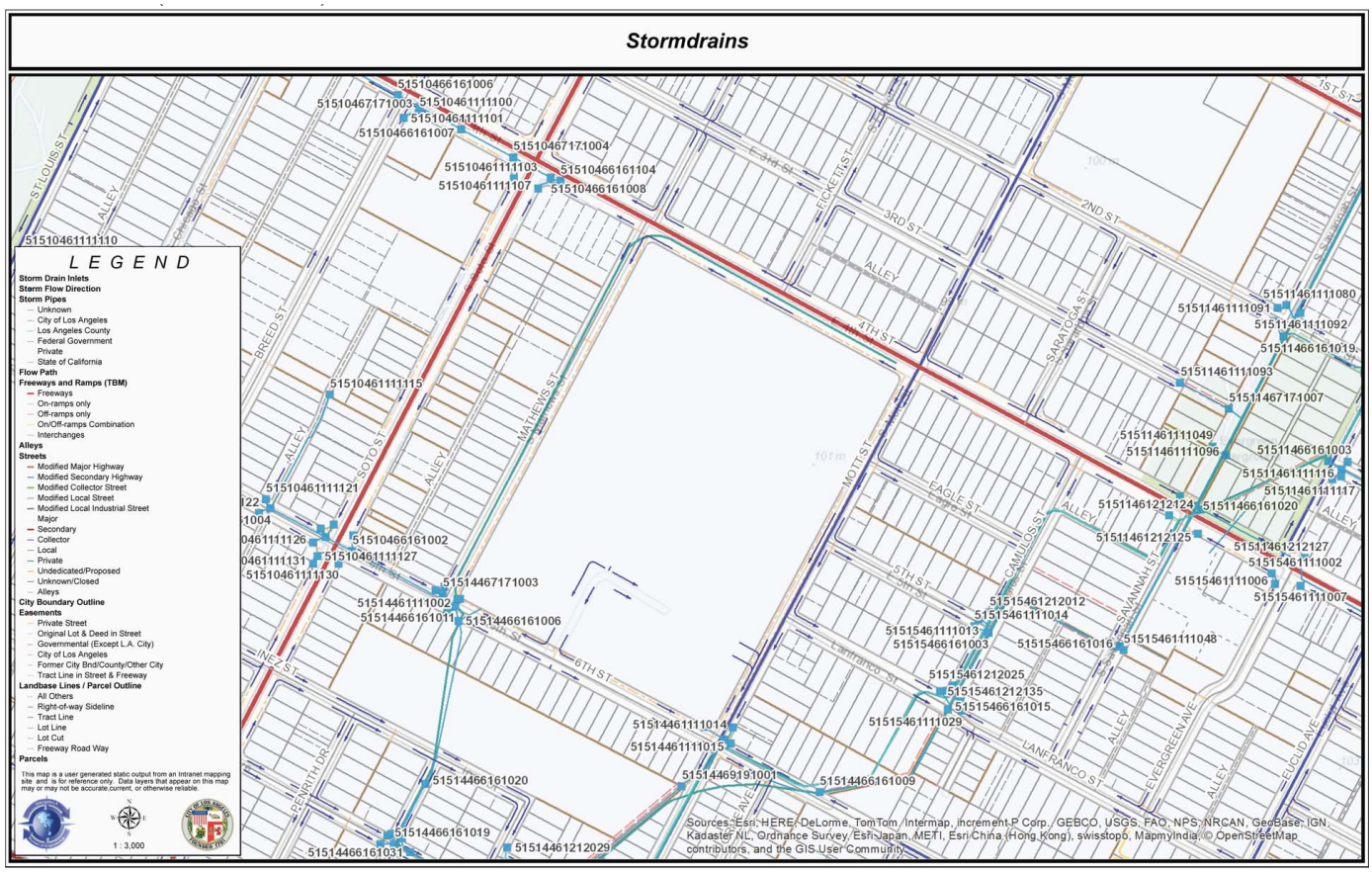


Figure 2.4.5.1 Map of Existing Sanitary Sewer Lines

2.4.5.3 POINT OF CONNECTION

Off-Site Utility Lines (Navigate LA)

- From Navigate LA, Figure 5.0 below shows the existing site and direction of off-site surface flow, the water from the site curb drains out onto the streets. The water then flows onto existing catch basins located at the Southeast and Southwest corners of the site's public right of way.



Off-Site Utility Lines (Navigate LA)

- From Navigate LA, Figure 6.0 below shows the existing off-site sewer lines and structures such as manholes. The mainlines enclosing the site are, one 8" VCP along Mathews Street, one 6" VCP along Mott Street, one 8" VCP along E. Fourth Street, and one 8" VCP along E. Sixth Street. There are multiple existing sewer laterals around the site, especially along Mathews Street. If the intent is to reuse an existing lateral, CCTV of the pipe is recommended in order to establish the condition of pipe and wye. The image above also shows the abandoned on-site sewer lines and manholes.

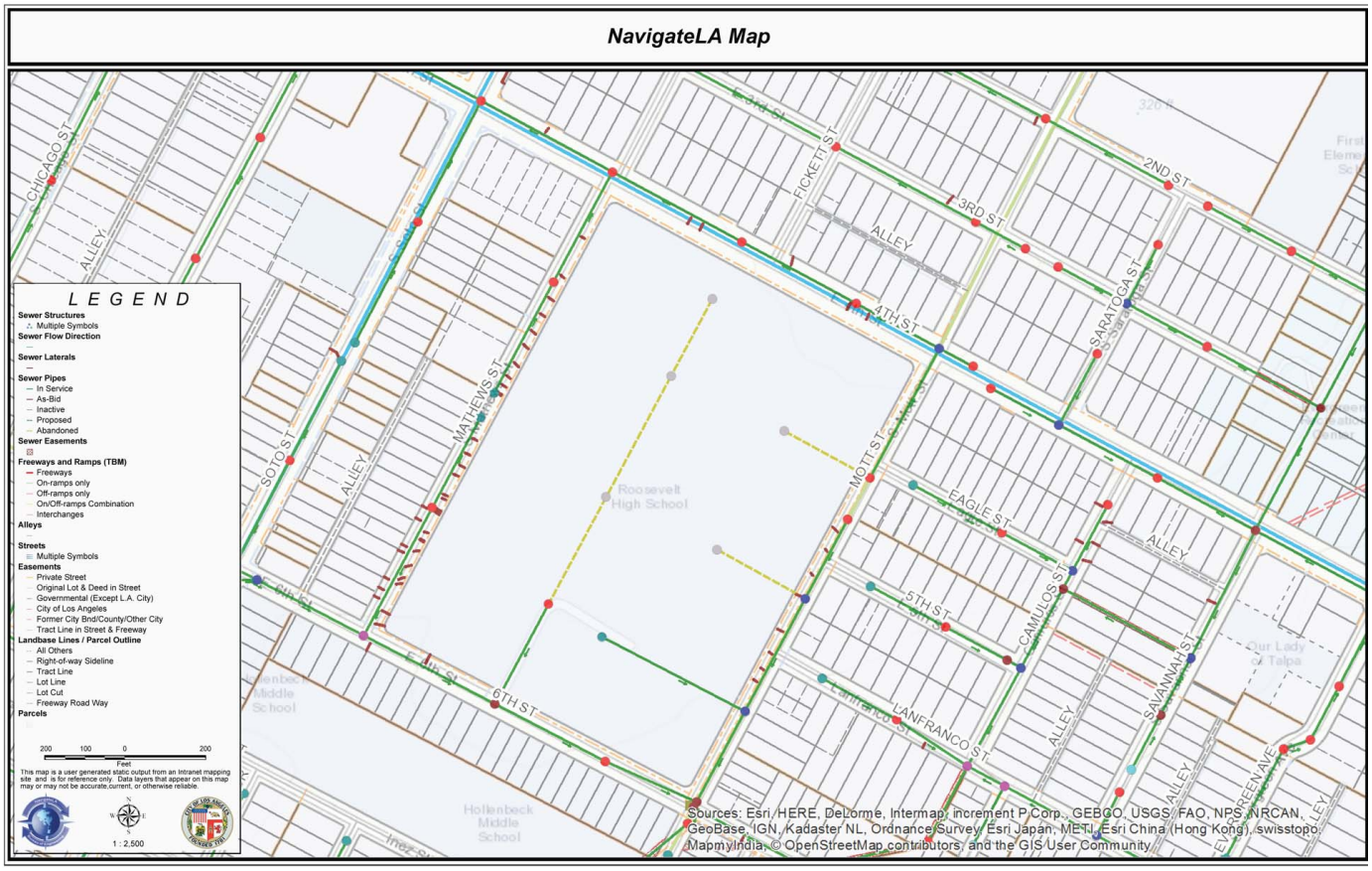


FIG 6.0 OFFSITE SEWER LINES AND SEWER STRUCTURES.

Off-Site Utility Lines (Navigate LA)

- From LADWP, Figure 7.0 below and Figure 7.1 on the following page, show the existing water main lines bounding the site, along with location of existing fire hydrants and lateral locations around the site. The main line sizes range from 4 inches to 8 inches. A fire flow test will provide the available pressure and flow fro these lines.

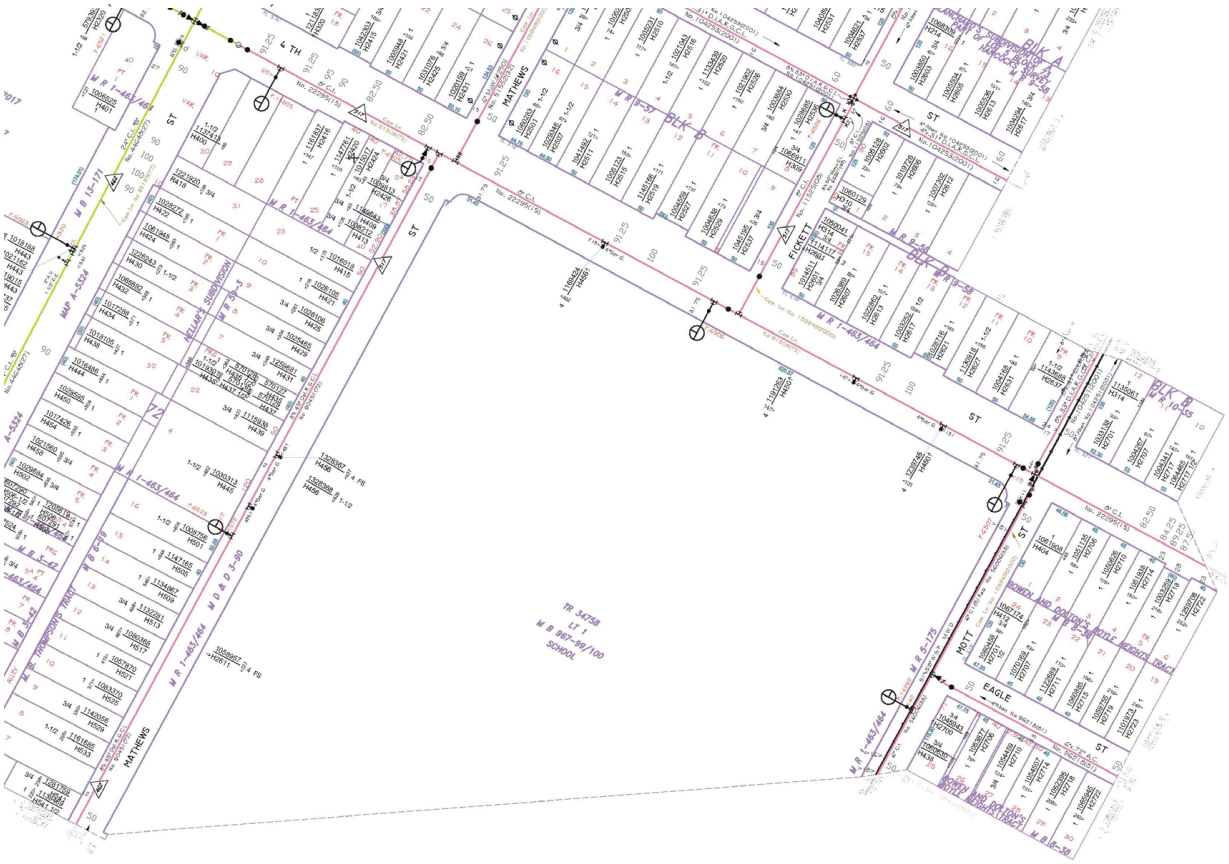


FIG 7.0 MAP OF OFFSITE WATER LINES AND WATER STRUCTURES.

Off-Site Utility Lines (Navigate LA)

- The shown above groundstructures are verified through Navigate LA and various site visits. For the underground connections and shown abandoned lines, the underground survey will verify the locations, sizes and uses of either fire water or domestic water lines.

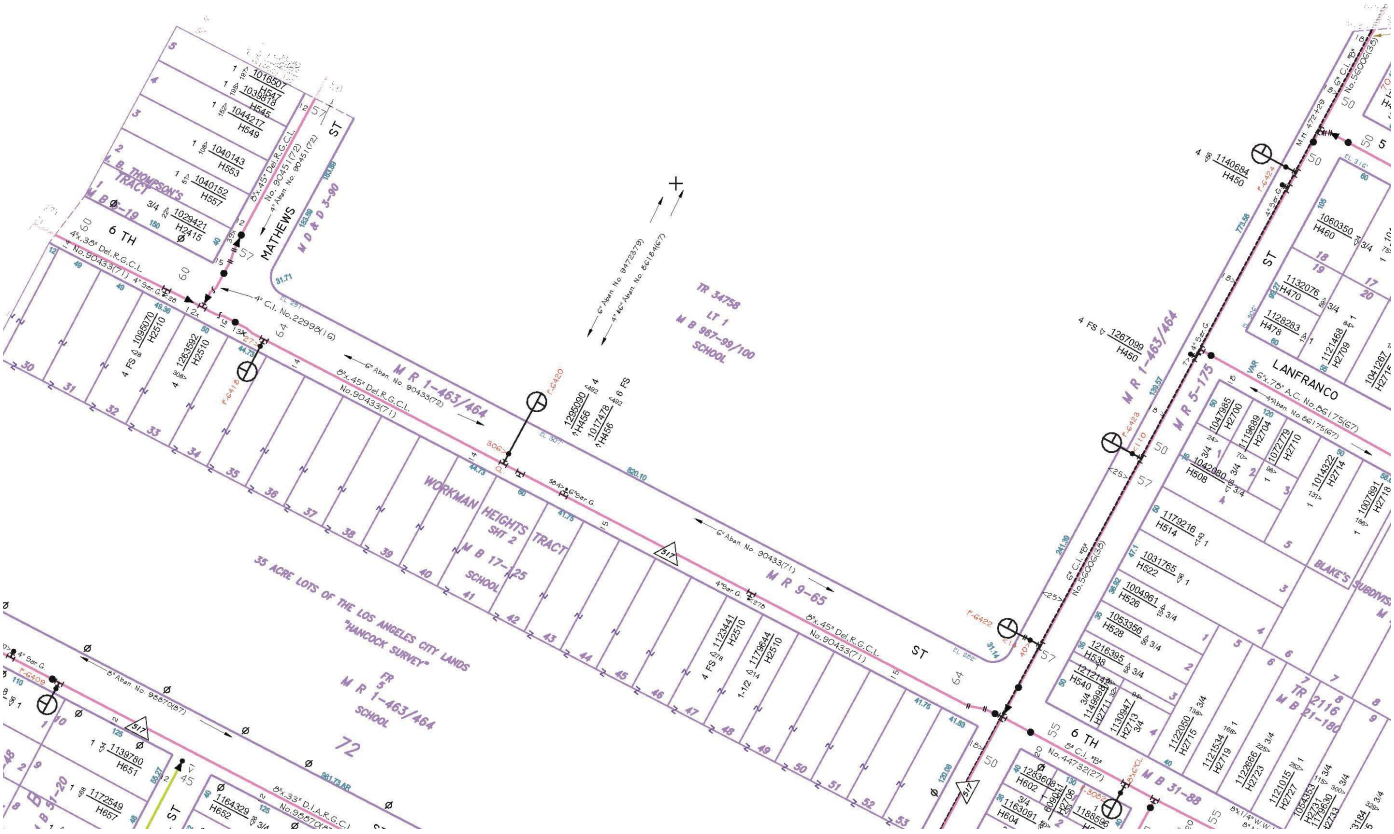


FIG 7.1 MAP OF OFFSITE WATER LINES AND WATER STRUCTURES.

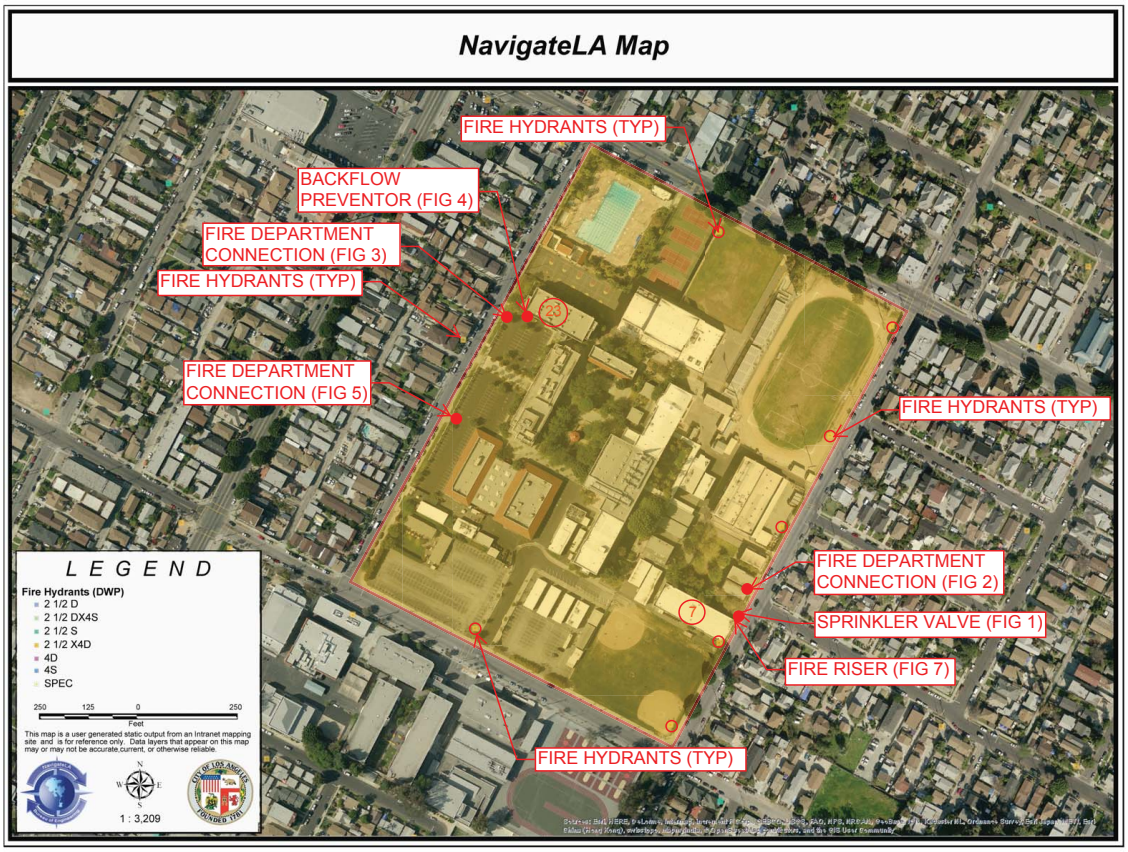


FIG 8.0 MAP OF FIRE WATER POINT OF CONNECTIONS

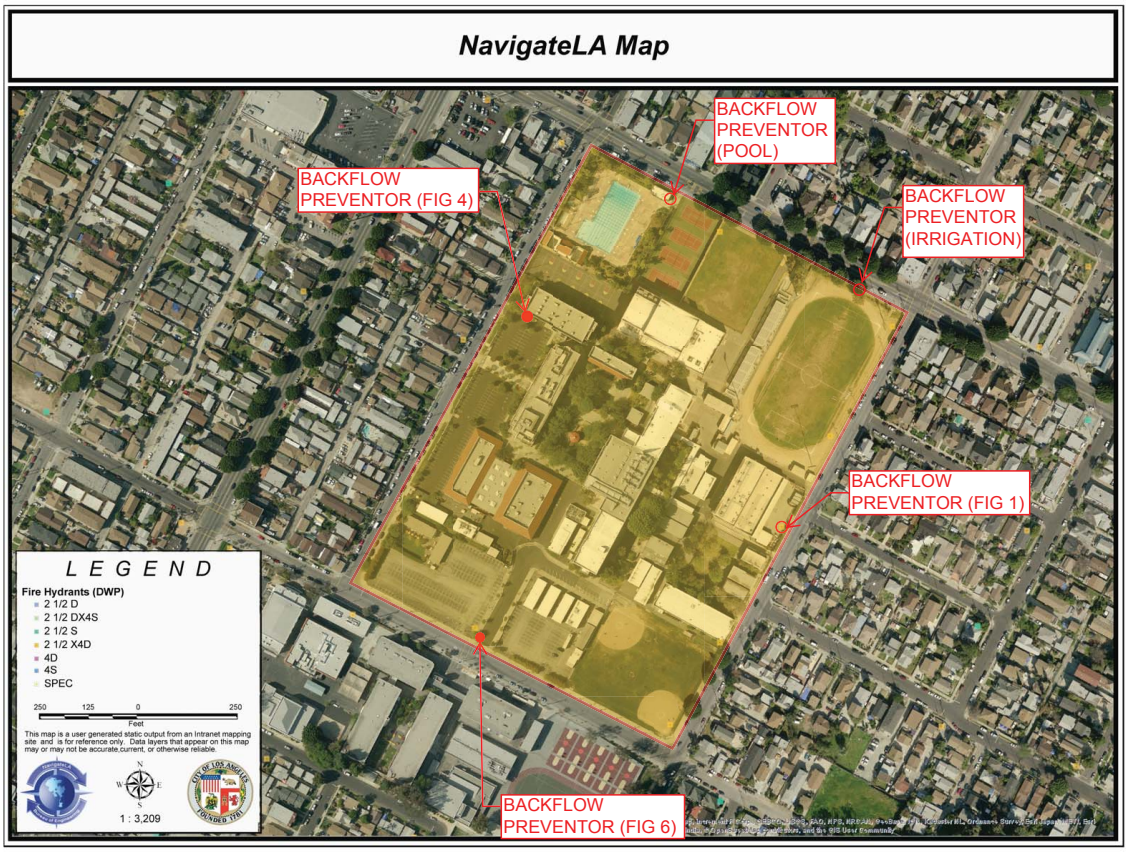


FIG 9.0 MAP OF DOMESTIC WATER POINT OF CONNECTIONS

Sanitary Sewer

- There are four sewer main lines surrounding the site, one 8" VCP along Mathews Street, one 6" VCP along Mott Street, one 8" VCP along E. Fourth Street, and one 8" VCP along E. Sixth Street. The property has one sewer lateral connecting to the main line on Mathews Street , three laterals connecting to the main line on Mott Street, one sewer lateral connecting to the main line on E Fourth Street, and one sewer lateral connecting to the main line on E. Sixth Street .

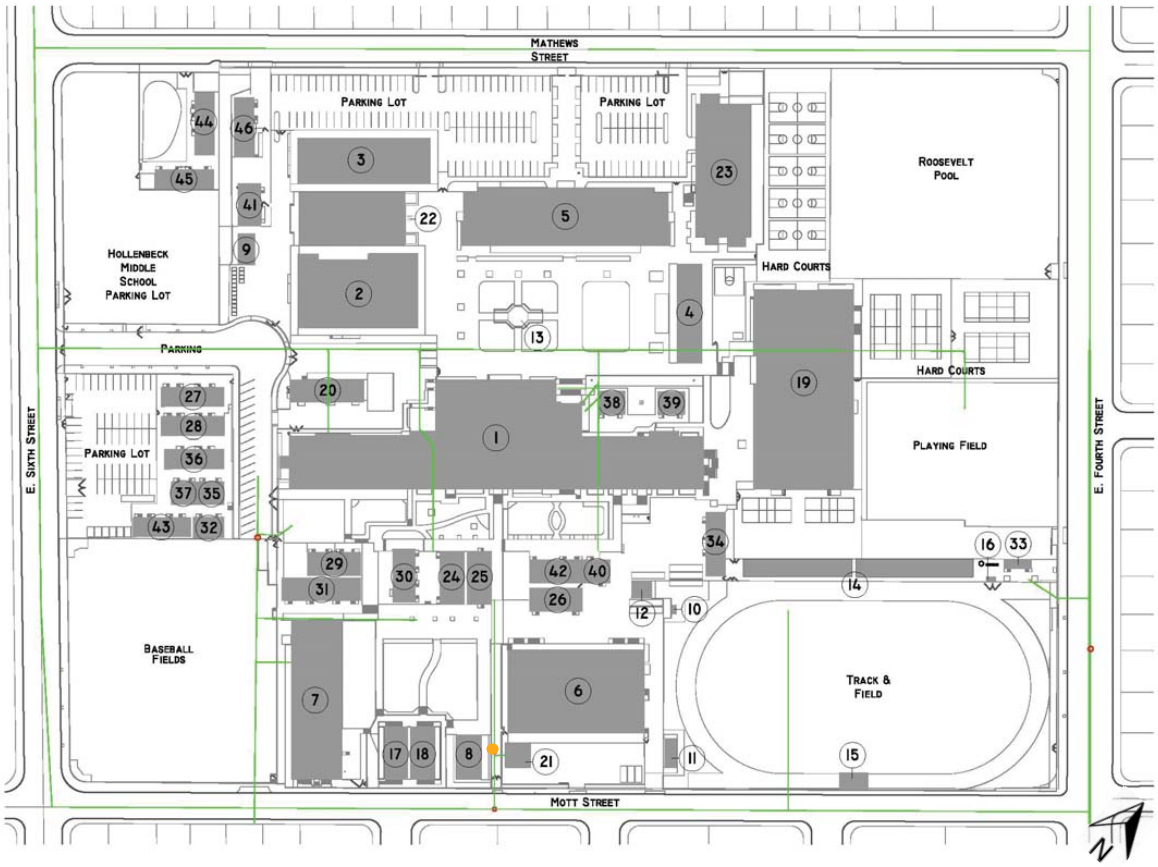


Figure 2.4.5.1 Map of Existing Sanitary Sewer Lines

Domestic Water

- The domestic water on the site originates from 5 different points of connection.
- There are five Backflow Preventers on the campus site, Figure 2.4.5.3 shows the location of the Backflow Preventers. The connection and uses of these preventers will be reviewed per the conducted underground survey.



FIG 1. BACKFLOW PREVENTER ON MOTT STREET



FIG 2. BACKFLOW PREVENTER ON E. SIXTH STREET



FIG 3. BACKFLOW PREVENTER ON MATHEWS STREET



FIG 4. BACKFLOW PREVENTER ON E. 4TH STREET



FIG 5. BACKFLOW PREVENTER ON E. 4TH STREET

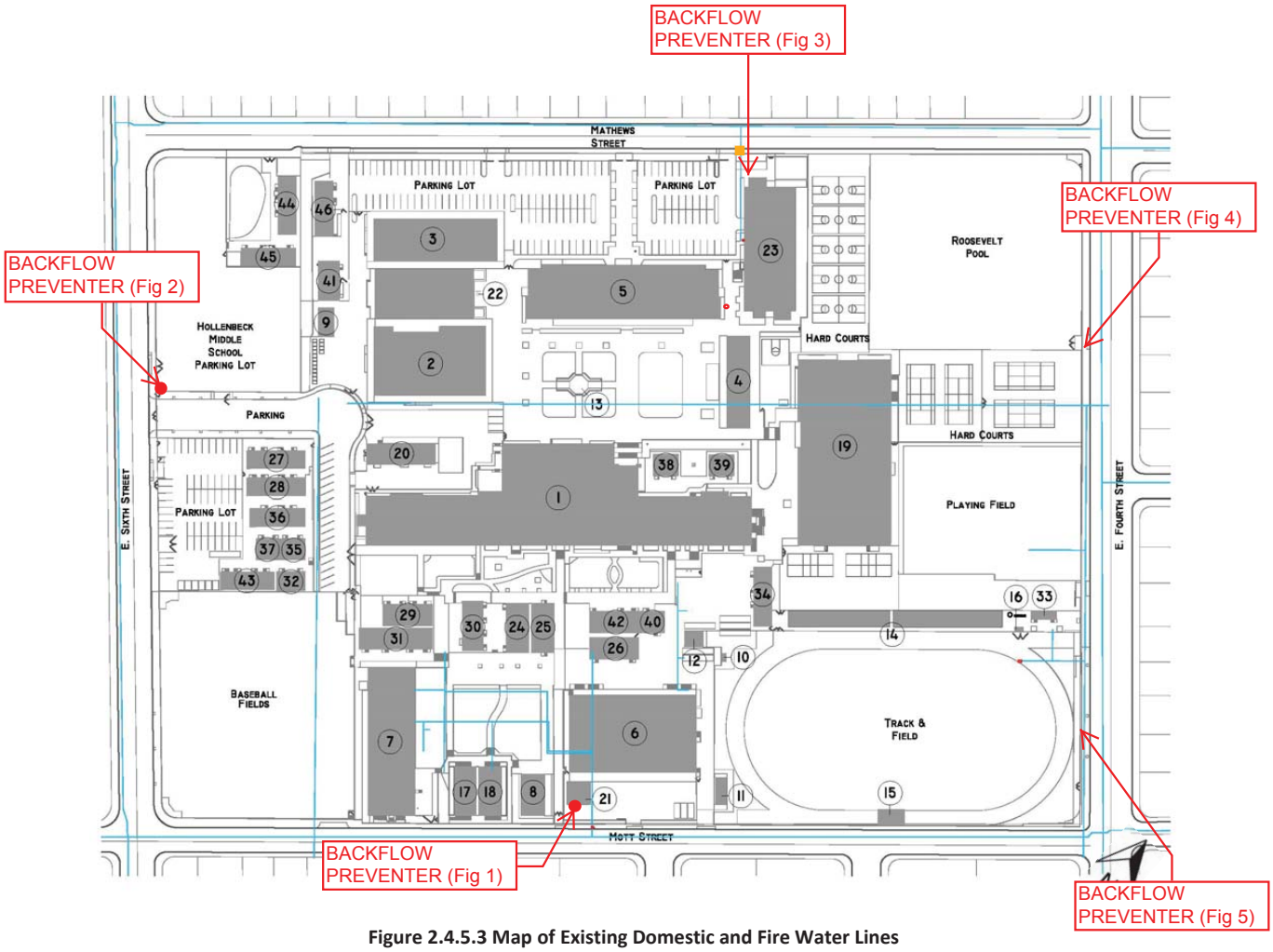


Figure 2.4.5.3 Map of Existing Domestic and Fire Water Lines

Fire Water

- The domestic water on the site originates from five different points of connection.

- There are three existing Fire Department Connections. Two are located along Matthews Street (near building 23 and in the parking lot). One is located along Mott Street near building 17. Figure 5.0 shows the location of the Fire Department Connections.

- There are several fire hydrants around the project site. Five are located along Mott Street, one is located along E. Sixth Street, and one is located along E Fourth Street.Three are located on the opposite side of the surrounding streets. Figure 5.0 shows the location of the fire hydrants.

- The main fire sprinkler drain and shut off valve is located on Mott Street north of building 7. Figure 5.0 shows the location of the main fire sprinkler.



FIG 1. SPRINKLER VALVE ON THE NORTH SIDE OF OF BUILDING 7 ALONG MOTT STREET.



FIG. 2 FIRE DEPARTMENT CONNECTION AND POST INDICATOR VALVE ALONG MOTT STREET EAST OF BUILDING 17.



FIG. 3 FIRE DEPARTMENT CONNECTION AND POST INDICATOR VALVE ALONG MATHEWS STREET WEST OF BUILDING 23.



FIG 4. BACKFLOW PREVENTOR ON THE SOUTHWEST SIDE OF BUILDING 23.

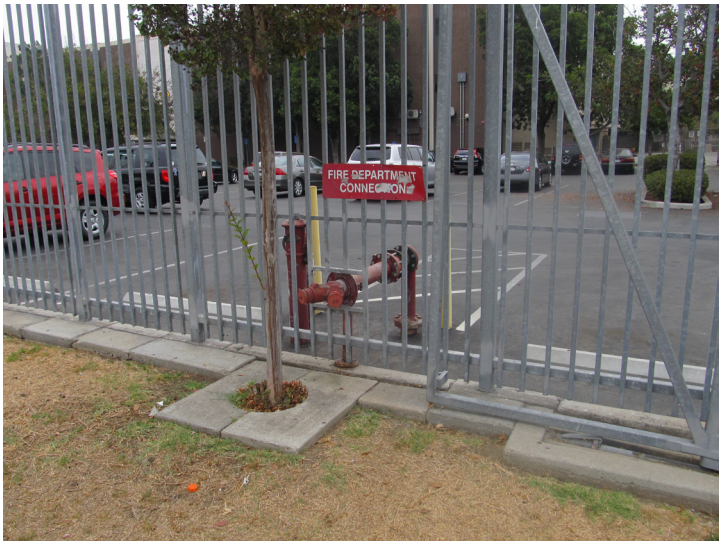


FIG 5. FIRE DEPARTMENT CONNECTION IN THE PARKING LOT ALONG MATHEWS STREET.



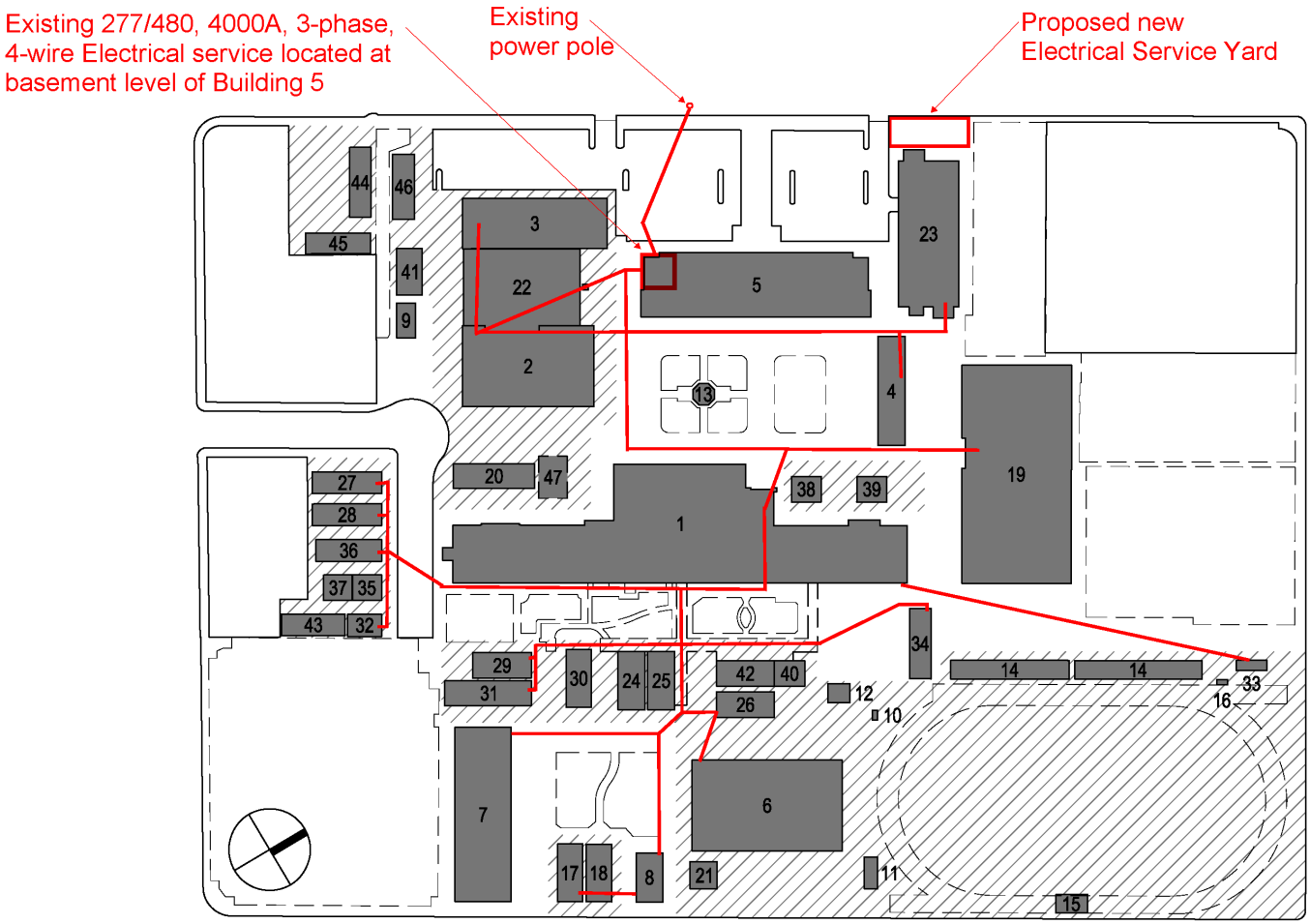
FIG 6. BACKFLOW PREVENTOR ON THE WEST SIDE OF THE PARKING LOT ENTRANCE ALONG SIXTH STREET.



FIG 7. FIRE RISER LOCATED ON THE SIDE OF BUILDING 7 NEAR MOTT STREET.

Electrical Service Location Diagram

- Roosevelt High School has one point of electrical connection from Los Angeles Department of Water and Power. Power comes down from a power pole on Mathews Street. It travels underground across the parking lot to the vault on the basement level of Building 5.



2.4.6 STORM DRAINAGE ANALYSIS

-From Navigate LA, the existing storm drainage around the site is all surface flow. There are no existing storm drain lines on any of the four streets enclosing the site. the existing surface flow travels onto existing catch basins located at the corner of E 6th Street and S Mathews Street. also at the corner of E 6th Street and S Mott Street.:

-As seen on the figure on the right the existing on site water flows out via 4 existing curb drains on Mott Street. The North West half of the campus does not have sufficient information of underground storm drain lines or outlet locations, but should flow out onto existing curb drains on Matherws Street. An underground utility survey is recommended for additional existing information.

-From Navigate LA, the existing storm drainage around the site is all surface flow. There are no existing storm drain lines on any of the four streets enclosing the site. The existing high point is at the corner of E 4th Street and S Mott Street, the flow is divererted West on E 4th Street and South on S Mathews Street, and South on S Mott Street. The flow on E 6th Street diverges in the middle of the street, directing the flow from there east and west. The surface flow travels onto existing catch basins located at the corner of E 6th Street and S Mathews Street, and at the corner of E 6th Street and S Mott Street. From the information provided the two existing catch basins are three and a half feet deep with side curb openings. Theses catch basins connect to existing storm drain mainlines owned by the City of Los Angeles.



FIG 1. EXISTING CATCH BASIN AT THE CORNER OF MOTT STREET AND SIXTH STREET.



FIG 2. EXISTING CATCH BASIN AT THE CORNER OF MATHEWS STREET AND SIXTH STREET.

-As seen in figure 2.4.6 on the following page, the existing on-site water flows out via 4 existing curb drains on Mott Street. From visting the site, these curb drains are four inch drain outlets with one side opening outlet. The Northwest half of the campus does not have sufficient information of underground storm drain lines or outlet locations, but should flow out onto existing curb drains on Mathews Street. From the site visit, an additional side opening curb outlet was found on Fourth street and on Sixth Street, and curb drains were found on Mathews Street. An underground utility survey is recommended for additional existing information.

The on-site campus, as seen in figure 2.4.6, drains through existing roof down spouts and planter areas. The majority of these planter areas contain a twelve inch catch basin which connects to the on-site storm drainage network and flows out to the curb drains. For any hardscape on site, the surface directional flow is determined by the exiting site slopes either leading to existing planter areas, site catch basins, trench drains or area drains. A recent site topographic survey would be recommened for actual determination of existing surface flow direction and tributary areas.



FIG 3. EXISTING CATCH BASIN IN PLANTER AREA.



FIG 4. EXISTING TRENCH DRAINS AT RAMP LANDINGS.

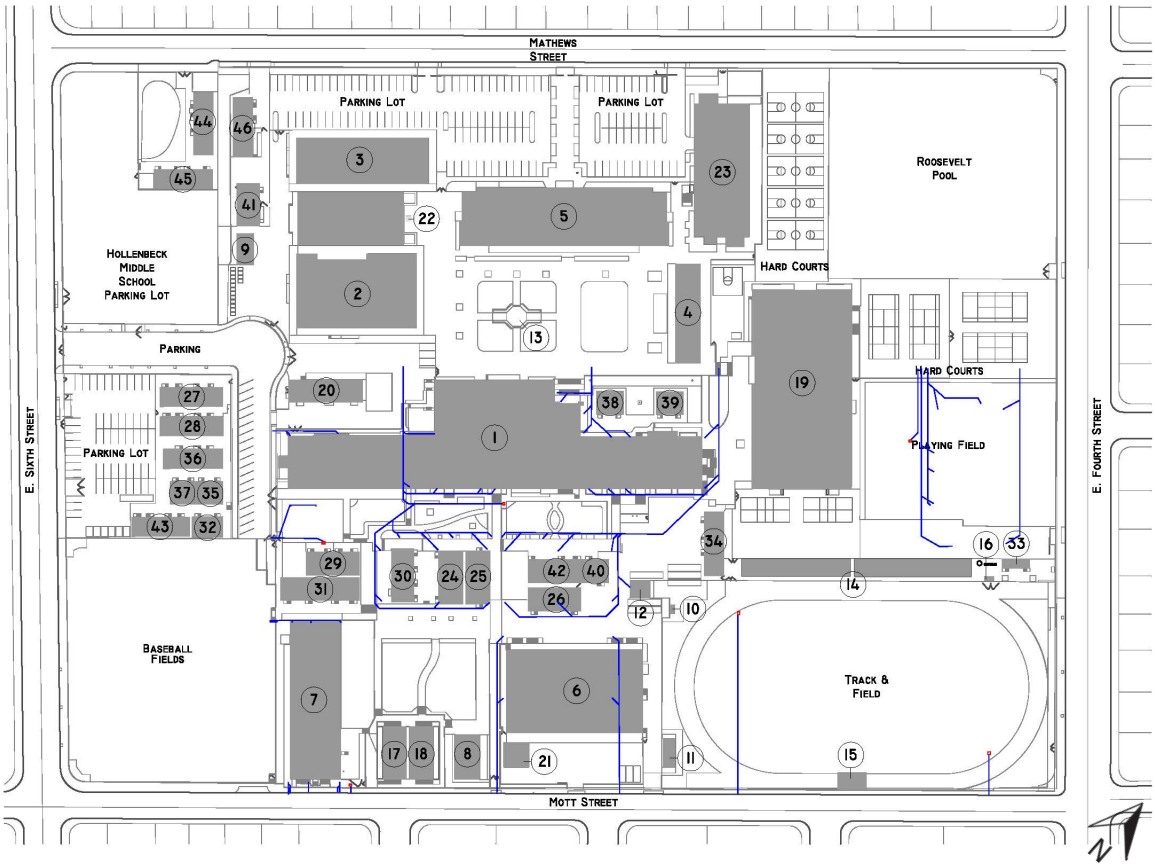


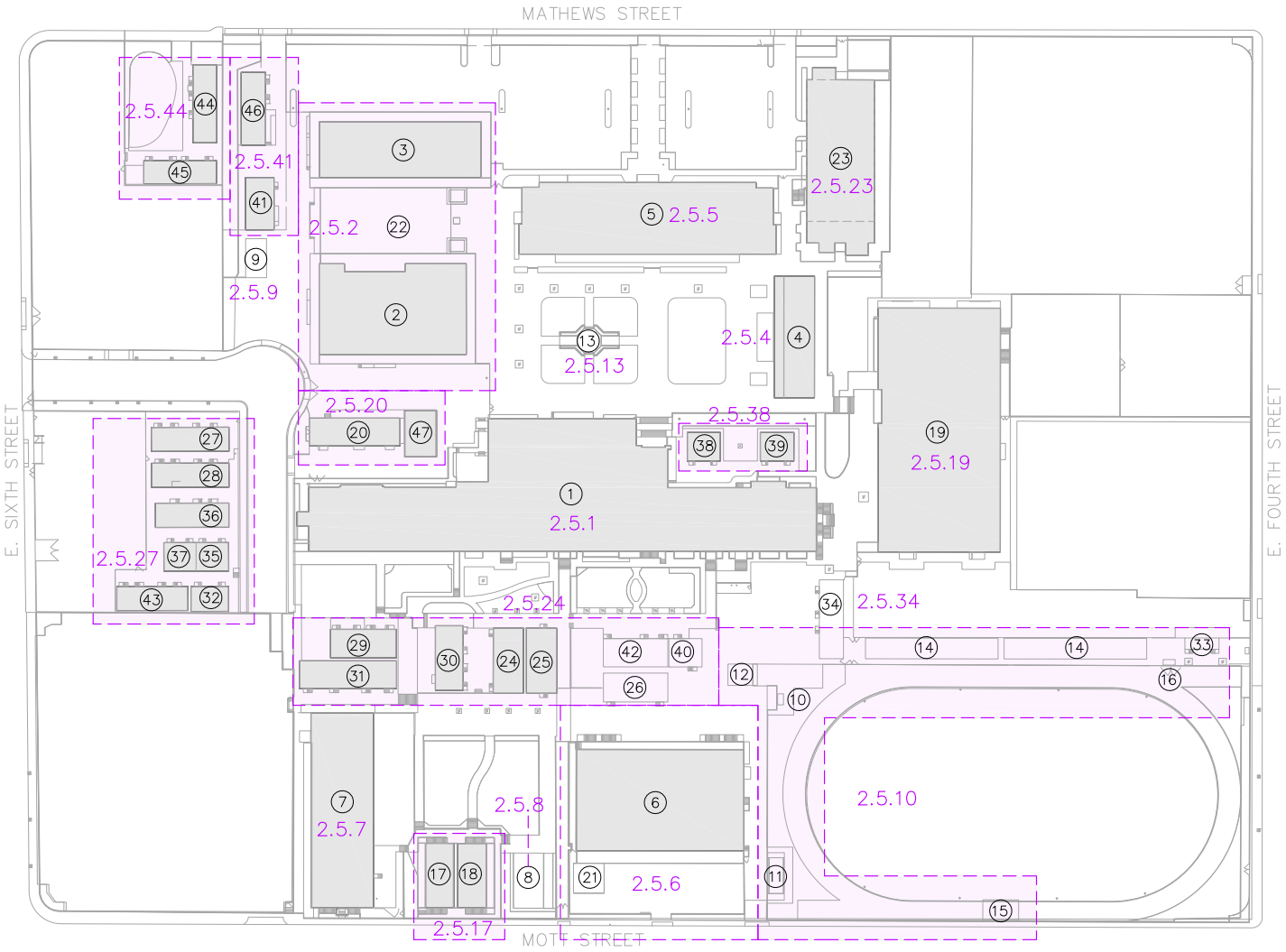
Figure 2.4.6 Map of On-Site Storm Drainage

LEGEND

STORM DRAIN LINES

CATCH BASIN

2.5 BUILDING CONDITION ANALYSIS



BUILDING GROUPING PLAN

10' 25' 50' 100' 250'

BUILDING INDEX

1. AUDITORIUM AND CLASSROOM
2. CAFETERIA
3. WEST CLASSROOM
4. MUSIC
5. ADMINISTRATION AND CLASSROOM
6. INDUSTRIAL ARTS
7. EAST CLASSROOM
8. INSTRUMENTAL MUSIC
9. GARAGE / STORAGE - INFANT CARE
10. FLAMMABLE STORAGE
11. FIELD SANITARY
12. EQUIPMENT FIELD STORAGE
13. GAZEBO
14. HOME BLEACHERS
15. VISITORS BLEACHERS
16. FIELD LIGHT CONTROLS
17. CLASSROOM
18. CLASSROOM
19. PHYSICAL EDUCATION
20. UTILITY
21. AUTO SERVICE
22. ARCADE / LUNCH SHELTER
23. LIBRARY AND CLASSROOM
24. TWO / THREE UNIT RELOCATABLE
25. TWO / THREE UNIT RELOCATABLE
26. TWO / THREE UNIT RELOCATABLE
27. TWO / THREE UNIT RELOCATABLE
28. TWO / THREE UNIT RELOCATABLE
29. TWO / THREE UNIT RELOCATABLE
30. TWO / THREE UNIT RELOCATABLE
31. TWO / THREE UNIT RELOCATABLE
32. TWO / THREE UNIT RELOCATABLE
33. SANITARY RELOCATABLE
34. TWO / THREE UNIT RELOCATABLE
35. SINGLE UNIT RELOCATABLE
36. TWO / THREE UNIT RELOCATABLE
37. SINGLE UNIT RELOCATABLE
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41. SINGLE UNIT RELOCATABLE - INFANT CARE
42. TWO / THREE UNIT RELOCATABLE
43. CLASSROOM RELO-DOH / PARENT CENTER
44. TWO / THREE UNIT RELOCATABLE (BOYLE HEIGHTS CONT.)
45. TWO / THREE UNIT RELOCATABLE (BOYLE HEIGHTS CONT.)
46. TWO / THREE UNIT RELOCATABLE - INFANTCARE
47. CHILLER YARD

BUILDING GROUP INDEX

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2.5.34	PORTABLE AA-0955
2.5.38	QUAD PORTABLES CLUSTER
2.5.41	INFANT CARE CLUSTER
2.5.44	CONTINUATION SCHOOL CLUSTER

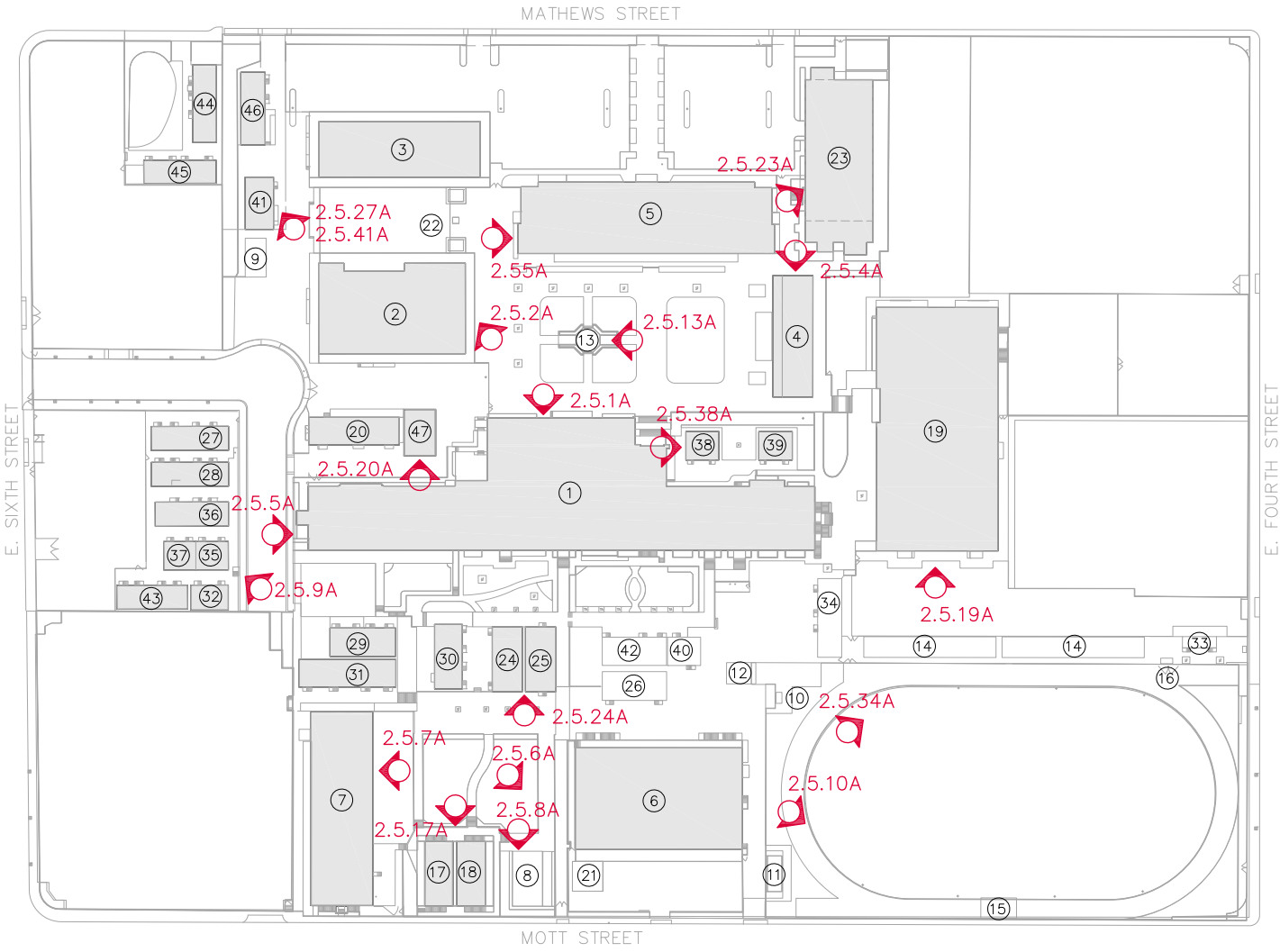


PHOTO INDEX

10' 25' 50' 100' 250'

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PHOTO INDEX

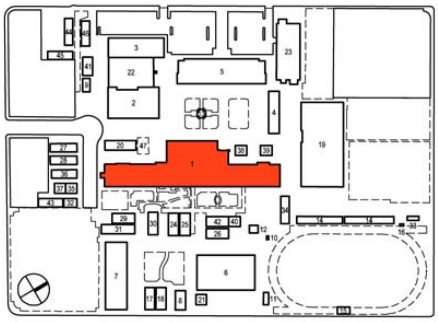
2.5.1A	AUDITORIUM LOBBY ENTRANCE
2.5.2A	CAFETERIA SERVICE WINDOWS WITH CLASSROOM ARCADE BEYOND
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2.5.7A	NORTH FAÇADE OF BUILDING
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2.5.41A	LOCATED AT FAR RIGHT (BEYOND GARAGE BUILDING)

2.5.1 AUDITORIUM AND CLASSROOM BUILDING

BUILDINGS: (1)



Auditorium Lobby Entrance



Campus Location of Building

AB300	FCI
YES	**51.0%**

Building Number	Design Year	DSA Application	Building Area (SF)	Occupancy Group(s)	Building Structure	Comments
1	1922	(pre-DSA)	108,270	A-1, A-3, B, E, F-1	Masonry/ Concrete	Original Building
	1924	(pre-DSA)			Masonry/ Concrete	South Wing
	1936	A-1613				Field Act (Original)
	1949	A-7020				
	1954	A-11575				Field Act (South)
	1970	A-33406				
	1985	A-46484				
	1995	A-63192				
	1998	A03-100523				S&T Fire Alarm
	2006	A03-110294				
	2007	A03-110395				
	2007	A03-111456				Fire Alarm Mod

Architectural

Overview

Auditorium and Classroom Building #1, or "R Building" as the current school administration refers to it, is the oldest building on the Roosevelt High School campus. The original 1922 design featured extensive exterior ornamentation, including decorative glazed tiles and dramatic gamble pediments; however, the 1924 addition of a south wing was more subdued, and subsequent seismic strengthening projects in 1936 and 1954 removed almost all of the original design features. A fire resulted in the removal of the original fourth floor, leaving a three-story building that mitigates some of the campus site slope through a first floor that is essentially a basement at its north end. In addition to classrooms and related support spaces, the building also includes a performance auditorium with balcony seating and a large double-height lobby. The exterior entrance to the lobby and some of the interior of the auditorium are the only remaining traces of the original design ornament, and the interior is actually a product of the 1936 seismic remodel.

Educational Facilities

The building contains forty-eight (48) classrooms, almost all of which appear to be used for general or core instruction. (This count includes spaces such as work rooms that do not appear to be intended for classroom use.) Of these classrooms, ten (10), or about 1/5, are officially less than 800 square feet as measured by the official "SP2A" diagrams; however, spot-checks of those diagrams indicates a consistent dimensional error that results in a variance of approximately 4% from the actual measured conditions. When adjusted to 96% of the reported SP2A areas, the number of classrooms less than 800 square feet jumps from ten (10) to thirty-three (33), or more 2/3 of the building's classrooms.

Building #1 also includes a performance auditorium with raked floor and balcony seating. The auditorium stage features a fly loft, operable rigging and small wings for storage and staging; there is also a large door directly to the exterior. The auditorium lobby is a grand double-height space dominated by grand stairs leading to the second floor to the east; the ticket booth is located on the south side of the lobby between pairs of auditorium doors; the main building entrance is located on the west side of the lobby; a large display case is featured on the north side of the lobby; and doors to the wellness center are located in the northeast corner.

Aesthetics

The building is in fair architectural condition. Exterior wall surfaces are heavily repainted but in otherwise fair condition. Interior floor finishes show excessive wear, particularly in circulation zones like corridors and stairs. Interior wall and ceiling finishes vary by space but are in generally good condition, with the exception of the Auditorium walls where adhered acoustic tiles are falling off (or have already fallen off) of the walls; however, the Auditorium ceiling appears to be in pristine condition, including several styles and sizes of ornate lighting fixtures. Windows are old single-pane glazed, either wood or narrow steel framed, and many have been removed or altered for retrofit air conditioning units.

Large murals are painted on several interior corridor walls as well as a few exterior wall locations. The most significant of these murals is located on the south side of the second floor corridor opposite the “middle” building stairs; it stretches the full length of the auditorium from balcony to stage.

Code Compliance

FIRE/LIFE SAFETY

The structural system of the building includes wood floors and joists under the classrooms on either side of the concrete-framed central corridor, so the “highest” possible classification under current building code would be Type IIIA; however, the building exceeds the current maximum allowable area for Type IIIA construction, both for each floor and for the overall building.

ACCESSIBILITY

Almost every exterior door, including official building entrances, requires the use of stairs. Existing stairs do not meet current accessibility requirements, particularly for handrails. An elevator was retrofit at the extreme south end of the building at some point, but the travel distance between it and the north end of the building greatly exceeds 200 feet. Most restrooms are not only not currently accessible but unlikely to be easily retrofit for accessibility due to existing size limitations.

Mechanical

As-Built Conditions

Auditorium is served by multiple roof-top 4 pipe air handling units by Energy Labs with exposed and unsightly ductwork on the roof. Chilled water for these air handling units is provided by two York air cooled chillers installed on grade inside a walled yard adjacent to the Utility Building. These chillers are very noisy and the sound is penetrating into the classrooms adjacent to the yard. Heating hot water is provided by multiple Patterson Kelley Compact boilers in the basement. The majority of the classrooms are provided with 4 pipe unit ventilators that are very noisy.

Some of the classrooms are provided with wall mounted heat pumps by Bard or Marvair.

The air distribution, ventilation, air filtration and acoustical performance of all the classroom HVAC systems for this building are poor.

The existing classroom systems have exceeded their expected life.

The chillers and boilers are close to the end of their expected life.

The existing chilled and hot water piping is run exposed in the corridors. It is very unsightly. Seismic joints are also missing.

The HVAC units use Refrigerant-22 which has been totally phased out since 2010.

Recommendations

REPLACEMENT HVAC SYSTEMS

Replacement of the wall mounted heat pumps and unit ventilators in the classrooms with Variable Refrigerant Flow Systems would reduce the current excessive sound levels. The work would be minimally invasive and the space requirements and weight would be also minimal.

Replacing the current overhead air distribution system for the auditorium with an underfloor air distribution system could reduce the air flow and exposed ductwork required. The existing air cooled chillers may be replaced with VRF outdoor units to reduce the sound levels. VRF manufacturers have developed their outdoor units to be able to connect to third part air handling units.

REUSE OF EXISTING DUCTWORK

The aerosol duct sealing technology invented and developed by the Energy Performance of Buildings Group at Lawrence Berkeley National Laboratory in 1994 could be used to seal the existing ductwork after cleaning. This technology internally seals leaks in air distribution ducts by injecting a fog of aerosolized sealant particles into a pressurized duct system.

ENERGY MANAGEMENT SYSTEMS

EMS is required for all new projects to comply with the current codes requirements such as “Fault Detection and Diagnostics” and “Demand Controlled Ventilation”.

VENTILATION

The outdoor air flow rates for ventilation is usually much lower than required by current codes.

Electrical

Existing Electrical Service

Building 1 has an Electrical Room in the basement. Panelboards are located in the hallways. Existing equipment is in working condition but may be at end of life. Existing equipment may need to be replaced if the building is modernized.

Existing Lighting System

Classroom and interior lighting system is old and inefficient compared to new lighting fixtures available in the market today. Lighting control in classrooms is manual switching. Classroom lighting layouts do not comply with the latest LAUSD Design Criteria. Lighting fixtures in hallways are above conduit. Existing lighting system may need to be replaced if the building is modernized.

Plumbing

As-Built conditions

1. Existing fixtures do not comply with State water conservation guidelines and standards, including maximum flow as follows:

a. Water Closets: 1.28 gpf.
b. Urinals: 1/8 gpf or Non-water type.
c. Lavatory Faucets: 0.5 gpm.

2. Student Restrooms:
   a. The following features to reduce maintenance, conserve water and minimize student tampering do not exist:
      i. Water-saving battery-operated infrared-sensored flush valves or manual valves in high vandalism areas.
      ii. Push-button, ADA-metered, self-closing faucets on lavatories.
      iii. Hose-bib with vacuum breaker in recessed box with locking cover.
      iv. Floor drains with trap primers with floors sloped to drain.
3. Faculty and Visitor Restrooms:
   a. The following features to reduce maintenance and conserve water do not exist:
      i. Floor drains with trap primers with floors sloped to drain.
4. Sewer Lines
   a. Existing cast iron soil pipes are more than 40 years old and might have corroded to a point where replacement or lining is necessary.
5. Water systems
   a. We have not received any record drawings to date regarding plumbing upgrades.
   b. Galvanized iron pipes exist in lieu of Type L hard copper pipe inside buildings or existing copper piping is over 30 years old and corroded.
   c. Water hammer arrestors required for lavatories, sinks, fountains, water closets, urinal headers, and other fixtures or devices with quick-closing valves, such as clothes washers do not exist or are not functioning.
   d. Vacuum breakers or other required backflow prevention assemblies which are required are missing or not functioning at some of the following locations:
      i. Hose bibs and sill cocks.
      ii. Fire sprinkler systems.
      iii. Irrigation systems.
6. Gas Piping:
   a. Gas pipes
      i. Above grade pipes within the building are more than 25 years old and require instrument assisted evaluation and possible replacement.
   b. Gas Valves:
      i. DSA approved seismic gas shut-off valves are missing at regulators and gas meter.
7. Seismic restraints for equipment and piping systems in accordance with applicable codes and guidelines are missing at some locations.

Recommendations

1. Replace all existing galvanized piping with copper.
2. Replacement of existing water heaters with high efficiency direct vent water heaters would be required to meet current standards.

3. Replace all water, waste and vent piping in all restrooms which will get accessibility upgrades.
4. Replace all waste piping above grade.
5. Do a video survey of all below grade waste piping that will be retained. Replace all 4" lines if found to be defective. Smaller lines may be replaced or lined.
6. Lining with cured in place material should be considered for underground or difficult to access sanitary sewer and storm drainage piping in lieu of replacement if there are budget restrictions.
7. Do a video survey of all vent piping that will be retained. Replace if defective.

Fire Sprinklers

As-Built Conditions

We have not received any record drawings to date regarding fire sprinklers. Based on the FCI the Auditorium & Classroom Building is required to have total or near total fire sprinkler system replacement.

Recommendations

Based on recent experience with DSA, partial replacement, repair, expansion or any type of modification of a fire sprinkler system requires verification of system performance through hydraulic calculations. This process entails the modeling of the entire system on an approved fire sprinkler design platform such as SprinkCad and is a major undertaking.

DSA also requires verification and upgrade of fire sprinkler systems designed through the pipe schedule method (which was used before the advent of the hydraulic calculation design software) if there is a major building remodel. This usually results in the removal of the existing system completely and installing a totally new, hydraulically calculated system.

Sixty-five (65) psi is the minimum required pressure for the hydraulically most remote 1.5" hose station at the stage (NFPA 14, 7.8.1). If this is not achievable, we could choose to do one of the following:

1. Use a manual wet standpipe system (NFPA 14, 3.3.15.5). This standpipe system requires Local Fire Authority approval since the pressure to supply the standpipe demand relies exclusively on the fire department connection.
2. Use a fire pump, a costly and complicated addition to the system. This is not recommended and should be avoided if possible.

Low Voltage Systems

Existing Fire Alarm System

Existing fire alarm systems for the campus is fully automatic fire alarm system. On the first floor, Existing FATC-1 and FATC-1A are located in the Corridor 103, existing FACP-2 is located in the Phone Equipment 108, existing FATC-2 and FATC-2A are located in the Office next to Classroom R107. On the second floor, existing FATC-3 and FATC-3A are located in Janitor Closet, existing FATC-4 and FATC-4A are located in Storage 231, existing FATC-5 and FATC-5A are located in the Storage Room. On the third floor, existing FATC-6 and FATC-

6A are located in Library Office 302, existing FATC-7A is located in Janitor 323, existing FACP-4, FACP, and FATC are located in Teacher's Lounge Work Room 20. Existing fire alarm system is in working condition. The campus does not have emergency voice evacuation speakers to meet current code. A new fire alarm system with voice evacuation system to comply with the latest fire alarm code will be installed if the building is modernized.

Existing Signal System

- Existing IDF-BIRC is in the Storage Room on the first floor. Existing IDF-A3RC, IDF-C3RCA, and IDF-C3RCB are in the Library Workroom on the third. Existing IDFs are connected to MDF via underground fiber optic cabling system. There are 8-10 data outlets in each classroom installed in surface mounted outlets.
- A new Wireless LAN system has recently been installed. Upgrading this system will not be required in existing buildings to remain.
- There are surface mounted PA speakers in classrooms as well as PA speakers in corridors and on exterior walls of the buildings.
- Existing main telephone equipment is in Building 5. Telephones are in each classroom.
- Existing cable television service via underground TV signal wiring system. Cable television drops are in the classrooms.
- Existing intrusion and CCTV systems provide partial protection and monitoring. There are CCTV cameras at some entrances to the buildings, parking structure, and interior court yards.
- Existing signaling system in the campus are interconnected via a complex, old, and undocumented conduit duct banks and pull boxes. The existing system will stay up and running in other buildings during modernization projects. Existing signaling equipment may need to be replaced if the building is modernized.

Structural

APPROXIMATE DATE OF DESIGN
1922 (Original), 1924 (South Wing)

NUMBER OF STORIES
3

VERTICAL CARRYING SYSTEM
The main building portion's roof framing consists of straight 1x planks over wood roof joists at the classrooms. At the auditorium, the roof diaphragm remains as 1x planks but they are over existing reinforced steel trusses. At the auditorium stage, the roof framing consists of a 4" concrete slab over steel beams. The balcony in the auditorium is constructed of steel beams, steel girders, and steel columns. Excluding the balcony framing, the above roof framing is supported by either reinforced concrete walls, gunite walls, or gunite strengthened brick walls. Both 2nd and 3rd floor framing in classrooms is made up of straight 1x planks over wood joists or reinforced concrete slab supported by either reinforced concrete walls, gunite walls, or gunite strengthened brick walls.

The roof framing of the classroom addition at the south wing consists of straight 1x planks over wood trusses supported by either reinforced concrete walls or gunite strengthened brick walls. Both 2nd and 3rd floor framing consists of 1x diagonal planks over wood joists supported by reinforced concrete walls and gunite strengthened brick walls.

LATERAL RESISTING SYSTEM

The lateral load resisting system for the main building portion consists of flexible and rigid roof diaphragm regions at all story levels, excluding the ground level. The flexible diaphragms consist of wood planks – straight at the roof level and diagonal configuration at the floor levels. Rigid diaphragms (4 ½" – 8" concrete slab) occur at all floor and roof levels. There is also the presence of steel horizontal bracing at Building 1 which are located at the roof level in both wings of the building and were part of the 1936 strengthening measures. Horizontal braces also occur at the balcony in the auditorium as part of the original construction. The diaphragms and steel horizontal braces transfer lateral seismic and wind loads to reinforced concrete or gunite strengthened brick shear walls.

The lateral load resisting system for the South wing classroom addition at the roof level consists of flexible diaphragms in the classrooms and horizontal steel bracing at the corridor roof. These diaphragms transfer lateral seismic and wind loads to gunite strengthened brick and hollow clay shear walls. Both 2nd and 3rd floor lateral load resisting system consists of diaphragms constructed from 1x diagonal wood planks at the classrooms and a concrete slab at the corridor. These diaphragms transfer lateral seismic and wind loads to solid gunite, gunite strengthened brick, and gunite strengthened hollow clay shear walls.

FOUNDATION SYSTEM

The foundation for both portions of the building consist of a concrete slab on grade with isolated pad footings at columns and continuous wall footings at load bearing and shear walls. Piles were added at the expansion joint at the South wing as part of the 1936 strengthening and modification effort.

Conclusions

Most of this building is now over 90 years old. While numerous projects have expanded, reconfigured and modernized much of the facility, the underlying “bones” of the structure are still approaching the century mark. Accessibility is minimal. Building systems run exposed down hundreds of feet of corridors. Finishes are failing, in some cases literally falling off the walls.

Given the likelihood that most of the classrooms are not only substandard in size but also locked to those sizes by building structure, the most reasonable approach from an academic standpoint would be to replace the building with modern structures including at least one new classroom building and a new auditorium or multipurpose building.

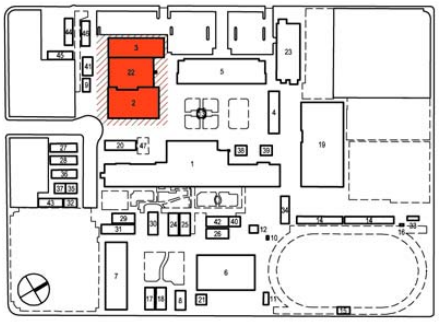
END OF 2.5.1: AUDITORIUM & CLASSROOM BUILDING.

2.5.2 CAFETERIA CLASSROOM CLUSTER

BUILDINGS: 2 3 22



Cafeteria with Arcade and Classroom Beyond



Campus Location of Building

AB300	FCI
NO	56.4%

Building Number	Design Year	DSA Application	Building Area (SF)	Occupancy Group(s)	Building Structure	Comments
2	1975	A-38340	12,586	A-2, B, S-1, F-1	Wood Frame	Cafeteria Building
3	1975	A-38340	8,896	B, E	Wood Frame	Classroom Building
22	1975	A-38340	36*	A-2	Wood Frame	Kiosk and Lunch Shelter

Architectural

Overview

This cluster of buildings consists of Cafeteria Building #2, Classroom Building #3 (or "E Building" as the current school administration refers to it), and Lunch Shelter/Arcade Building #22. They were all constructed under the same DSA project in 1977 at the south edge of the central commons "quad" together with Music Building #4 at the north edge and Gazebo Building #13 in the middle of the quad. These single-story wood-frame buildings feature deep perimeter overhangs enclosed by arcades. Most rooms open directly to one of these covered exterior spaces. The only enclosed part of the Lunch Shelter/Arcade is a small kiosk on the north side; the rest of Building #22 is open to the elements, including several large roof openings.

Educational Facilities

Building #3 contains eight (8) general-use classrooms, four (4) of which open to the west arcade and four (4) of which open to the east arcade and lunch shelter (Building #22). All of the classrooms have a single exterior door and a row of high windows that provide little light to the space.

The Cafeteria in Building #2 provides overflow and after-school educational space for various clubs and extracurricular activities.

Aesthetics

The building is in fair to poor architectural condition. Exterior stucco wall surfaces are heavily repainted with build-up. Interior floor finishes are in fair condition. Interior wall and ceiling finishes vary by space but are in generally good condition. What few windows are provided at classrooms are small and set above head height far under the perimeter overhangs, then covered with security mesh, all but eliminating their usefulness for bringing natural light into the classrooms.

Large "quote" murals are painted above the arcade facing the quad.

Narrative for Paint and Repair Scope at Building

Re-paint existing painted interior walls and "hard-lid" ceilings to provide Level 5 finish condition per the Drywall Finishing Council's "Recommended Surface Treatment for Finishing Gypsum Board to Attain a Level 5 Finish" and related documents (see dwfc.org/publications/) and the Gypsum Association's "GA-214 Recommended Levels of Finish for Gypsum Board, Glass Mat and Fiber-Reinforced Gypsum Panels" and related documents (see www.gypsum.org/ga-publications/). Process includes but is not necessarily limited to: preparation of existing painted surfaces, which may require temporary relocation of existing furniture and equipment, removal of existing paint layers, patching of existing surface damage, re-taping joints or providing new expansion joints, replacement of surfaces with irreparable damage, etc.; application of at least one coat of primer material to prepared surfaces; and application of at least two coats of topcoat finish material to primed surfaces. After painting is complete, clean up areas of drips, runs, overspray, and similar defects to provide clean finished conditions throughout.

Re-paint existing painted exterior walls, canopies, soffits, and similar construction to achieve finish condition substantially equivalent to interior painted walls and ceilings. Follow procedures for interior painted walls and ceilings adapted for exterior conditions. Patching and repair of existing exterior finishes is required throughout. New patched or repaired plaster finishes shall integrate new and existing weatherproofing layers and shall match the existing adjacent finish to the greatest extent that is readily achievable.

Re-paint existing painted exterior and interior doors and door frames to achieve level of finish equivalent to specified wall finish. Do not paint over door hardware, integrated glazing, identification signs, or fire rating labels. Do not paint doors shut or allow wet or tacky paint on adjacent surfaces to come in contact. Existing stained or shellacked doors to remain “as-is” un-painted.

Closely examine existing masonry units and joints for mortar separation, cracking, spalling, or other evidence of damage or failure. Replace damaged masonry units and loose or missing mortar. Re-set and re-point loose but otherwise undamaged masonry units. Re-point damaged mortar that is otherwise still bonded to adjacent masonry units.

After patching, repair and other surface preparation, but prior to painting, replace sealant at perimeters of doors, windows, louvers, grilles, and similar wall/ceiling openings and penetrations at interior and exterior.

Code Compliance

FIRE/LIFE SAFETY

These buildings are of Type V construction; assumed Type VA due to allowable areas and presence of central kitchen in the Cafeteria Building #2.

ACCESSIBILITY

Remove identified and prioritized barriers to program accessibility. Provide accessibility improvements as required by the 2010 ADA Standards for Accessible Design, Chapter 11B of the current edition of the California Building Code (Part 2 of Title 24, California Code of Regulations), and the LAUD Office of the Independent Monitor (OIM).

Provide an accessible path of travel from site arrival points to athletic fields and courts. Site arrival points include the existing pedestrian entrance and accessible parking spaces accessed from S. Mathews Street; the existing accessible parking spaces accessed from E. 6th Street; and the new pedestrian entrance, drop-off and accessible parking spaces accessed from E. 4th Street. Scope includes replacement of grates for area drains and covers for pull-boxes, yard boxes, vaults and similar below-grade components, such that no opening dimension exceeds 1/4" in the dominant direction of travel.

Modify or replace food service equipment to provide accessible tray slide heights and check-out counters. Provide an accessible path of travel for entry to, use of, and exit from the cafeteria serving aisle; this accessible route shall connect to the accessible path of travel provided for the student indoor dining area.

Mechanical

As-Built conditions

The Kitchen area still has the original make-up air system. The kitchen hood is a UL listed Type I hood with ANSUL fire protection system. It appears that the exhaust system has been upgraded to comply with the current code. However, no record drawings were reviewed including this work. There are gas radiant heaters for the lunch shelter.

The classrooms in this building are provided with wall mounted heat pumps. There are also a few split system heat pumps.

The HVAC units use Refrigerant-22 which has been totally phased out since 2010.

Recommendations

REUSE OF EXISTING DUCTWORK

The aerosol duct sealing technology invented and developed by the Energy Performance of Buildings Group at Lawrence Berkeley National Laboratory in 1994 could be used to seal the existing ductwork after cleaning. This technology internally seals leaks in air distribution ducts by injecting a fog of aerosolized sealant particles into a pressurized duct system.

ENERGY MANAGEMENT SYSTEMS

EMS is required for all new projects to comply with the current codes requirements such as “Fault Detection and Diagnostics” and “Demand Controlled Ventilation”.

VENTILATION

The outdoor air flow rates for ventilation for older buildings is usually much lower than required by current codes.

Electrical

Existing Electrical Service

Building 2 has an Electrical Room in the southwest corner of the building. Electrical panelboards are located in the Mechanical Room in Building 3. Existing equipment is in working condition but may be at end of life. Existing equipment may need to be replaced if the building is modernized.

Existing Lighting System

Classroom, cafeteria, and lunch shelter lighting system is old and inefficient compared to new lighting fixtures available in the market today. Lighting control in classrooms is manual switching. Classroom lighting layouts do not comply with the latest LAUSD Design Criteria. Existing lighting system is in working condition but may be at end of life. Existing lighting system may need to be replaced if the building is modernized.

Plumbing

As-built conditions

1. Existing fixtures do not comply with State water conservation guidelines and standards, including maximum flow as follows:
   a. Water Closets: 1.28 gpf.
   b. Urinals: 1/8 gpf or Non-water type.
   c. Lavatory Faucets: 0.5 gpm.
   d. Kitchen Sink Faucets: 2.0 gpm.
2. Student Restrooms:
   a. The following features to reduce maintenance, conserve water and minimize student tampering do not exist:
      i. Water-saving battery-operated infrared-sensored flush valves or manual valves in high vandalism areas.
      ii. Push-button, ADA-metered, self-closing faucets on lavatories.
      iii. Hose-bib with vacuum breaker in recessed box with locking cover.
      iv. Floor drains with trap primers with floors sloped to drain.
3. Faculty and Visitor Restrooms:
   a. The following features to reduce maintenance and conserve water do not exist:
      i. Floor drains with trap primers with floors sloped to drain.
4. Sewer Lines
   a. Existing cast iron soil pipes are more than 40 years old and might have corroded to a point where replacement or lining is necessary.
5. Food Service Establishments (FSE's) Waste:
   a. Cafeterias do not comply with the City of Los Angeles' Fats, Oil and Grease (FOG) Control Program. There are no grease interceptors and there are existing garbage disposals in the School cafeterias which are classified as Food Service Establishment's. (The exception would be kitchens within the learning environment).
6. Water systems
   a. Record drawings were not reviewed regarding plumbing upgrades.
   b. Galvanized iron pipes exist in lieu of Type L hard copper pipe inside buildings or existing copper piping is over 30 years old and corroded.
   c. Water hammer arrestors required for lavatories, sinks, fountains, water closets, urinal headers, and other fixtures or devices with quick-closing valves, such as clothes washers do not exist or are not functioning.
   d. Vacuum breakers or other required backflow prevention assemblies which are required are missing or not functioning at some of the following locations:
      i. Hose bibs and sill cocks.
      ii. Fire sprinkler systems.
      iii. Irrigation systems.
7. Gas Piping:
   a. Gas pipes

i. Above grade pipes within the building are more than 25 years old and require instrument assisted evaluation and possible replacement.

b. Gas Valves:

i. DSA approved seismic gas shut-off valves are missing at regulators and gas meter.

8. Seismic restraints for equipment and piping systems in accordance with applicable codes and guidelines are missing at some locations.

Recommendations

1. Replace all existing galvanized piping with copper.
2. Replacement of existing water heaters with high efficiency direct vent water heaters would be required to meet current standards.
3. Replace all water, waste and vent piping in all restrooms which will get accessibility upgrades.
4. Replace all waste piping above grade.
5. Do a video survey of all below grade waste piping that will be retained. Replace all 4" lines if found to be defective. Smaller lines may be replaced or lined.
6. Lining with cured in place material should be considered for underground or difficult to access sanitary sewer and storm drainage piping in lieu of replacement if there are budget restrictions.
7. Do a video survey of all vent piping that will be retained. Replace if defective.

Fire Sprinklers

As-Built Conditions

We have not received any record drawings to date regarding fire sprinklers. Based on the FCI the Cafeteria Building is required to have 50% fire sprinkler system replacement.

Recommendations

Based on recent experience with DSA, partial replacement, repair, expansion or any type of modification of a fire sprinkler system requires verification of system performance through hydraulic calculations. This process entails the modeling of the entire system on an approved fire sprinkler design platform such as SprinkCad and is a major undertaking.

DSA also requires verification and upgrade of fire sprinkler systems designed through the pipe schedule method (which was used before the advent of the hydraulic calculation design software) if there is a major building remodel. This usually results in the removal of the existing system completely and installing a totally new, hydraulically calculated system.

Low Voltage Systems

Existing Fire Alarm System

Existing fire alarm systems for the campus is fully automatic fire alarm system. Existing FACP-3, FATC-CAFE-A, and FACP are located in the Mechanical Room in Building 2. Existing FACP and FATC-BLDG E are located in Mechanical Room 4 and Custodian 3 in Building 3. Existing fire alarm system is in working condition. The

campus does not have emergency voice evacuation speakers to meet current code. A new fire alarm system with voice evacuation system to comply with the latest fire alarm code will be installed if the building is modernized.

Existing Signal System

- Existing IDF-CAFE is located in the Boiler Room of Building 2. Existing IDFs are connected to MDF via underground fiber optic cabling system. There are 8-10 data outlets in each classroom installed in surface mounted outlets.
- A new Wireless LAN system has recently been installed. Upgrading this system will not be required in existing buildings to remain.
- There are surface mounted PA speakers in classrooms as well as PA speakers in corridors and on exterior walls of the buildings.
- Existing main telephone equipment is in Building 5. Telephones are in each classroom.
- Existing cable television service via underground TV signal wiring system. Cable television drops are in the classrooms.
- Existing intrusion and CCTV systems provide partial protection and monitoring. There are CCTV cameras at some entrances to the buildings, parking structure, and interior court yards.
- Existing signaling system in the campus are interconnected via a complex, old, and undocumented conduit duct banks and pull boxes. The existing system will stay up and running in other buildings during modernization projects. Existing signaling equipment may need to be replaced if the building is modernized.

Structural

All buildings in this cluster feature the same structural system.

APPROXIMATE DATE OF DESIGN
1975

NUMBER OF STORIES
1

VERTICAL CARRYING SYSTEM
The roof framing consists of plywood sheathing over open web joists, sawn lumber roof joists and steel beams. Wood-framed load bearing walls and steel columns provide vertical support for the roof elements.

LATERAL RESISTING SYSTEM
The lateral load resisting system consists of flexible plywood sheathed diaphragms which transfer lateral wind and seismic loads to wood framed, plywood sheathed shear walls.

FOUNDATION SYSTEM
The foundation system consists of slab-on-grade with continuous walls footings and spread footings at column locations.

Conclusions

These buildings show their age, both in terms of dated aesthetics and in terms of physical wear-and-tear. Classrooms are large but relatively dark. The cafeteria is small and the food service areas are awkwardly positioned for easy campus access. The lunch shelter is loud and also awkwardly positioned for easy campus access; it also backs up to the service yard where trash containers are stored, creating an unpleasant environment for food consumption.

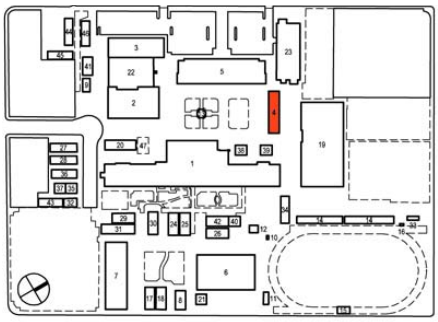
END OF 2.5.2: CAFETERIA-CLASSROOM CLUSTER.

2.5.4 MUSIC BUILDING

BUILDINGS: (4)



West End of Building



Campus Location of Building

AB300	FCI
NO	82.6%

Building Number	Design Year	DSA Application	Building Area (SF)	Occupancy Group(s)	Building Structure	Comments
4	1975	A-38340	3,630	E, S-2	Wood Frame	

Architectural

Overview

Music Building #4, or “M Building” as the current school administration refers to it, was constructed on the north edge of the central commons “quad” in 1977 together with the Cafeteria-Classroom Cluster at the south edge and the Gazebo Building #13 in the middle of the quad. This single-story wood-frame building features a deep perimeter overhang on the south (quad) side that is enclosed by an arcade. Most rooms open directly to this covered exterior space. The interior of the building is dominated by two large music classrooms that feature high ceilings and acoustical wall treatments.

Educational Facilities

Building #4 has two (2) large, high-bay music classrooms with adjacent storage rooms. All rooms, including the classrooms, open directly onto the arcade on the south side of the building.

Aesthetics

The building is in fair to poor architectural condition. Exterior stucco wall surfaces are heavily repainted. Interior floor finishes are in fair to poor condition. Interior wall and ceiling finishes vary by space but are in generally poor condition. There are no windows.

Large “quote” murals are painted above the arcade facing the quad.

Code Compliance

FIRE/LIFE SAFETY

This building is most likely of Type VB construction.

ACCESSIBILITY

The only stairs within the building are choral risers in the music classrooms; however, these are not provided with handrails or designated wheelchair seating spaces. Most door hardware appears to be non-compliant. There are no restrooms in the building.

Mechanical

As-built conditions

The building is provided with rooftop packaged units and some split system heat pumps.

The air distribution, ventilation, air filtration and acoustical performance of all the HVAC systems for this building are poor.

The existing systems have exceeded their expected life.

The HVAC units use Refrigerant-22 which has been totally phased out since 2010.

Recommendations

REPLACEMENT HVAC SYSTEMS
Replace rooftop packaged units and split systems with new units of the same type but of higher efficiency.

REUSE OF EXISTING DUCTWORK
The aerosol duct sealing technology invented and developed by the Energy Performance of Buildings Group at Lawrence Berkeley National Laboratory in 1994 can be used to seal the existing ductwork after cleaning. This technology internally seals leaks in air distribution ducts by injecting a fog of aerosolized sealant particles into a pressurized duct system.

ENERGY MANAGEMENT SYSTEMS
EMS is required for all new projects to comply with the current codes requirements such as “Fault Detection and Diagnostics” and “Demand Controlled Ventilation”.

VENTILATION
The outdoor air flow rates for ventilation is usually much lower than required by current codes.

Electrical

Existing Electrical Service

Existing electrical panelboards are located in the Electrical Room in Building 3. Existing equipment is in working condition but may be at end of life. Existing equipment may need to be replaced if the building is modernized.

Existing Lighting System

Music shelter lighting system is old and inefficient compared to new lighting fixtures available in the market today. Lighting control is manual switching. Existing lighting system is in working condition but may be at end of life. Existing lighting system may need to be replaced if the building is modernized.

Plumbing

As-built conditions

1. No plumbing except roof drainage, hose bibs and condensate drains and gas for HVAC.
2. Sewer Lines
   a. Existing cast iron soil pipes are more than 40 years old and might have corroded to a point where replacement or lining is necessary.
3. Water systems
   a. We have not received any record drawings to date regarding plumbing upgrades.
   b. Galvanized iron pipes exist in lieu of Type L hard copper pipe inside buildings or existing copper piping is over 30 years old and corroded.
   c. Vacuum breakers or other required backflow prevention assemblies which are required are missing or not functioning at some of the following locations:

i. Hose bibs and sill cocks.
ii. Fire sprinkler systems.
iii. Irrigation systems.

4. Gas Piping:
   a. Gas pipes
      i. Above grade pipes within the building are more than 25 years old and require instrument assisted evaluation and possible replacement.
   b. Gas Valves:
      i. DSA approved seismic gas shut-off valves are missing at regulators and gas meter.
5. Seismic restraints for equipment and piping systems in accordance with applicable codes and guidelines are missing at some locations.

Recommendations

1. Replace all existing galvanized piping with copper.
2. Replacement of existing water heaters with high efficiency direct vent water heaters would be required to meet current standards.
3. Replace all water, waste and vent piping in all restrooms which will get accessibility upgrades.
4. Replace all waste piping above grade.
5. Do a video survey of all below grade waste piping that will be retained. Replace all 4" lines if found to be defective. Smaller lines may be replaced or lined.
6. Lining with cured in place material should be considered for underground or difficult to access sanitary sewer and storm drainage piping in lieu of replacement if there are budget restrictions.
7. Do a video survey of all vent piping that will be retained. Replace if defective.

Fire Sprinklers

No fire sprinklers.

Low Voltage Systems

Existing Fire Alarm System

Existing fire alarm systems for the campus is fully automatic fire alarm system. Existing FATC-MUSIC and FATC-MUSIC-A are located in the Electrical Room 102. Existing fire alarm system is in working condition. The campus does not have emergency voice evacuation speakers to meet current code. A new fire alarm system with voice evacuation system to comply with the latest fire alarm code will be installed if the building is modernized.

Existing Signal System

- Building 4 does not have an IDF.
- There are surface mounted PA speakers in classrooms as well as PA speakers in corridors and on exterior walls of the buildings.
- Existing main telephone equipment is in Building 5. Telephones are in each classroom.

- Existing cable television service via underground TV signal wiring system. Cable television drops are in the classrooms.
- Existing intrusion and CCTV systems provide partial protection and monitoring. There are CCTV cameras at some entrances to the buildings, parking structure, and interior court yards.
- Existing signaling system in the campus are interconnected via a complex, old, and undocumented conduit duct banks and pull boxes. The existing system will stay up and running in other buildings during modernization projects. Existing signaling equipment may need to be replaced if the building is modernized.

Structural

APPROXIMATE DATE OF DESIGN
1975

NUMBER OF STORIES
1

VERTICAL CARRYING SYSTEM
The roof framing consists of plywood sheathing over open web joists and sawn lumber roof joists. Wood-framed load bearing walls provide vertical support for the roof elements.

LATERAL RESISTING SYSTEM
The lateral load resisting system consists of flexible plywood sheathed diaphragms which transfer lateral wind and seismic loads to wood framed, plywood sheathed shear walls.

FOUNDATION SYSTEM
The foundation system consists of slab on grade with continuous walls footings.

Conclusions

Built at the same time as the Cafeteria-Classroom Cluster, this building similarly shows its age both aesthetically and physically.

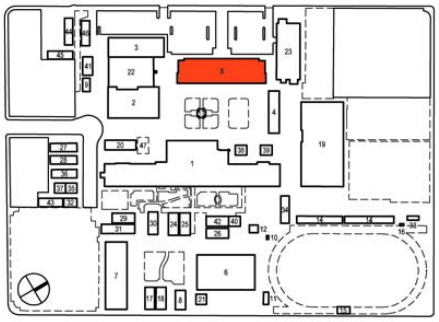
END OF 2.5.4: MUSIC BUILDING.

2.5.5 ADMINISTRATIVE / CLASSROOM BUILDING

BUILDINGS: 5



South End of Building



Campus Location of Building

AB300	FCI
NO	55.1%

Building Number	Design Year	DSA Application	Building Area (SF)	Occupancy Group(s)	Building Structure	Comments
5	1969	A-31314	57,709	A-3, B, E, S-1	Concrete	Original Building
	2007	A03-110395				

Architectural

Overview

Administrative/Classroom Building #5, or "A Building" as the current school administration refers to it, was built in 1972 on what was originally residential property on the opposite side of the former Fickett Street, which had been abandoned several years earlier, from Auditorium and Classroom Building #1. Its position created the central commons "quad" that would be further defined in 1977 by the Cafeteria-Classroom Cluster to the south and the Music Building to the north.

The building is three stories above grade with a partial basement at the south end and a partial fourth floor or "mezzanine" also at the south end. The first floor is exclusively administrative and includes both a parent center and office spaces for the Roosevelt Community Adult School. The second and third floors are primarily educational, though there are storage and support spaces as well.

Educational Facilities

Building #5 contains nineteen (19) classrooms, including eight (8) science labs on the third floor (including two with fume hoods) and three (3) classrooms on the second floor that could be used for science (though only one currently is). Seven (7) other classrooms on the second floor include three (3) large computer labs and one (1) small space that was originally intended to be a teacher workroom. There is also a courtroom/classroom space on the fourth floor or "mezzanine" level, which is sometimes labeled as a "Mock Courtroom" but is in fact an actual functioning juvenile court facility.

Aesthetics

The building is in fair to good architectural condition. Exterior wall surfaces are mostly masonry with limited plaster portions, lightly painted and in mostly good condition. Interior floor finishes show wear, particularly in circulation zones like corridors and stairs, for fair condition. Interior wall and ceiling finishes vary by space but are in generally good condition. Windows are small, narrow, and widely spaced, requiring all interior spaces to rely on artificial lighting.

Large murals are painted on several interior corridor walls (particularly at the first floor) as well as a several exterior wall locations (including above the main entrance on the west façade, to the left of the south entrance, and centered on the east façade). Interior corridor walls and walls in the open stairs at either end of the building also feature "quote" murals.

Narrative for Paint and Repair Scope at Building

Re-paint existing painted interior walls and "hard-lid" ceilings to provide Level 5 finish condition per the Drywall Finishing Council's "Recommended Surface Treatment for Finishing Gypsum Board to Attain a Level 5 Finish" and related documents (see dwfc.org/publications/) and the Gypsum Association's "GA-214 Recommended Levels of Finish for Gypsum Board, Glass Mat and Fiber-Reinforced Gypsum Panels" and related documents (see www.gypsum.org/ga-publications/). Process includes but is not necessarily limited to: preparation of existing painted surfaces, which may require temporary relocation of existing furniture and equipment, removal of existing paint layers, patching of existing surface damage, re-taping joints or

providing new expansion joints, replacement of surfaces with irreparable damage, etc.; application of at least one coat of primer material to prepared surfaces; and application of at least two coats of topcoat finish material to primed surfaces. After painting is complete, clean up areas of drips, runs, overspray, and similar defects to provide clean finished conditions throughout.

Re-paint existing painted exterior walls, canopies, soffits, and similar construction to achieve finish condition substantially equivalent to interior painted walls and ceilings. Follow procedures for interior painted walls and ceilings adapted for exterior conditions. Patching and repair of existing exterior finishes is required throughout. New patched or repaired plaster finishes shall integrate new and existing weatherproofing layers and shall match the existing adjacent finish to the greatest extent that is readily achievable.

Re-paint existing painted exterior and interior doors and door frames to achieve level of finish equivalent to specified wall finish. Do not paint over door hardware, integrated glazing, identification signs, or fire rating labels. Do not paint doors shut or allow wet or tacky paint on adjacent surfaces to come in contact. Existing stained or shellacked doors to remain “as-is” un-painted.

Closely examine existing masonry units and joints for mortar separation, cracking, spalling, or other evidence of damage or failure. Replace damaged masonry units and loose or missing mortar. Re-set and re-point loose but otherwise undamaged masonry units. Re-point damaged mortar that is otherwise still bonded to adjacent masonry units.

After patching, repair and other surface preparation, but prior to painting, replace sealant at perimeters of doors, windows, louvers, grilles, and similar wall/ceiling openings and penetrations at interior and exterior.

Code Compliance

FIRE/LIFE SAFETY

The building appears to qualify as a Type II building due to noncombustible construction throughout, but further analysis is required to determine specific classification. The stairs serving the three primary floors are all open to the corridor at each floor. The only enclosed stairs are between the third floor and the roof (or mezzanine) and between the first floor and the partial basement.

ACCESSIBILITY

Remove identified and prioritized barriers to program accessibility. Provide accessibility improvements as required by the 2010 ADA Standards for Accessible Design, Chapter 11B of the current edition of the California Building Code (Part 2 of Title 24, California Code of Regulations), and the LAUD Office of the Independent Monitor (OIM).

Provide an accessible path of travel from site arrival points to athletic fields and courts. Site arrival points include the existing pedestrian entrance and accessible parking spaces accessed from S. Mathews Street; the existing accessible parking spaces accessed from E. 6th Street; and the new pedestrian entrance, drop-off and accessible parking spaces accessed from E. 4th Street. Scope includes replacement of grates for area drains and covers for pull-boxes, yard boxes, vaults and similar below-grade components, such that no opening dimension exceeds 1/4" in the dominant direction of travel.

Modify or replace casework to provide accessible counter heights at the attendance office and nurse office. Replace one drinking fountain at each story with an accessible "hi-lo" fixture and provide directional signage to this fixture at any other drinking fountains located on the respective story. Modify existing restroom associated with nurse office to make it an accessible unisex restroom.

Mechanical

As-Built conditions

This building is provided with multi-zone and double duct gas electric rooftop packaged units by Seasons 4. They were installed in about 2008 and have substantial service life remaining.

The science classrooms, preparation rooms and chemical storage rooms are not provided with 100% exhaust and no return per current codes.

Recommendations

REPLACEMENT HVAC SYSTEMS

Existing double duct and multi-zone units shall remain. The science classrooms shall be upgraded to current code requirements.

REUSE OF EXISTING DUCTWORK

The aerosol duct sealing technology invented and developed by the Energy Performance of Buildings Group at Lawrence Berkeley National Laboratory in 1994 could be used to seal the existing ductwork after cleaning. This technology internally seals leaks in air distribution ducts by injecting a fog of aerosolized sealant particles into a pressurized duct system.

ENERGY MANAGEMENT SYSTEMS

EMS is required for all new projects to comply with the current codes requirements such as "Fault Detection and Diagnostics" and "Demand Controlled Ventilation".

VENTILATION

The outdoor air flow rates for ventilation is usually much lower than required by current codes.

Electrical

Existing Electrical Service

An existing dedicated main electrical service 277/480V, 4000A, 3-phase, and 4-wires is supplying the campus. The main service enters the campus in the basement of Building 5. Panelboards are located in the hallways. Existing equipment is in working condition but may be at end of life. Existing equipment may need to be replaced if the building is modernized.

Existing Lighting System

Classroom and interior lighting system is old and inefficient compared to new lighting fixtures available in the market today. Lighting control in classrooms is manual switching. Classroom lighting layouts do not comply

with the latest LAUSD Design Criteria. Lighting fixtures in hallways are above conduit. Existing lighting system may need to be replaced if the building is modernized.

Plumbing

As-Built Conditions

1. Existing fixtures do not comply with State water conservation guidelines and standards, including maximum flow as follows:
    a. Water Closets: 1.28 gpf.
    b. Urinals: 1/8 gpf or Non-water type.
    c. Lavatory Faucets: 0.5 gpm.
    d. Showers: 2.0 gpm.
2. Student Restrooms:
    a. The following features to reduce maintenance, conserve water and minimize student tampering do not exist:
        i. Water-saving battery-operated infrared-sensored flush valves or manual valves in high vandalism areas.
        ii. Push-button, ADA-metered, self-closing faucets on lavatories.
        iii. Hose-bib with vacuum breaker in recessed box with locking cover.
        iv. Floor drains with trap primers with floors sloped to drain.
3. Faculty and Visitor Restrooms:
    a. The following features to reduce maintenance and conserve water do not exist:
        i. Floor drains with trap primers with floors sloped to drain.
4. Sewer Lines
    a. Existing cast iron soil pipes are more than 40 years old and might have corroded to a point where replacement or lining is necessary.
5. Science Classrooms, Flexible Classrooms and Prep Room/Work Room Wastes:
    a. All science, chemistry, flexible science classrooms and science prep/workrooms do not have dedicated corrosion resistant chemical waste piping.
6. Water systems
    a. We have not received any record drawings to date regarding plumbing upgrades.
    b. Galvanized iron pipes exist in lieu of Type L hard copper pipe inside buildings or existing copper piping is over 30 years old and corroded.
    c. Water hammer arrestors required for lavatories, sinks, fountains, water closets, urinal headers, and other fixtures or devices with quick-closing valves, such as clothes washers do not exist or are not functioning.
    d. Vacuum breakers or other required backflow prevention assemblies which are required are missing or not functioning at some of the following locations:
        i. Hose bibs and sill cocks.
        ii. Demonstration tables.
        iii. Fire sprinkler systems.
        iv. Irrigation systems.

7. Emergency Shower and Eye Wash:
    a. Emergency shower and eye wash equipment are not installed in the following areas where eye or skin irritants exist and must comply with California Code of Regulations (CCR), Title 8, Section 5162.
        i. Science and teacher's chemistry/laboratory workrooms.
8. Gas Piping:
    a. Gas pipes
        i. Above grade pipes within the building are more than 25 years old and require instrument assisted evaluation and possible replacement.
    b. Gas Valves:
        i. Remotely operated emergency push button controllers for laboratory gas solenoid shut off valves are not provided in the science classrooms.
        ii. DSA approved seismic gas shut-off valves are missing at regulators and gas meter.
9. Seismic restraints for equipment and piping systems in accordance with applicable codes and guidelines are missing at some locations.

Recommendations

1. Replace all existing galvanized piping with copper.
2. Replacement of existing water heaters with high efficiency direct vent water heaters would be required to meet current standards.
3. Replace all water, waste and vent piping in all restrooms which will get accessibility upgrades.
4. Replace all waste piping above grade.
5. Do a video survey of all below grade waste piping that will be retained. Replace all 4" lines if found to be defective. Smaller lines may be replaced or lined.
6. Lining with cured in place material should be considered for underground or difficult to access sanitary sewer and storm drainage piping in lieu of replacement if there are budget restrictions.
7. Do a video survey of all vent piping that will be retained. Replace if defective.
8. The science classrooms, preparation rooms and chemical storage rooms shall be provided with corrosion resistant drainage piping per current codes.
9. The science classrooms, preparation rooms and chemical storage rooms shall be provided with emergency drench showers and eyewashes per current codes.
10. Provide emergency gas shutoff valves to the science classrooms.

Fire Sprinklers

As-Built Conditions

We have not received any record drawings to date regarding fire sprinklers. Based on the FCI the Administration and Classroom building is required to have 99% which is total or near total fire sprinkler system replacement.

Recommendations

Based on recent experience with DSA, partial replacement, repair, expansion or any type of modification of a fire sprinkler system requires verification of system performance through hydraulic calculations. This process entails the modeling of the entire system on an approved fire sprinkler design platform such as SprinkCad and is a major undertaking.

DSA also requires verification and upgrade of fire sprinkler systems designed through the pipe schedule method (which was used before the advent of the hydraulic calculation design software) if there is a major building remodel. This usually results in the removal of the existing system completely and installing a totally new, hydraulically calculated system.

Low Voltage Systems

Existing Fire Alarm System

Existing fire alarm systems for the campus is fully automatic fire alarm system. The existing FACP is in the Storage Room next to the Main Office in Building 5. The FA Annunciator is in the Main Office 162. An existing FATC is in Switchboard B5 on the basement level. Additional FATC are located in Storage 111 on the first level. On the second level, FATC-2 and FATC-2A is located in Custodian and FATC-3 and FATC-3A is located in Storage. The campus does not have emergency voice evacuation speakers to meet current code. A new fire alarm system with voice evacuation system to comply with the latest fire alarm code will be installed if the building is modernized.

Existing Signal System

- Existing MDF is in Custodian 156 on the first floor and Room 206B on the second floor of the Building 5. Existing IDFs are connected to MDF via underground fiber optic cabling system. There are 8-10 data outlets in each classroom installed in surface mounted outlets.
- A new Wireless LAN system has recently been installed. Upgrading this system will not be required in existing buildings to remain.
- Existing Public Address Rack is in the Main Office. There are surface mounted speakers in classrooms as well as speakers in corridors and on exterior walls of the buildings.
- Existing MPOE and main telephone equipment is in Telephone Equipment 152 in Building 5.
- Existing cable television service via underground TV signal wiring system.
- Existing intrusion and CCTV systems provide partial protection and monitoring. There are CCTV cameras at some entrances to the buildings, parking structure, and interior court yards.
- Existing signaling system in the campus are interconnected via a complex, old, and undocumented conduit duct banks and pull boxes. The existing system will stay up and running in other buildings during modernization projects. Existing signaling equipment may need to be replaced if the building is modernized.

Structural

APPROXIMATE DATE OF DESIGN
1969

NUMBER OF STORIES
3

VERTICAL CARRYING SYSTEM
The typical elevated levels consist of concrete slabs supported by concrete beams and girders. The concrete beams and girders transfer vertical loads to load bearing brick and concrete walls and concrete columns.

LATERAL RESISTING SYSTEM
The lateral load resisting system consists of rigid concrete diaphragms which transfer lateral wind and seismic loads to reinforced brick and concrete shear walls.

FOUNDATION SYSTEM
The foundation system consists of slab-on-grade and continuous wall footings at load bearing brick and concrete walls. At column locations, spread footings are utilized.

Conclusions

Building #5 is a large opaque structure that effectively cuts off the center of the campus from public view or easy access. Its opacity extends to its interior, where the small and infrequent windows fail to provide meaningful daylighting or views to the exterior. Most classrooms, including the science classrooms, comfortably exceed minimum space requirements.

END OF 2.5.5: ADMINISTRATIVE/CLASSROOM BUILDING.

2.5.6 INDUSTRIAL ARTS CLUSTER

BUILDINGS: 6 21



Restrooms at Southeast Corner



Campus Location of Cluster

AB300	FCI
YES	54.4%

Building Number	Design Year	DSA Application	Building Area (SF)	Occupancy Group(s)	Building Structure	Comments
6	1966	A-27577	25,546	A-3, B, E, F-1, S-1	Masonry/ Concrete	Technical Arts Building
	1995	A-63192				
21	1975	A-35713	900	S-1	Steel	Auto Service Shed

Architectural

Overview

This cluster of buildings consists of Industrial Arts Building #6 (or "T Building" as the current school administration refers to it) and Auto Service Building #21. While almost all of Building #6 is open and accessible to students as part of the industrial arts and fine arts facilities, Building #21 is apparently only used by campus staff for storage purposes.

Educational Facilities

Building #6 contains several classrooms of varying sizes and uses. The first floor includes one (1) large art/shop classroom space at the northwest; one (1) large classroom space at the northeast that has been carved from one (1) auto shop bay; at least one (1) other auto shop bay; and what was once a large art/shop classroom and a series of offices and storage rooms at the southwest that was subsequently carved into one (1) regular classroom and four (4) smaller classroom spaces.

Building #21 does not contain educational facilities.

Aesthetics

Building #6 is a concrete frame building with masonry infill walls and interior steel columns. Exterior walls are in good to fair condition. Interior finishes are in fair to poor condition.

Building #21 appears to be a modular storage building with corrugated steel siding and roof, all in relatively good condition.

Code Compliance

FIRE/LIFE SAFETY

Industrial Arts Building #6 appears to be a Type II building, though it might be classified as Type III for convenience; it appears to be too large to be considered a Type V building. Auto Service Building #21 is probably of similar classification due to its narrow separation from Building #6.

ACCESSIBILITY

At Building #6, the second floor and the "auto shop" eastern portion of the first floor are only accessible via stairs. Door hardware is a mix of compliant and non-compliant components. Restrooms appear to have been renovated relatively recently but are not fully compliant. Building #21 could not be reviewed.

Mechanical

As-Built conditions

This building was originally provided with hot water unit ventilators. The hot water was originally generated with steam form the central plant. At present, gas fired heating hot water boilers have been installed to replace the steam converters.

Some areas of this building are provided with split system heat pumps of both ducted and ductless type.

The majority of the exhaust fans are not functioning.

The 15 year expected life of all the cooling systems has been exceeded. Also, these units use Refrigerant-22 which has been totally phased out since 2010.

Recommendations

REPLACEMENT HVAC SYSTEMS

The wall mounted heat pumps, split system heat pumps and unit heaters should be replaced with Variable Refrigerant Flow Systems to reduce the current excessive sound levels. The work would be minimally invasive and the space requirements and weight will be also minimal.

REUSE OF EXISTING DUCTWORK

The aerosol duct sealing technology invented and developed by the Energy Performance of Buildings Group at Lawrence Berkeley National Laboratory in 1994 can be used to seal the existing ductwork after cleaning. This technology internally seals leaks in air distribution ducts by injecting a fog of aerosolized sealant particles into a pressurized duct system.

ENERGY MANAGEMENT SYSTEMS

EMS is required for all new projects to comply with the current codes requirements such as “Fault Detection and Diagnostics” and “Demand Controlled Ventilation”.

VENTILATION

The outdoor air flow rates for ventilation is usually much lower than required by current codes.

Electrical

Existing Electrical Service

Building 6 has panelboards located in the Teacher’s Lounge Workroom 20 and Electrical Mechanical Equipment 18 on the first floor and Storage on the second floor. Existing equipment is in working condition but may be at end of life. Existing equipment may need to be replaced if the building is modernized.

Existing Lighting System

Interior lighting system is old and inefficient compared to new lighting fixtures available in the market today. Lighting control is manual switching. Existing lighting is in working condition but may be at end of life. Existing lighting system may need to be replaced if the building is modernized.

Plumbing

As-Built Conditions

1. Existing fixtures do not comply with State water conservation guidelines and standards, including maximum flow as follows:

a. Water Closets: 1.28 gpf.
b. Urinals: 1/8 gpf or Non-water type.
c. Lavatory Faucets: 0.5 gpm.

2. Student Restrooms:
   a. The following features to reduce maintenance, conserve water and minimize student tampering do not exist:
      i. Water-saving battery-operated infrared-sensored flush valves or manual valves in high vandalism areas.
      ii. Push-button, ADA-metered, self-closing faucets on lavatories.
      iii. Hose-bib with vacuum breaker in recessed box with locking cover.
      iv. Floor drains with trap primers with floors sloped to drain.
3. Faculty Restrooms:
   a. The following features to reduce maintenance and conserve water do not exist:
      i. Floor drains with trap primers with floors sloped to drain.
4. Sewer Lines
   a. Existing cast iron soil pipes are more than 40 years old and might have corroded to a point where replacement or lining is necessary.
5. Other Special Wastewater Provisions:
   a. Some areas requiring special pretreatment of wastewater before discharge into the City sewer system are not compliant:
      i. Ceramics Room sinks: Solids Interceptor.
6. Water systems
   a. We have not received any record drawings to date regarding plumbing upgrades.
   b. Galvanized iron pipes exist in lieu of Type L hard copper pipe inside buildings or existing copper piping is over 30 years old and corroded.
   c. Water hammer arrestors required for lavatories, sinks, fountains, water closets, urinal headers, and other fixtures or devices with quick-closing valves, such as clothes washers do not exist or are not functioning.
   d. Vacuum breakers or other required backflow prevention assemblies which are required are missing or not functioning at some of the following locations:
      i. Hose bibs and sill cocks.
      ii. Fire sprinkler systems.
      iii. Irrigation systems.
7. Emergency Shower and Eye Wash:
   a. Emergency shower and eye wash equipment are not installed in the following areas where eye or skin irritants exist and must comply with California Code of Regulations (CCR), Title 8, Section 5162.
      i. Supplies storage area.
8. Gas Piping:
   a. Gas pipes
      i. Above grade pipes within the building are more than 25 years old and require instrument assisted evaluation and possible replacement.

b. Gas Valves:
   i. DSA approved seismic gas shut-off valves are missing at regulators and gas meter.

9. Seismic restraints for equipment and piping systems in accordance with applicable codes and guidelines are missing at some locations.

Recommendations

1. Replace all existing galvanized piping with copper.
2. Replacement of existing water heaters with high efficiency direct vent water heaters would be required to meet current standards.
3. Replace all water, waste and vent piping in all restrooms which will get accessibility upgrades.
4. Replace all waste piping above grade.
5. Do a video survey of all below grade waste piping that will be retained. Replace all 4" lines if found to be defective. Smaller lines may be replaced or lined.
6. Lining with cured in place material should be considered for underground or difficult to access sanitary sewer and storm drainage piping in lieu of replacement if there are budget restrictions.
7. Do a video survey of all vent piping that will be retained. Replace if defective.

Fire Sprinklers

As-Built Conditions

We have not received any record drawings to date regarding fire sprinklers. Based on the FCI the Industrial Arts Building is required to have total fire sprinkler system replacement.

Recommendations

Based on recent experience with DSA, partial replacement, repair, expansion or any type of modification of a fire sprinkler system requires verification of system performance through hydraulic calculations. This process entails the modeling of the entire system on an approved fire sprinkler design platform such as SprinkCad and is a major undertaking.

DSA also requires verification and upgrade of fire sprinkler systems designed through the pipe schedule method (which was used before the advent of the hydraulic calculation design software) if there is a major building remodel. This usually results in the removal of the existing system completely and installing a totally new, hydraulically calculated system.

Low Voltage Systems

Existing Fire Alarm System

Existing fire alarm systems for the campus is fully automatic fire alarm system. The existing FACP-4 is in the Teacher's Lounge Work Room 20 in Building 6. Existing FATC-2 is located in Classroom on the second floor. The campus does not have emergency voice evacuation speakers to meet current code. A new fire alarm system with voice evacuation system to comply with the latest fire alarm code will be installed if the building is modernized.

Existing Signal System

- Existing IDF-ITC is located in the Teacher's Lounge Work Room of Building 6. Existing IDFs are connected to MDF via underground fiber optic cabling system.
- A new Wireless LAN system has recently been installed. Upgrading this system will not be required in existing buildings to remain.
- There are surface mounted PA speakers in classrooms as well as PA speakers in corridors and on exterior walls of the buildings.
- Existing main telephone equipment is in Building 5. Telephones are in each classroom.
- Existing cable television service via underground TV signal wiring system. Cable television drops are in the classrooms.
- Existing intrusion and CCTV systems provide partial protection and monitoring. There are CCTV cameras at some entrances to the buildings, parking structure, and interior court yards.
- Existing signaling system in the campus are interconnected via a complex, old, and undocumented conduit duct banks and pull boxes. The existing system will stay up and running in other buildings during modernization projects. Existing signaling equipment may need to be replaced if the building is modernized.

Structural

Each building in this cluster features a different structural system.

Building 6 – Industrial Arts Building

APPROXIMATE DATE OF DESIGN
1966

NUMBER OF STORIES
2

VERTICAL CARRYING SYSTEM
The vertical load carrying system of the low roof consists of composite roof deck on top of wood roof joists and steel beams, which transfer vertical loads to tapered steel girders. The steel girders are supported by steel columns, concrete pilasters and load bearing masonry walls.

The vertical load carrying system of the high roof consists of plywood sheathing supported by wood roof joists and steel beams, which span to tapered steel girders. The steel girders are supported by steel columns, concrete pilasters and load bearing masonry walls.

The vertical load carrying system of the 2nd floor consist of an elevated concrete slab supported with castellated steel beams, which transfer vertical loads to steel columns, concrete pilasters and load bearing masonry walls.

LATERAL RESISTING SYSTEM
The lateral load resisting system for the building consists of the flexible roof diaphragms that deliver lateral wind/seismic forces to reinforced masonry walls. The rigid diaphragm at the second level delivers lateral wind/seismic forces to reinforced masonry walls.

FOUNDATION SYSTEM
The building walls are founded with continuous wall footings and columns are founded with isolated spread footings.

Building 21 – Auto Service Shed

APPROXIMATE DATE OF DESIGN
1972

NUMBER OF STORIES
1

VERTICAL CARRYING SYSTEM
The roof framing consists of corrugated steel roofing over steel beams and girders. The steel beams and girders transfer vertical loads to steel columns.

LATERAL RESISTING SYSTEM
The lateral load resisting system appears to consist of a flexible metal deck diaphragm which transfers lateral wind and seismic loads to cantilevered steel columns.

FOUNDATION SYSTEM
The foundation system consists of slab-on-grade with caissons.

Conclusions

Industrial Arts Building #6 probably has many more years of adequate service left, despite the lack of accessibility for its second floor. However, its campus location prevents the Stadium Cluster from expanding to provide regulation athletic facilities. In addition, a new “industrial and fine arts” facility with modern amenities would probably serve the campus better and longer than yet another remodel of this building, which is almost 50 years old, and could be located to allow proper sizing of the adjacent Stadium Cluster.

Auto Service Building #21 does not provide a vital service to the campus and could be removed, with or without replacement.

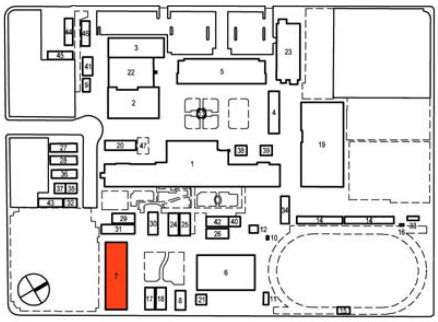
END OF 2.5.6: INDUSTRIAL ARTS CLUSTER.

2.5.7 CLASSROOM BUILDING

BUILDINGS: (7)



North Façade of Building



Campus Location of Building

AB300	FCI
NO	50.2%

Building Number	Design Year	DSA Application	Building Area (SF)	Occupancy Group(s)	Building Structure	Comments
7	1936	A-1639	26,097	B, E	Concrete	Original Building
	1974	A-37515				
	1995	A-63192				
	1998	A03-100523				S&T Fire Alarm
	2007	A03-111456				Fire Alarm Mod

Architectural

Overview

Classroom Building #7, or “C Building” as the current school administration refers to it, is the second oldest building still present on the Roosevelt High School campus. The original 1937 design was somewhat utilitarian and lacked almost any kind of exterior ornamentation.

Educational Facilities

Building #7 contains six (6) classrooms on the first floor and nine (9) classrooms on the second floor; however, two additional spaces on the first floor that are currently used as administrative offices were originally classrooms and could be re-converted, bringing the building total to seventeen (17) classrooms.

Aesthetics

The building is in fair architectural condition. Exterior wall surfaces are heavily repainted but in otherwise good condition. Interior floor finishes show wear, particularly in circulation zones like corridors and stairs. Interior wall and ceiling finishes vary by space but are in generally good condition. Windows are old single-pane glazed, either wood or narrow steel framed, and many have been removed or altered.

Large murals are painted on several interior stair walls as well as a few exterior wall locations.

Code Compliance

FIRE/LIFE SAFETY

The structural system of the building includes wood floors and joists under the classrooms on either side of the concrete-framed central corridor, so the “highest” possible classification under current building code would be Type IIIA. It appears that this construction type would be sufficient for the existing building height and building areas to comply with current building codes.

ACCESSIBILITY

The west building entrance is at grade but features a non-compliant threshold height, while the east building entrance requires the use of stairs. Existing stairs at interior and exterior locations do not meet current accessibility requirements, particularly for handrails. There is no elevator. All restrooms require the use of stairs for access, and the sanitary facilities themselves are generally too small to easily support remodeling for accessibility.

Mechanical

As-Built Conditions

The classrooms are provided with wall mounted heat pumps by Bard or Marvair.

The air distribution, ventilation, air filtration and acoustical performance of all the classroom HVAC systems for this building are poor.

The existing classroom systems have exceeded their expected life.

The HVAC units use Refrigerant-22 which has been totally phased out since 2010.

Recommendations

REPLACEMENT HVAC SYSTEMS

The classrooms with wall mounted heat pumps and unit ventilators should be replaced with Variable Refrigerant Flow Systems to reduce the current excessive sound levels. The work will be minimally invasive and the space requirements and weight will be also minimal.

REUSE OF EXISTING DUCTWORK

The aerosol duct sealing technology invented and developed by the Energy Performance of Buildings Group at Lawrence Berkeley National Laboratory in 1994 can be used to seal the existing ductwork after cleaning. This technology internally seals leaks in air distribution ducts by injecting a fog of aerosolized sealant particles into a pressurized duct system.

ENERGY MANAGEMENT SYSTEMS

EMS is required for all new projects to comply with the current codes requirements such as “Fault Detection and Diagnostics” and “Demand Controlled Ventilation”.

VENTILATION

The outdoor air flow rates for ventilation is usually much lower than required by current codes.

Electrical

Existing Electrical Service

Building 7 does not have an Electrical Room. Switchboard A and panel boards are located in the corridor. Existing equipment is in working condition but may be at end of life. Existing equipment may need to be replaced if the building is modernized.

Existing Lighting System

Classroom and interior lighting system is old and inefficient compared to new lighting fixtures available in the market today. Lighting control in classrooms is manual switching. Classroom lighting layouts do not comply with the latest LAUSD Design Criteria. Existing lighting system is in working condition but may be at end of life. Existing lighting system may need to be replaced if the building is modernized.

Plumbing

As-Built Conditions

1. Existing fixtures do not comply with State water conservation guidelines and standards, including maximum flow as follows:
   a. Water Closets: 1.28 gpf.
   b. Urinals: 1/8 gpf or Non-water type.

c. Lavatory Faucets: 0.5 gpm.

2. Student Restrooms:
   a. The following features to reduce maintenance, conserve water and minimize student tampering do not exist:
      i. Water-saving battery-operated infrared-sensored flush valves or manual valves in high vandalism areas.
      ii. Push-button, ADA-metered, self-closing faucets on lavatories.
      iii. Hose-bib with vacuum breaker in recessed box with locking cover.
      iv. Floor drains with trap primers with floors sloped to drain.
3. Faculty and Visitor Restrooms:
   a. The following features to reduce maintenance and conserve water do not exist:
      i. Floor drains with trap primers with floors sloped to drain.
4. Sewer Lines
   a. Existing cast iron soil pipes are more than 50 years old and might have corroded to a point where replacement or lining is necessary.
5. Water systems
   a. We have not received any record drawings to date regarding plumbing upgrades.
   b. Galvanized iron pipes exist in lieu of Type L hard copper pipe inside buildings or existing copper piping is over 30 years old and corroded.
   c. Water hammer arrestors required for lavatories, sinks, fountains, water closets, urinal headers, and other fixtures or devices with quick-closing valves, such as clothes washers do not exist or are not functioning.
   d. Vacuum breakers or other required backflow prevention assemblies which are required are missing or not functioning at some of the following locations:
      i. Hose bibs and sill cocks.
      ii. Fire sprinkler systems.
      iii. Irrigation systems.
6. Gas Piping:
   a. Gas pipes
      i. Above grade pipes within the building are more than 25 years old and require instrument assisted evaluation and possible replacement.
   b. Gas Valves:
      i. DSA approved seismic gas shut-off valves are missing at regulators and gas meter.
7. Seismic restraints for equipment and piping systems in accordance with applicable codes and guidelines are missing at some locations.

Recommendations

1. Replace all existing galvanized piping with copper.
2. Replacement of existing water heaters with high efficiency direct vent water heaters would be required to meet current standards.
3. Replace all water, waste and vent piping in all restrooms which will get accessibility upgrades.
4. Replace all waste piping above grade.

5. Do a video survey of all below grade waste piping that will be retained. Replace all 4" lines if found to be defective. Smaller lines may be replaced or lined.
6. Lining with cured in place material should be considered for underground or difficult to access sanitary sewer and storm drainage piping in lieu of replacement if there are budget restrictions.
7. Do a video survey of all vent piping that will be retained. Replace if defective.
8. For buildings without showers, science laboratories, kitchens and others special areas with higher hot water demand and just require hot water for faculty restrooms and custodian rooms, instantaneous electric water heaters should be considered for the faculty restroom lavatories and a gas tankless hot water for the custodian rooms. There will be substantial initial cost savings through not having to install insulated hot water supply and return piping and circulating pumps. There will also be substantial energy savings from eliminating the standby losses from the water heater storage tanks, supply and return piping and circulating pumps. The instantaneous point of use water heaters only heat the quantity of water that is actually used to the desired temperature. Stored hot water is required to be heated to 140^0F and stored at 140^0F to prevent the growth of Legionella Bacteria. This has to be mixed with cold water to 110^0F before distribution. There is substantial energy loss in doing this. Modern storage water heaters have electric blowers for forced draft combustion and electronic controls. Other high maintenance items such as mixing valves, water temperature limiting control and flue condensate neutralizers are also required. The low flow 0.4 GPM faucets do not get hot water before emptying the cold water in the supply line in a conventional circulated hot water system. 10 Feet of ½" copper pipe holds about 0.2 gallons of water. If the mixing ratio is 5 parts hot water of 110^0F with 1 part cold water of 50^0F to get 100^0F hot water from the faucet, the time delay will be about 36 seconds and nearly a quarter gallon of water will be wasted at each use of the lavatory faucet. A urinal uses only one eighth of a gallon per flush. An instantaneous hot water heater has usually only a few feet of pipe between it and the faucet.

Fire Sprinklers

As-Built Conditions

We have not received any record drawings to date regarding fire sprinklers. Based on the FCI the classroom building is required to have total or near total fire sprinkler system replacement.

Recommendations

Based on recent experience with DSA, partial replacement, repair, expansion or any type of modification of a fire sprinkler system requires verification of system performance through hydraulic calculations. This process entails the modeling of the entire system on an approved fire sprinkler design platform such as SprinkCad and is a major undertaking.

DSA also requires verification and upgrade of fire sprinkler systems designed through the pipe schedule method (which was used before the advent of the hydraulic calculation design software) if there is a major building remodel. This usually results in the removal of the existing system completely and installing a totally new, hydraulically calculated system.

Low Voltage Systems

Existing Fire Alarm System

Existing fire alarm systems for the campus is fully automatic fire alarm system. Existing FACP and FATC-C are located in the Office on the first floor. The fire alarm system is in working condition. The campus does not have emergency voice evacuation speakers to meet current code. A new fire alarm system with voice evacuation system to comply with the latest fire alarm code will be installed if the building is modernized.

Existing Signal System

- Existing IDF-ICC is located in the Storage Room of Building 7. Existing IDFs are connected to MDF via underground fiber optic cabling system. There are 8-10 data outlets in each classroom installed in surface mounted outlets.
- A new Wireless LAN system has recently been installed. Upgrading this system will not be required in existing buildings to remain.
- There are surface mounted PA speakers in classrooms as well as PA speakers in corridors and on exterior walls of the buildings.
- Existing main telephone equipment is in Building 5. Telephones are in each classroom.
- Existing cable television service via underground TV signal wiring system. Cable television drops are in the classrooms.
- Existing intrusion and CCTV systems provide partial protection and monitoring. There are CCTV cameras at some entrances to the buildings, parking structure, and interior court yards.
- Existing signaling system in the campus are interconnected via a complex, old, and undocumented conduit duct banks and pull boxes. The existing system will stay up and running in other buildings during modernization projects. Existing signaling equipment may need to be replaced if the building is modernized.

Structural

APPROXIMATE DATE OF DESIGN
1936

NUMBER OF STORIES
2

VERTICAL CARRYING SYSTEM
The typical elevated levels consist of concrete slabs supported by concrete beams and girders. The concrete beams and girders transfer vertical loads to load bearing concrete walls.

LATERAL RESISTING SYSTEM
The lateral load resisting system consists of rigid concrete diaphragms which transfer lateral wind and seismic loads to reinforced concrete shear walls.

FOUNDATION SYSTEM

The foundation system consists of slab on grade with continuous walls footings.

Conclusions

Even though it is almost 80 years old, Building #7 remains functional and in generally fair to good condition. However, several classrooms are on the border of compliance with minimum acceptable area. Furthermore, all existing restrooms and the entire second floor are not accessible to persons with disabilities. Building #7 could provide some use as temporary classrooms while other structures on the campus are built or remodeled, but its long-term viability as a classroom building (or for any student use) is limited.

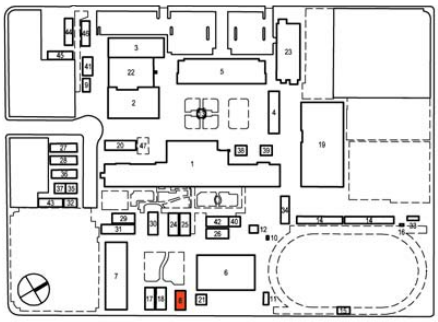
END OF 2.5.7: CLASSROOM BUILDING.

2.5.8 INSTRUMENTAL MUSIC BUILDING

BUILDINGS: 8



Mural on West End of Building



Campus Location of Building

AB300	FCI
NO	50.3%

Building Number	Design Year	DSA Application	Building Area (SF)	Occupancy Group(s)	Building Structure	Comments
8	1959	A-18534	1,800	E	Wood Frame	Original Building
	1995	A-63192				

Architectural

Overview

Built in the late 1950s, Instrumental Music Building #8 consists of a single high volume mass with a low covered walkway along the north side. The building is used for instrumental music and includes eleven (11) upright pianos and two (2) baby grand pianos, plus unknown numbers and types of other instruments in secure interior storage unit along the west end of the main space.

Educational Facilities

Building #8 contains one (1) music classroom with four (4) small practice rooms along the east end of the main space.

Aesthetics

Instrumental Music is in generally poor condition. Exterior walls are heavily painted stucco in fair to poor condition with evidence of graffiti and physical vandalism. Interior walls and ceilings feature adhered acoustic tiles, many of which appear to have failed or are failing. Floor finishes show wear from regular traffic by heavy musical instruments. Small windows provide light to the practice rooms, which in turn provide some "borrowed light" to the main space; however, artificial lighting is necessary for the main space to be usable. Doors and door hardware are in poor condition.

A large "shield" mural is painted on the west exterior wall.

Code Compliance

FIRE/LIFE SAFETY

No door handle provided on one of the two doors into the building. Exterior circulation creates a *de facto* dead-end condition at the east end of the covered walkway.

ACCESSIBILITY

Building and room signage are not compliant. Door hardware is non-compliant throughout.

Mechanical

As-built conditions

The building is provided with split system heat pumps.

The air distribution, ventilation, air filtration and acoustical performance of all the HVAC systems for this building are poor.

The existing systems have exceeded their expected life.

The HVAC units use Refrigerant-22 which has been totally phased out since 2010.

Recommendations

REPLACEMENT HVAC SYSTEMS

The existing split systems should be replaced with Variable Refrigerant Flow Systems to reduce the current sound levels. The work will be minimally invasive and the space requirements and weight will be also minimal.

REUSE OF EXISTING DUCTWORK

The aerosol duct sealing technology invented and developed by the Energy Performance of Buildings Group at Lawrence Berkeley National Laboratory in 1994 can be used to seal the existing ductwork after cleaning. This technology internally seals leaks in air distribution ducts by injecting a fog of aerosolized sealant particles into a pressurized duct system.

ENERGY MANAGEMENT SYSTEMS

EMS is required for all new projects to comply with the current codes requirements such as “Fault Detection and Diagnostics” and “Demand Controlled Ventilation”.

VENTILATION

The outdoor air flow rates for ventilation is usually much lower than required by current codes.

Electrical

Existing Electrical Service

Building 8 does not have an Electrical Room. Panel boards are located in the Instrument Music Room S111. Existing equipment is in working condition but may be at end of life. Existing equipment may need to be replaced if the building is modernized.

Existing Lighting System

Classroom and interior lighting system is old and inefficient compared to new lighting fixtures available in the market today. Lighting control in classrooms is manual switching. Classroom lighting layouts do not comply with the latest LAUSD Design Criteria. Existing lighting system is in working condition but may be at end of life. Existing lighting system may need to be replaced if the building is modernized.

Plumbing

As-Built Conditions

1. No plumbing except roof drainage, hose bibs and condensate drains and gas for HVAC.
2. Sewer Lines
   a. Existing cast iron soil pipes are more than 40 years old and might have corroded to a point where replacement or lining is necessary.
3. Water systems
   a. We have not received any record drawings to date regarding plumbing upgrades.

b. Galvanized iron pipes exist in lieu of Type L hard copper pipe inside buildings or existing copper piping is over 30 years old and corroded.
c. Water hammer arrestors required for lavatories, sinks, fountains, water closets, urinal headers, and other fixtures or devices with quick-closing valves, such as clothes washers do not exist or are not functioning.
d. Vacuum breakers or other required backflow prevention assemblies which are required are missing or not functioning at some of the following locations:
    i. Hose bibs and sill cocks.
    ii. Fire sprinkler systems.
    iii. Irrigation systems.

4. Gas Piping:
    a. Gas pipes
        i. Above grade pipes within the building are more than 25 years old and require instrument assisted evaluation and possible replacement.
    b. Gas Valves:
        i. DSA approved seismic gas shut-off valves are missing at regulators and gas meter.
5. Seismic restraints for equipment and piping systems in accordance with applicable codes and guidelines are missing at some locations.

Recommendations

1. Replace all existing galvanized piping with copper.
2. Replacement of existing water heaters with high efficiency direct vent water heaters would be required to meet current standards.
3. Replace all water, waste and vent piping in all restrooms which will get accessibility upgrades.
4. Replace all waste piping above grade.
5. Do a video survey of all below grade waste piping that will be retained. Replace all 4" lines if found to be defective. Smaller lines may be replaced or lined.
6. Lining with cured in place material should be considered for underground or difficult to access sanitary sewer and storm drainage piping in lieu of replacement if there are budget restrictions.
7. Do a video survey of all vent piping that will be retained. Replace if defective.

Fire Sprinklers

As-Built Conditions

No fire sprinklers.

Low Voltage Systems

Existing Fire Alarm System

Existing fire alarm systems for the campus is fully automatic fire alarm system. The FATC-MUSIC B is located in the Instrumental Music Room S111. The campus does not have emergency voice evacuation speakers to

meet current code. A new fire alarm system with voice evacuation system to comply with the latest fire alarm code will be installed if the building is modernized.

Existing Signal System

- There is no IDF in Building 8.
- A new Wireless LAN system has recently been installed. Upgrading this system will not be required in existing buildings to remain.
- There are surface mounted PA speakers in classrooms as well as PA speakers in corridors and on exterior walls of the buildings.
- Existing main telephone equipment is in Building 5. Telephones are in each classroom.
- Existing cable television service via underground TV signal wiring system. Cable television drops are in the classrooms.
- Existing intrusion and CCTV systems provide partial protection and monitoring. There are CCTV cameras at some entrances to the buildings, parking structure, and interior court yards.
- Existing signaling system in the campus are interconnected via a complex, old, and undocumented conduit duct banks and pull boxes. The existing system will stay up and running in other buildings during modernization projects. Existing signaling equipment may need to be replaced if the building is modernized.

Structural

APPROXIMATE DATE OF DESIGN
1959

NUMBER OF STORIES
1

VERTICAL CARRYING SYSTEM
Wood roof sheathing over wood joists supported by wood frame walls likely sheathed with stucco/plaster.

LATERAL RESISTING SYSTEM
Vertical lateral bracing appears to be provided by wood frame shear walls.

FOUNDATION SYSTEM
Assume conventional shallow foundations with continuous wall footings.

Conclusions

The building is old and showing its age, both functionally and aesthetically. It is a potential candidate for replacement with new construction.

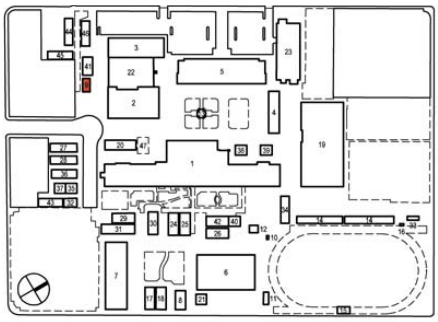
END OF 2.5.8: INSTRUMENTAL MUSIC BUILDING.

2.5.9 GARAGE BUILDING

BUILDINGS: 9



Garage Building (in distance)



Campus Location of Building

AB300	FCI
NO	61.0%

Building Number	Design Year	DSA Application	Building Area (SF)	Occupancy Group(s)	Building Structure	Comments
9	1969	A-31314	889	S-2	Wood Frame	Original Building

Architectural

Overview

Garage Building #9 was built under the same application as Administrative/Classroom Building #5, but that is the only apparent relationship between the buildings. This one-story stucco building features two large lift-up garage doors and a single pedestrian exit door. Observations indicate that it is likely used for storage and vehicle maintenance.

Educational Facilities

There are no educational facilities in this building.

Aesthetics

Building #9 is in fair to poor condition. Interior spaces were not accessible for observation, but exterior surfaces show age and wear.

The building has no significant aesthetic features.

Code Compliance

FIRE/LIFE SAFETY

No access to interior of building. Lift-up garage doors, which are padlocked from exterior, are generally considered more hazardous than roll-up garage doors.

ACCESSIBILITY

No access to interior of building. Door hardware appears to be non-compliant.

Mechanical

No mechanical systems.

Electrical

Existing Electrical Service

Building 9 does not have an Electrical Room. Panel boards are located in the Building 9. Existing equipment is in working condition but may be at end of life. Existing equipment may need to be replaced if the building is modernized.

Existing Lighting System

Lighting system is old and inefficient compared to new lighting fixtures available in the market today. Lighting control in classrooms is manual switching. Existing lighting system is in working condition but may be at end of life. Existing lighting system may need to be replaced if the building is modernized.

Plumbing

No plumbing systems.

Fire Sprinklers

No fire sprinklers.

Low Voltage Systems

Existing Fire Alarm System

Existing fire alarm systems for the campus is fully automatic fire alarm system. Existing FATC is located in the Garage. The fire alarm system is in working condition. The campus does not have emergency voice evacuation speakers to meet current code. A new fire alarm system with voice evacuation system to comply with the latest fire alarm code will be installed if the building is modernized.

Existing Signal System

- There is no IDF in the Garage.
- A new Wireless LAN system has recently been installed. Upgrading this system will not be required in existing buildings to remain.
- There are surface mounted PA speakers in classrooms as well as PA speakers in corridors and on exterior walls of the buildings.
- Existing main telephone equipment is in Building 5. Telephones are in each classroom.
- Existing cable television service via underground TV signal wiring system. Cable television drops are in the classrooms.
- Existing signaling system in the campus are interconnected via a complex, old, and undocumented conduit duct banks and pull boxes. The existing system will stay up and running in other buildings during modernization projects. Existing signaling equipment may need to be replaced if the building is modernized.

Structural

APPROXIMATE DATE OF DESIGN
1972

NUMBER OF STORIES
1

VERTICAL CARRYING SYSTEM
Wood roof sheathing over wood joists supported by wood frame walls likely sheathed with stucco/plaster.

LATERAL RESISTING SYSTEM
Assume conventional shallow foundations with continuous wall footings.

FOUNDATION SYSTEM
Vertical lateral bracing appears to be provided by wood frame shear walls.

Conclusions

The present location of Building #9 places it adjacent to unsecured trash bins and relatively easy student access from the adjacent Cafeteria-Classroom Cluster (Buildings #2, #3 and #22). Given the age and condition of the building, its apparent uses would be better supported by combination with the Plant Manager Cluster (Buildings #20 and #47) at a location near the edge of campus.

END OF 2.5.9: GARAGE BUILDING.

2.5.10 STADIUM CLUSTER

BUILDINGS: (10) (11) (12) (14) (15) (16) (33)



Track and Football Stadium from south end



Campus Location of Cluster

AB300	FCI
NO	99.7%

Building Number	Design Year	DSA Application	Building Area (SF)	Occupancy Group(s)	Building Structure	Comments
10	1953?			H	Concrete	Flammable Storage Building
11	1958	A-16647		A-5	Wood Frame	Field Sanitary Building
	1998	A03-100523				S&T Fire Alarm
	2007	A03-111456				Fire Alarm Mod
12	1941?			A-2	Wood Frame	Equipment Field Storage
14	2008	A03-110484		A-5	Steel/ Aluminum	Home Bleachers
15	2008	A03-110484		A-5	Steel/ Aluminum	Visitor Bleachers
16	1949	A-7320		A-5	Concrete	Field Light Controls
	2002	A03-106310				
33	1975			A-5	Wood Frame	Sanitary Portable J-308

Architectural

Overview

The Stadium Cluster consists of a series of small buildings and open structures constructed over more than 70 years: The Equipment Field Storage Building #12 is the oldest, built circa 1941; and the Home Bleachers Building #14 (north and south) are the newest, built circa 2008. Even though it is listed as Building #15, the Visitor Bleacher is actually a set of portable seating/risers.

Educational Facilities

Other than the athletic functions of the field and track, which are not buildings, there are no educational facilities in this cluster.

Aesthetics

With the exception of the relatively new Home Bleachers, the permanent buildings in the Stadium Cluster are all over 50 years old. Flammable Storage Building #10 is in good condition, mostly due to its small size, infrequent use, and concrete “bunker” style design. Field Sanitary Building #11 and Equipment Field Storage Building #12 are in fair to poor condition, the latter due to age and the former due to relatively inexpensive construction. Home Bleachers #14 appear to be in good condition. Field Light Controls Building #16 was renovated in 2002 and assumed to be in fair to good condition. The Sanitary Portable Building #33 is assumed to be in fair to poor condition based on its age and function.

Code Compliance

FIRE/LIFE SAFETY

Most of the buildings in the Stadium Cluster are likely classified as Type V construction for convenience, with the exception of Building #10 which could be Type I or Type II. Building #12 does not appear to have a pedestrian egress door, and the lift-up garage door present is padlocked.

ACCESSIBILITY

Normally occupied Buildings #11 and #14 provide accessible path of travel from or at grade, respectively. Access to the Sanitary Portable could not be determined due to lack of access.

Mechanical

Exhaust fans for Building 11 Field Sanitary Building needs to be replaced.

Electrical

Existing Electrical Service

Existing electrical equipment is in working condition but may be at end of life. Existing equipment may need to be replaced if the building is modernized.

Existing Lighting System

Lighting system is old and inefficient compared to new lighting fixtures available in the market today. Existing lighting system is in working condition but may be at end of life. Existing lighting system may need to be replaced if the building is modernized.

Plumbing

As-Built Conditions

1. Existing fixtures for Building 11 Field Sanitary Building do not comply with State water conservation guidelines and standards, including maximum flow as follows:
    a. Water Closets: 1.28 gpf.
    b. Urinals: 1/8 gpf or Non-water type.
    c. Lavatory Faucets: 0.5 gpm.
2. Student Restrooms:
    a. The following features to reduce maintenance, conserve water and minimize student tampering do not exist:
        i. Water-saving battery-operated infrared-sensored flush valves or manual valves in high vandalism areas.
        ii. Push-button, ADA-metered, self-closing faucets on lavatories.
        iii. Hose-bib with vacuum breaker in recessed box with locking cover.
        iv. Floor drains with trap primers with floors sloped to drain.
3. Faculty Restrooms:
    a. The following features to reduce maintenance and conserve water do not exist:
    1. Floor drains with trap primers with floors sloped to drain.
4. Sewer Lines
    a. Existing cast iron soil pipes are more than 40 years old and might have corroded to a point where replacement or lining is necessary.
5. Water systems
    a. We have not received any record drawings to date regarding plumbing upgrades.
    b. Galvanized iron pipes exist in lieu of Type L hard copper pipe inside buildings or existing copper piping is over 30 years old and corroded.
    c. Water hammer arrestors required for lavatories, sinks, fountains, water closets, urinal headers, and other fixtures or devices with quick-closing valves, such as clothes washers do not exist or are not functioning.
    d. Vacuum breakers or other required backflow prevention assemblies which are required are missing or not functioning at some of the following locations:
        i. Hose bibs and sill cocks.
        ii. Fire sprinkler systems.
        iii. Irrigation systems.

Recommendations

1. Replace all existing galvanized piping with copper.

2. Replacement of existing water heaters with high efficiency direct vent water heaters would be required to meet current standards.
3. Replace all water, waste and vent piping in all restrooms which will get accessibility upgrades.
4. Replace all waste piping above grade.
5. Do a video survey of all below grade waste piping that will be retained. Replace all 4" lines if found to be defective. Smaller lines may be replaced or lined.
6. Lining with cured in place material should be considered for underground or difficult to access sanitary sewer and storm drainage piping in lieu of replacement if there are budget restrictions.
7. Do a video survey of all vent piping that will be retained. Replace if defective.

Fire Sprinklers

No fire protection systems.

Low Voltage Systems

Existing Fire Alarm System

Existing fire alarm systems for the campus is fully automatic fire alarm system. The fire alarm system is in working condition. The campus does not have emergency voice evacuation speakers to meet current code. A new fire alarm system with voice evacuation system to comply with the latest fire alarm code will be installed if the building is modernized.

Existing Signal System

Existing signaling system in the campus are interconnected via a complex, old, and undocumented conduit duct banks and pull boxes. The existing system will stay up and running in other buildings during modernization projects. Existing signaling equipment may need to be replaced if the building is modernized.

Structural

Each building in this cluster features a different structural system.

Building 10 Flammable Storage

APPROXIMATE DATE OF DESIGN
1953

NUMBER OF STORIES
1

VERTICAL CARRYING SYSTEM
Reinforced concrete roof and walls.

LATERAL RESISTING SYSTEM
Vertical lateral bracing appears to be provided by concrete shear walls.

FOUNDATION SYSTEM
Assume conventional shallow foundations with continuous wall footings, though it is possible this small building is only supported by a thickened concrete slab on grade.

Building 11 Field Sanitary Building

APPROXIMATE DATE OF DESIGN
1958

NUMBER OF STORIES
1

VERTICAL CARRYING SYSTEM
Wood roof sheathing over wood joists supported by wood frame walls likely sheathed with stucco/plaster.

LATERAL RESISTING SYSTEM
Vertical lateral bracing appears to be provided by wood frame shear walls.

FOUNDATION SYSTEM
Assume conventional shallow foundations with continuous wall footings.

Building 12 Equipment Field Storage

APPROXIMATE DATE OF DESIGN
1941

NUMBER OF STORIES
1

VERTICAL CARRYING SYSTEM
Wood roof sheathing over wood joists supported by wood frame walls sheathed with wood siding.

LATERAL RESISTING SYSTEM
There does appear to be a viable vertical lateral bracing system; the wood siding was likely intended to act as bracing.

FOUNDATION SYSTEM
Assume conventional shallow foundations with continuous wall footings.

Building 14 Home Bleachers

This “building” from approximately 2008 is actually a pair of steel/metal frame bleachers. However, unlike Building #15, these bleachers are permanent construction with concrete footings and accessible ramps.

Building 15 Visitor Bleachers

This “building” is actually a set of three three-riser portable metal bleacher units.

Building 16 Field Light Controls

APPROXIMATE DATE OF DESIGN
1949

NUMBER OF STORIES
1

VERTICAL CARRYING SYSTEM
Assumed to be wood roof sheathing over wood joists supported by wood frame walls likely sheathed with stucco/plaster.

LATERAL RESISTING SYSTEM
Vertical lateral bracing appears to be provided by wood frame shear walls.

FOUNDATION SYSTEM
Assume conventional shallow foundations with continuous wall footings.

Building 33 Sanitary Relocatable Building

This building is a prefabricated relocatable structure (“portable”). Wood roof sheathing over wood joists supported by wood frame walls likely sheathed with stucco/plaster. Appears to have raised wood floor framing of wood sheathing over wood joists supported by wood frame cripple walls. Cripple walls likely supported on continuous concrete footings. Vertical lateral bracing appears to be provided by wood frame shear walls.

Conclusions

While the existing Home Bleachers Building #14 and Flammable Storage Building #10 are in good condition, the rest of the Stadium Cluster is in fair to poor condition and does not comply with code and modern athletic standards.

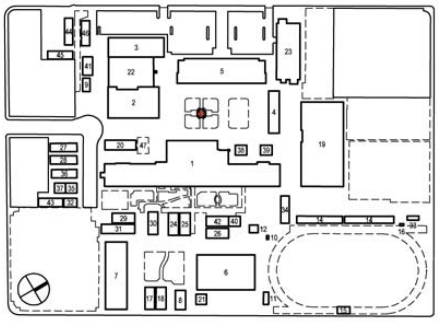
END OF 2.5.10: STADIUM CLUSTER.

2.5.13 GAZEBO

BUILDINGS: (13)



Gazebo from north



Campus Location of Building

AB300	FCI
NO	0.0%

Building Number	Design Year	DSA Application	Building Area (SF)	Occupancy Group(s)	Building Structure	Comments
13	1975	A-38340	466	A-3	Arcade	

Architectural

Overview

Gazebo Building #13 consists of an elevated, covered, open-air structure in the central commons "quad" area bounded by Buildings #1, #3, #4 and #5.

Educational Facilities

There are no educational facilities in this building.

Aesthetics

The Gazebo and surrounding site work are painted in school livery.

Code Compliance

FIRE/LIFE SAFETY

This open-air "building" does not include a fire alarm or other fire protection system.

ACCESSIBILITY

Ramps on the north and south sides provide theoretical wheelchair access, but neither ramp appears to be compliant with construction related accessibility standards.

Mechanical

No mechanical systems.

Electrical

Existing Electrical System

Receptacles are located on the gazebo fed from Building 2.

Existing Lighting System

Fluorescent light fixture in the gazebo fed from Building 2. Existing lighting system may need to be replaced if site is modernized.

Plumbing

No plumbing systems.

Fire Sprinklers

No fire protection systems.

Low Voltage Systems

No low voltage systems.

Structural

APPROXIMATE DATE OF DESIGN
1975

NUMBER OF STORIES
1

VERTICAL CARRYING SYSTEM
The vertical load carrying system consists of tongue and groove planks over sawn lumber beams. The sawn lumber beams transfer vertical loads to steel pipe columns. A metal copula is perched on the apex of the roof-top.

LATERAL RESISTING SYSTEM
The lateral load resisting system consists of a flexible diaphragm which transfers lateral wind and seismic loads to cantilevered steel pipe columns.

FOUNDATION SYSTEM
The foundation system consists of slab-on-grade and concrete pole footings.

Conclusions

Building #13 serves as the “heart” of the quad. It is well-used and well-liked by students. While its size is smaller than would be ideal for a campus of this size, the structure has a perceived significance to the school community and should be modernized for energy efficiency and accessibility.

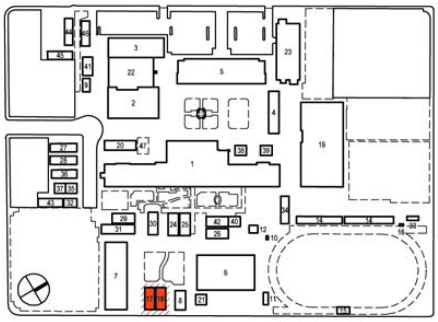
END OF 2.5.13: GAZEBO.

2.5.17 “FEDERAL” CLASSROOM CLUSTER

BUILDINGS: (17) (18)



West End of Buildings



Campus Location of Cluster

AB300	FCI
NO	41.9%

Building Number	Design Year	DSA Application	Building Area (SF)	Occupancy Group(s)	Building Structure	Comments
17	1964	A-24733	3,940	E	Wood Frame	Building A
	1995	A-63192				
18	1964	A-24733	3,940	E	Wood Frame	Building B
	1995	A-63192				

Architectural

Overview

Built in 1964, Buildings #17 and #18 (or Building A and Building B, respectively, as the current school administration refers to them) are mirror-images of each other separated by approximately four to five feet. The second floor walkway that projects from the north side of Building #18 and the south side of Building #17 forms a covered circulation zone for the buildings' respective first floors. Access to these walkways is by steel stairs located at the east and west ends of each building.

Details of the "Federal" designation are not clear, but that term is used in the District CAFM

Educational Facilities

Building #17 contains two (2) classrooms on its first floor and two (2) classrooms on its second floor.

Building #18 contains two (2) classrooms on its first floor and two (2) classrooms on its second floor.

Aesthetics

These buildings are utilitarian but in generally fair condition. The second floor walkways are in poor condition and should be replaced. Exterior windows that open to the walkways are in fair condition. Interior floor, wall and ceiling finishes are also in fair condition.

Code Compliance

FIRE/LIFE SAFETY

These two-story structures are of Type V construction. It is likely that they are considered a single building for code compliance in order to accommodate the narrow gap between them. The stairs on the east end empty to steep, narrow space between the buildings and campus perimeter fencing that does not appear adequate to support proper egress.

ACCESSIBILITY

The only way to access the "Federal" Classroom Cluster is via site stairs. Once the first floor is reached, the second floors of each building are only accessible via additional stairs. Signage and door hardware is non-compliant throughout.

Mechanical

As-Built Conditions

The classrooms are provided with wall mounted heat pumps by Bard or Marvair.

The air distribution, ventilation, air filtration and acoustical performance of all the classroom HVAC systems for this building are poor.

The existing classroom systems have exceeded their expected life.

The HVAC units use Refrigerant-22 which has been totally phased out since 2010.

Recommendations

REPLACEMENT HVAC SYSTEMS

The classrooms with wall mounted heat pumps and unit ventilators should be replaced with Variable Refrigerant Flow Systems to reduce the current excessive sound levels. The work will be minimally invasive and the space requirements and weight will be also minimal.

REUSE OF EXISTING DUCTWORK

The aerosol duct sealing technology invented and developed by the Energy Performance of Buildings Group at Lawrence Berkeley National Laboratory in 1994 can be used to seal the existing ductwork after cleaning. This technology internally seals leaks in air distribution ducts by injecting a fog of aerosolized sealant particles into a pressurized duct system.

ENERGY MANAGEMENT SYSTEMS

EMS is required for all new projects to comply with the current codes requirements such as “Fault Detection and Diagnostics” and “Demand Controlled Ventilation”.

VENTILATION

The outdoor air flow rates for ventilation is usually much lower than required by current codes.

Electrical

Existing Electrical Service

Building 17 has panelboard in Classroom S101. Building 18 has a panelboard in Classroom S100. Existing equipment is in working condition but may be at end of life. Existing equipment may need to be replaced if the building is modernized.

Existing Lighting System

Classroom and interior lighting system is old and inefficient compared to new lighting fixtures available in the market today. Lighting control in classrooms is manual switching. Classroom lighting layouts do not comply with the latest LAUSD Design Criteria. Lighting fixtures in hallways are above conduit. Existing lighting system may need to be replaced if the building is modernized.

Plumbing

As-Built Conditions

1. Existing fixtures do not comply with State water conservation guidelines and standards, including maximum flow as follows:
   a. Water Closets: 1.28 gpf.
   b. Urinals: 1/8 gpf or Non-water type.
   c. Lavatory Faucets: 0.5 gpm.

2. Student Restrooms:
    a. The following features to reduce maintenance, conserve water and minimize student tampering do not exist:
        i. Water-saving battery-operated infrared-sensored flush valves or manual valves in high vandalism areas.
        ii. Push-button, ADA-metered, self-closing faucets on lavatories.
        iii. Hose-bib with vacuum breaker in recessed box with locking cover.
        iv. Floor drains with trap primers with floors sloped to drain.
3. Faculty and Visitor Restrooms:
    a. The following features to reduce maintenance and conserve water do not exist:
        i. Floor drains with trap primers with floors sloped to drain.
4. Sewer Lines
    a. Existing cast iron soil pipes are more than 50 years old and might have corroded to a point where replacement or lining is necessary.
5. Water systems
    a. We have not received any record drawings to date regarding plumbing upgrades.
    b. Galvanized iron pipes exist in lieu of Type L hard copper pipe inside buildings or existing copper piping is over 30 years old and corroded.
    c. Water hammer arrestors required for lavatories, sinks, fountains, water closets, urinal headers, and other fixtures or devices with quick-closing valves, such as clothes washers do not exist or are not functioning.
    d. Vacuum breakers or other required backflow prevention assemblies which are required are missing or not functioning at some of the following locations:
        i. Hose bibs and sill cocks.
        ii. Fire sprinkler systems.
        iii. Irrigation systems.
6. Gas Piping:
    a. Gas pipes
        i. Above grade pipes within the building are more than 25 years old and require instrument assisted evaluation and possible replacement.
    b. Gas Valves:
        i. DSA approved seismic gas shut-off valves are missing at regulators and gas meter.
7. Seismic restraints for equipment and piping systems in accordance with applicable codes and guidelines are missing at some locations.

Recommendations

1. Replace all existing galvanized piping with copper.
2. Replacement of existing water heaters with high efficiency direct vent water heaters would be required to meet current standards.
3. Replace all water, waste and vent piping in all restrooms which will get accessibility upgrades.
4. Replace all waste piping above grade.

5. Do a video survey of all below grade waste piping that will be retained. Replace all 4" lines if found to be defective. Smaller lines may be replaced or lined.
6. Lining with cured in place material should be considered for underground or difficult to access sanitary sewer and storm drainage piping in lieu of replacement if there are budget restrictions.
7. Do a video survey of all vent piping that will be retained. Replace if defective.
8. For buildings without showers, science laboratories, kitchens and others special areas with higher hot water demand and just require hot water for faculty restrooms and custodian rooms, instantaneous electric water heaters should be considered for the faculty restroom lavatories and a gas tankless hot water for the custodian rooms. There will be substantial initial cost savings through not having to install insulated hot water supply and return piping and circulating pumps. There will also be substantial energy savings from eliminating the standby losses from the water heater storage tanks, supply and return piping and circulating pumps. The instantaneous point of use water heaters only heat the quantity of water that is actually used to the desired temperature. Stored hot water is required to be heated to 140^0F and stored at 140^0F to prevent the growth of Legionella Bacteria. This has to be mixed with cold water to 110^0F before distribution. There is substantial energy loss in doing this. Modern storage water heaters have electric blowers for forced draft combustion and electronic controls. Other high maintenance items such as mixing valves, water temperature limiting control and flue condensate neutralizers are also required. The low flow 0.4 GPM faucets do not get hot water before emptying the cold water in the supply line in a conventional circulated hot water system. 10 Feet of ½" copper pipe holds about 0.2 gallons of water. If the mixing ratio is 5 parts hot water of 110^0F with 1 part cold water of 50^0F to get 100^0F hot water from the faucet, the time delay will be about 36 seconds and nearly a quarter gallon of water will be wasted at each use of the lavatory faucet. A urinal uses only one eighth of a gallon per flush. An instantaneous hot water heater has usually only a few feet of pipe between it and the faucet.

Fire Sprinklers

As-Built Conditions

We have not received any record drawings to date regarding fire sprinklers. Based on the FCI the Library and Classroom building is required to have 100% fire sprinkler system replacement.

Recommendations

Based on recent experience with DSA, partial replacement, repair, expansion or any type of modification of a fire sprinkler system requires verification of system performance through hydraulic calculations. This process entails the modeling of the entire system on an approved fire sprinkler design platform such as SprinkCad and is a major undertaking.

DSA also requires verification and upgrade of fire sprinkler systems designed through the pipe schedule method (which was used before the advent of the hydraulic calculation design software) if there is a major building remodel. This usually results in the removal of the existing system completely and installing a totally new, hydraulically calculated system.

Low Voltage Systems

Existing Fire Alarm System

Existing fire alarm systems for the campus is fully automatic fire alarm system. Existing FATC is in Classroom S101 in Building 17 and Classroom S100 in Building 18. Existing fire alarm system is in working condition. The campus does not have emergency voice evacuation speakers to meet current code. A new fire alarm system with voice evacuation system to comply with the latest fire alarm code will be installed if the building is modernized.

Existing Signal System

- There is no IDF in Building 17 or 18. There are 8-10 data outlets in each classroom installed in surface mounted outlets.
- A new Wireless LAN system has recently been installed. Upgrading this system will not be required in existing buildings to remain.
- There are surface mounted PA speakers in classrooms as well as PA speakers in corridors and on exterior walls of the buildings.
- Existing main telephone equipment is in Building 5. Telephones are in each classroom.
- Existing cable television service via underground TV signal wiring system. Cable television drops are in the classrooms.
- Existing intrusion and CCTV systems provide partial protection and monitoring. There are CCTV cameras at some entrances to the buildings, parking structure, and interior court yards.
- Existing signaling system in the campus are interconnected via a complex, old, and undocumented conduit duct banks and pull boxes. The existing system will stay up and running in other buildings during modernization projects. Existing signaling equipment may need to be replaced if the building is modernized.

Structural

All buildings in this cluster feature the same structural system

APPROXIMATE DATE OF DESIGN
1964

NUMBER OF STORIES
2

VERTICAL CARRYING SYSTEM
The roof framing consists of plywood sheathing over sawn lumber roof rafters. Wood-framed load bearing walls provide vertical support for the roof elements. The second floor framing consists of plywood sheathing over castellated steel beams. The castellated steel beams transfer vertical loads to wood-framed load bearing walls.

LATERAL RESISTING SYSTEM

The lateral load resisting system for each level appears to consist of flexible plywood sheathed diaphragms which transfer lateral wind and seismic loads to wood framed, plywood sheathed shear walls.

FOUNDATION SYSTEM

The foundation system consists of slab-on-grade with continuous walls footings and circular spread footings.

Conclusions

At over 50 years old, these buildings show their age and should be replaced with modern construction.

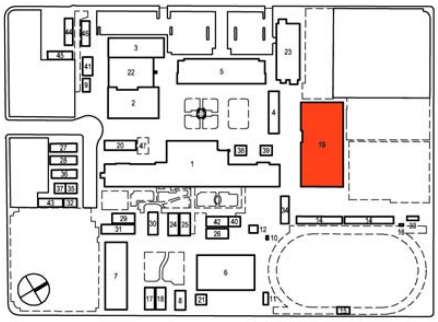
END OF 2.5.17: "FEDERAL" CLASSROOM CLUSTER.

2.5.19 PHYSICAL EDUCATION BUILDING

BUILDINGS: (19)



Canopy and Mural above Main Entrance Lobby



Campus Location of Building

AB300	FCI
YES	39.8%

Building Number	Design Year	DSA Application	Building Area (SF)	Occupancy Group(s)	Building Structure	Comments
19	1966	A-27577	38,799	A-4, B, E, S-2	Masonry/ Concrete	Original Building
	1995	A-63192				
	2005	A03-110660				
	2006	A03-110294				
	2007	A03-110395				
	2008	A03-110484				

Architectural

Overview

Physical Education Building #19 was constructed in the late 1960s at the north end of campus straddling what was once Fickett Street. With its completion, a new central commons began to take shape with Building #19 forming the north edge and Building #1, the oldest campus structure, forming the east edge. (Building #5 would soon be built to form the west edge, and the later additions of the Cafeteria-Classroom Cluster to the south and Music Building #4 immediate south of Building #19 would finalize the "quad" as it is known today.) Building #19 takes advantage of its sloped portion of the campus property with a partial basement level at the west end actually being open to grade; the primary entrance level is therefore actually the upper floor of the building. This level is at the same general grade as the practice field to the north and the Stadium Cluster to the east.

Educational Facilities

The Physical Education Building contains the primary gymnasium and an auxiliary gym or practice room. It also houses locker rooms, showers and restrooms for boys and girls, as well as a variety of athletic offices.

Aesthetics

Building #19 is in fair condition overall. Exterior walls are mostly painted masonry with some areas of painted stucco, all of which are in fair to good condition. Interior surfaces, from floors to walls to ceilings, show signs of excessive wear and physical abuse; the latter is more likely due to the nature of athletic use than vandalism.

Several murals are painted on the exterior of the building. "Roosevelt Rough Riders" appears on the stucco wall over the main entrance lobby. A black-and-white portrait of President Roosevelt appears on the north side of the building, and a stylized "sporty Roosevelt" appears on the east side facing the Stadium Cluster.

Code Compliance

FIRE/LIFE SAFETY

The structural system and apparent building materials suggest Type III construction. Egress widths appear sufficient but signage is missing in some areas (though not in and from the main gymnasium). Interior lighting tends to be dim beyond the athletic functions.

ACCESSIBILITY

The sloped nature of the building site makes exterior accessibility challenging, but an exterior enclosed wheelchair lift located near the main entrance lobby provides vertical access between the lower athletic functions (including the girls' lockers and basketball courts) and the upper athletic functions (including the gymnasium, boys' lockers and Stadium Cluster). Some of the accessible route signage creates confusing conditions, such as the sign adjacent to the main entrance lobby that suggests the entrance is not accessible (even though it is the only reasonable access to the gymnasium).

Mechanical

As-built conditions

The building was originally provided with a single zone Heating and Ventilating system with a dedicated air handling unit and return/relief fan for each gym. Heating source is hot water from gas fired boilers. The boiler replacement project was designed and approved in 2006. These are located in a dedicated mezzanine rooms with ducted supply and return/exhaust.

Recommendations

REPLACEMENT HVAC SYSTEMS

Reuse existing ductwork with new air handling units coupled with VRF outdoor units. The existing heating hot water system may be reused.

REUSE OF EXISTING DUCTWORK

The aerosol duct sealing technology invented and developed by the Energy Performance of Buildings Group at Lawrence Berkeley National Laboratory in 1994 can be used to seal the existing ductwork after cleaning. This technology internally seals leaks in air distribution ducts by injecting a fog of aerosolized sealant particles into a pressurized duct system.

ENERGY MANAGEMENT SYSTEMS

EMS is required for all new projects to comply with the current codes requirements such as “Fault Detection and Diagnostics” and “Demand Controlled Ventilation”.

VENTILATION

The outdoor air flow rates for ventilation is usually much lower than required by current codes.

Electrical

Existing Electrical Service

Building 19 has Electrical Rooms in the basement and first level. Existing equipment is in working condition but may be at end of life. Existing equipment may need to be replaced if the building is modernized.

Existing Lighting System

Interior lighting system may be old and inefficient compared to new lighting fixtures available in the market today. Lighting control is manual switching. Existing lighting system is in working condition but may be at end of life. Existing lighting system may need to be replaced if the building is modernized.

Plumbing

As-Built Conditions

1. Some existing fixtures do not comply with State water conservation guidelines and standards, including maximum flow as follows:

a. Water Closets: 1.28 gpf.
b. Urinals: 1/8 gpf or Non-water type.
c. Lavatory Faucets: 0.5 gpm.
d. Showers: 2.0 gpm.

2. Student Restrooms:
   a. The following features to reduce maintenance, conserve water and minimize student tampering do not exist:
      i. Water-saving battery-operated infrared-sensored flush valves or manual valves in high vandalism areas.
      ii. Push-button, ADA-metered, self-closing faucets on lavatories.
      iii. Hose-bib with vacuum breaker in recessed box with locking cover.
      iv. Floor drains with trap primers with floors sloped to drain.
3. Sewer Lines
   a. Existing cast iron soil pipes are more than 40 years old and might have corroded to a point where replacement or lining is necessary.
4. Water systems
   a. We have not received any record drawings to date regarding plumbing upgrades.
   b. Galvanized iron pipes exist in lieu of Type L hard copper pipe inside buildings or existing copper piping is over 30 years old and corroded.
   c. Water hammer arrestors required for lavatories, sinks, fountains, water closets, urinal headers, and other fixtures or devices with quick-closing valves, such as clothes washers do not exist or are not functioning.
   d. Vacuum breakers or other required backflow prevention assemblies which are required are missing or not functioning at some of the following locations:
      i. Hose bibs and sill cocks.
      ii. Fire sprinkler systems.
      iii. Irrigation systems.
5. Gas Piping:
   a. Gas pipes
      i. Above grade pipes within the building are more than 25 years old and require instrument assisted evaluation and possible replacement.
6. Seismic restraints for equipment and piping systems in accordance with applicable codes and guidelines are missing at some locations.

Recommendations

1. Replace all existing galvanized piping with copper.
2. Replacement of existing water heaters with high efficiency direct vent water heaters would be required to meet current standards.
3. Replace all water, waste and vent piping in all restrooms which will get accessibility upgrades.
4. Replace all waste piping above grade.
5. Do a video survey of all below grade waste piping that will be retained. Replace all 4" lines if found to be defective. Smaller lines may be replaced or lined.

6. Lining with cured in place material should be considered for underground or difficult to access sanitary sewer and storm drainage piping in lieu of replacement if there are budget restrictions.
7. Do a video survey of all vent piping that will be retained. Replace if defective.

Fire Sprinklers

As-Built Conditions

We have not received any record drawings to date regarding fire sprinklers. Based on the FCI Physical Education Building is required to have 100% fire sprinkler system replacement.

Recommendations

Based on recent experience with DSA, partial replacement, repair, expansion or any type of modification of a fire sprinkler system requires verification of system performance through hydraulic calculations. This process entails the modeling of the entire system on an approved fire sprinkler design platform such as SprinkCad and is a major undertaking.

DSA also requires verification and upgrade of fire sprinkler systems designed through the pipe schedule method (which was used before the advent of the hydraulic calculation design software) if there is a major building remodel. This usually results in the removal of the existing system completely and installing a totally new, hydraulically calculated system.

Low Voltage Systems

Existing Fire Alarm System

Existing fire alarm systems for the campus is fully automatic fire alarm system. Existing FACP-PHYS-ED is located on the first level Electrical Room. FATC is located in the second level Janitor 419. Existing fire alarm system is in working condition. The campus does not have emergency voice evacuation speakers to meet current code. A new fire alarm system with voice evacuation system to comply with the latest fire alarm code will be installed if the building is modernized.

Existing Signal System

- Existing IDF-PE is located in the Boy's PE Office 122 in Building 19. Existing IDFs are connected to MDF via underground fiber optic cabling system.
- A new Wireless LAN system has recently been installed. Upgrading this system will not be required in existing buildings to remain.
- There are surface mounted PA speakers on interior and exterior walls of the buildings.
- Existing main telephone equipment is in Building 5.
- Existing cable television service via underground TV signal wiring system.
- Existing intrusion and CCTV systems provide partial protection and monitoring. There are CCTV cameras at some entrances to the buildings, parking structure, and interior court yards.

- Existing signaling system in the campus are interconnected via a complex, old, and undocumented conduit duct banks and pull boxes. The existing system will stay up and running in other buildings during modernization projects. Existing signaling equipment may need to be replaced if the building is modernized.

Structural

APPROXIMATE DATE OF DESIGN
1966

NUMBER OF STORIES
1

VERTICAL CARRYING SYSTEM
The vertical load carrying system of the Gymnasium's high roof consists of a combination of wood sheathing and composite roof deck on top of wood roof joists, steel beams and tapered steel girders. The tapered steel girders are supported by concrete columns, and load bearing concrete walls.

The vertical load carrying system of the Gymnasium's low roof consists of plywood sheathing over wood roof joists, which are supported by steel beams. The steel beams transfer vertical loads to load bearing concrete and masonry walls/pilasters.

At the West side of the building, the 2nd level floor framing consists of an elevated floor slab supported by concrete beams and girders, which in turn span to cast-in-place concrete columns and cast-in-place load bearing concrete and masonry walls.

LATERAL RESISTING SYSTEM
The lateral load resisting system for the building consists of flexible roof diaphragms that deliver lateral wind/seismic forces to reinforced concrete and masonry shear walls. At the 2nd floor level, rigid concrete floor diaphragms deliver lateral wind/seismic forces to reinforced concrete and masonry shear walls.

FOUNDATION SYSTEM
The building walls are founded with continuous wall footings and columns are founded with isolated spread footings.

Conclusions

Beyond expected physical wear and tear inherent in a physical education building, Building #19 is in surprisingly good condition. The main gymnasium in particular is well-maintained and well-lit. Campus location is ideal considering adjacent athletic functions.

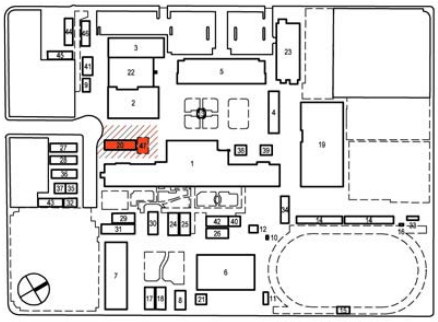
END OF 2.5.19: PHYSICAL EDUCATION BUILDING.

2.5.20 PLANT MANAGER CLUSTER

BUILDINGS: (20) (47)



Loading dock (#20) with chiller yard (#47) beyond



Campus Location of Cluster

AB300	FCI
NO	74.0%

Building Number	Design Year	DSA Application	Building Area (SF)	Occupancy Group(s)	Building Structure	Comments
20	1966	A-27577	2,537	B, S-1, S-2	Wood Frame	Utility Building
	1995	A-63192				
47	?	?	?	F or H	Steel/Wood Frame	Chiller Yard

Architectural

Overview

This cluster is located at the southwest corner of Building #1 and consists of Utility Building #20 (built in 1966) and Chiller Yard Building #47 (of unknown construction). Building #20 contains the Plant Manager and related functions. Building #47 contains chillers and other mechanical equipment related to the campus central plant. According to campus staff, the Chiller Yard enclosure was constructed "recently" in order to mitigate mechanical noise for adjacent classrooms in Building #1.

Aesthetics

These buildings are utilitarian in appearance but in generally good condition.

About half of a large mural painted on the north side of Building #47 has been painted over.

Code Compliance

FIRE/LIFE SAFETY

The "loading dock" along the west side of Building #20 does not appear to be used for regular loading, and therefore should have a guard rail or similar edge protection device.

ACCESSIBILITY

The only access to Building #20 is by stair. Door hardware appears to be non-compliant throughout.

Note: Building #47 is a "mechanical space" that does not require accessibility.

Mechanical

As-Built Conditions

The classrooms are provided with wall mounted heat pumps by Bard or Marvair.

The air distribution, ventilation, air filtration and acoustical performance of all the classroom HVAC systems for this building are poor.

The existing classroom systems have exceeded their expected life.

The HVAC units use Refrigerant-22 which has been totally phased out since 2010.

Recommendations

REPLACEMENT HVAC SYSTEMS

The classrooms with wall mounted heat pumps and unit ventilators should be replaced with Variable Refrigerant Flow Systems to reduce the current excessive sound levels. The work will be minimally invasive and the space requirements and weight will be also minimal.

REUSE OF EXISTING DUCTWORK

The aerosol duct sealing technology invented and developed by the Energy Performance of Buildings Group at Lawrence Berkeley National Laboratory in 1994 can be used to seal the existing ductwork after cleaning. This technology internally seals leaks in air distribution ducts by injecting a fog of aerosolized sealant particles into a pressurized duct system.

ENERGY MANAGEMENT SYSTEMS

EMS is required for all new projects to comply with the current codes requirements such as “Fault Detection and Diagnostics” and “Demand Controlled Ventilation”.

VENTILATION

The outdoor air flow rates for ventilation is usually much lower than required by current codes.

Electrical

Existing Electrical Service

Building 20 has a panelboard in Maintenance D. Existing equipment is in working condition but may be at end of life. Existing equipment may need to be replaced if the building is modernized.

Existing Lighting System

Interior lighting system may be old and inefficient compared to new lighting fixtures available in the market today. Lighting control is manual switching. Existing lighting system is in working condition but may be at end of life. Existing lighting system may need to be replaced if the building is modernized.

Plumbing

As-Built Conditions

1. Existing fixtures do not comply with State water conservation guidelines and standards, including maximum flow as follows:
    a. Water Closets: 1.28 gpf.
    b. Urinals: 1/8 gpf or Non-water type.
    c. Lavatory Faucets: 0.5 gpm.
2. Student Restrooms:
    a. The following features to reduce maintenance, conserve water and minimize student tampering do not exist:
        i. Water-saving battery-operated infrared-sensored flush valves or manual valves in high vandalism areas.
        ii. Push-button, ADA-metered, self-closing faucets on lavatories.
        iii. Hose-bib with vacuum breaker in recessed box with locking cover.
        iv. Floor drains with trap primers with floors sloped to drain.
3. Faculty Restrooms:
    a. The following features to reduce maintenance and conserve water do not exist:
        i. Floor drains with trap primers with floors sloped to drain.

4. Sewer Lines
    a. Existing cast iron soil pipes are more than 40 years old and might have corroded to a point where replacement or lining is necessary.
5. Other Special Wastewater Provisions:
    a. Some areas requiring special pretreatment of wastewater before discharge into the City sewer system are not compliant:
        i. Ceramics Room sinks: Solids Interceptor.
6. Water systems
    a. We have not received any record drawings to date regarding plumbing upgrades.
    b. Galvanized iron pipes exist in lieu of Type L hard copper pipe inside buildings or existing copper piping is over 30 years old and corroded.
    c. Water hammer arrestors required for lavatories, sinks, fountains, water closets, urinal headers, and other fixtures or devices with quick-closing valves, such as clothes washers do not exist or are not functioning.
    d. Vacuum breakers or other required backflow prevention assemblies which are required are missing or not functioning at some of the following locations:
        i. Hose bibs and sill cocks.
        ii. Fire sprinkler systems.
        iii. Irrigation systems.
7. Emergency Shower and Eye Wash:
    a. Emergency shower and eye wash equipment are not installed in the following areas where eye or skin irritants exist and must comply with California Code of Regulations (CCR), Title 8, Section 5162.
        i. Central Custodial supplies storage area. In middle and high schools install in receiving area.
8. Gas Piping:
    a. Gas pipes
        i. Above grade pipes within the building are more than 25 years old and require instrument assisted evaluation and possible replacement.
    b. Gas Valves:
        i. DSA approved seismic gas shut-off valves are missing at regulators and gas meter.
9. Seismic restraints for equipment and piping systems in accordance with applicable codes and guidelines are missing at some locations.

Recommendations

1. Replace all existing galvanized piping with copper.
2. Replacement of existing water heaters with high efficiency direct vent water heaters would be required to meet current standards.
3. Replace all water, waste and vent piping in all restrooms which will get accessibility upgrades.
4. Replace all waste piping above grade.
5. Do a video survey of all below grade waste piping that will be retained. Replace all 4" lines if found to be defective. Smaller lines may be replaced or lined.

6. Lining with cured in place material should be considered for underground or difficult to access sanitary sewer and storm drainage piping in lieu of replacement if there are budget restrictions.
7. Do a video survey of all vent piping that will be retained. Replace if defective.

Fire Sprinklers

As-Built Conditions

We have not received any record drawings to date regarding fire sprinklers. Based on the FCI the utility building is required to have total or near total fire sprinkler system replacement.

Recommendations

Based on recent experience with DSA, partial replacement, repair, expansion or any type of modification of a fire sprinkler system requires verification of system performance through hydraulic calculations. This process entails the modeling of the entire system on an approved fire sprinkler design platform such as SprinkCad and is a major undertaking.

DSA also requires verification and upgrade of fire sprinkler systems designed through the pipe schedule method (which was used before the advent of the hydraulic calculation design software) if there is a major building remodel. This usually results in the removal of the existing system completely and installing a totally new, hydraulically calculated system.

Low Voltage Systems

Existing Fire Alarm System

Existing fire alarm systems for the campus is fully automatic fire alarm system. Existing FATC for Building 20 is in Maintenance D. Existing fire alarm system is in working condition. The campus does not have emergency voice evacuation speakers to meet current code. A new fire alarm system with voice evacuation system to comply with the latest fire alarm code will be installed if the building is modernized.

Existing Signal System

- There is no IDF in Building 20.
- A new Wireless LAN system has recently been installed. Upgrading this system will not be required in existing buildings to remain.
- There are surface mounted PA speakers on the interior and exterior walls of the buildings.
- Existing main telephone equipment is in Building 5.
- Existing cable television service via underground TV signal wiring system.
- Existing intrusion and CCTV systems provide partial protection and monitoring. There are CCTV cameras at some entrances to the buildings, parking structure, and interior court yards.

- Existing signaling system in the campus are interconnected via a complex, old, and undocumented conduit duct banks and pull boxes. The existing system will stay up and running in other buildings during modernization projects. Existing signaling equipment may need to be replaced if the building is modernized.

Structural

Each building in this cluster features a different structural system.

Building 20 Utility

APPROXIMATE DATE OF DESIGN
1968

NUMBER OF STORIES
1

VERTICAL CARRYING SYSTEM
Wood roof sheathing over wood joists supported by wood frame walls likely sheathed with stucco/plaster.

LATERAL RESISTING SYSTEM
Vertical lateral bracing appears to be provided by wood frame shear walls.

FOUNDATION SYSTEM
Assume conventional shallow foundations with continuous wall footings.

Building 47 Chiller Yard

APPROXIMATE DATE OF DESIGN
Unknown

NUMBER OF STORIES
1

VERTICAL CARRYING SYSTEM
Exposed steel space frame supporting bird mesh canopy. Enclosure assumed to be wood frame walls likely sheathed with stucco/plaster.

LATERAL RESISTING SYSTEM
Vertical lateral bracing appears to be provided by wood frame shear walls.

FOUNDATION SYSTEM
Assume conventional shallow foundations with continuous wall footings and isolated pad footings under steel space frame.

BUILDINGS: 23

Conclusions

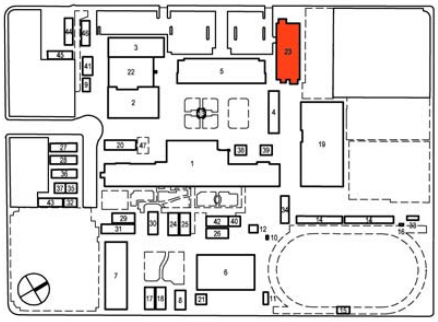
The buildings in this cluster appear to be functional and in relatively good condition. While their central location is convenient for the purposes they serve, it is also inconvenient for student supervision and public access control. Both of these concerns would be better served if this cluster was relocated near an edge of the campus. Garage Building #9 is recommended for combination into this cluster for a new location.

END OF 2.5.20: PLANT MANAGER CLUSTER.

2.5.23: Library & Classroom Building



Exterior Stair on South Façade of Building



Campus Location of Building

AB300	FCI
NO	32.7%

Building Number	Design Year	DSA Application	Building Area (SF)	Occupancy Group(s)	Building Structure	Comments
23	1987	A-48733	35,120	B, E, S-2	Masonry/ Concrete	Original Building

Architectural

The Library and Classroom Building #23, or "L Building" as the current school administration refers to it, was built in 1990. Excluding the stadium bleachers that were constructed in 2008, it is the youngest building on the Roosevelt High School campus. The first floor of the building is a semi-enclosed parking garage; the second floor contains classrooms, including some that appear to have been retrofit for science use; and the third floor contains a mix of classrooms, computer labs, and the campus library.

Educational Facilities

Building #23 contains nine (9) classrooms on the second floor, which is sandwiched between a parking garage on the first floor and two (2) computer lab spaces and the campus library on the third floor. Three (3) of the classrooms have been retrofit with pedestal sink/gas/air casework for use as science classrooms.

Aesthetics

The building is in fair to good architectural condition, though it is of a design that not only conflicts with the rest of the campus but is also hard to identify as a high school building. Exterior wall surfaces are weather-stained but in otherwise good condition. Interior floor finishes show some wear, particularly in circulation zones like corridors and stairs, which are in fair condition at best. Interior wall and ceiling finishes vary by space but are in generally good condition. Windows are tinted but in fair to good condition, though they are not large enough for classrooms by current standards.

Narrative for Paint and Repair Scope at Building

Re-paint existing painted interior walls and "hard-lid" ceilings to provide Level 5 finish condition per the Drywall Finishing Council's "Recommended Surface Treatment for Finishing Gypsum Board to Attain a Level 5 Finish" and related documents (see dwfc.org/publications/) and the Gypsum Association's "GA-214 Recommended Levels of Finish for Gypsum Board, Glass Mat and Fiber-Reinforced Gypsum Panels" and related documents (see www.gypsum.org/ga-publications/). Process includes but is not necessarily limited to: preparation of existing painted surfaces, which may require temporary relocation of existing furniture and equipment, removal of existing paint layers, patching of existing surface damage, re-taping joints or providing new expansion joints, replacement of surfaces with irreparable damage, etc.; application of at least one coat of primer material to prepared surfaces; and application of at least two coats of topcoat finish material to primed surfaces. After painting is complete, clean up areas of drips, runs, overspray, and similar defects to provide clean finished conditions throughout.

Re-paint existing painted exterior walls, canopies, soffits, and similar construction to achieve finish condition substantially equivalent to interior painted walls and ceilings. Follow procedures for interior painted walls and ceilings adapted for exterior conditions. Patching and repair of existing exterior finishes is required throughout. New patched or repaired plaster finishes shall integrate new and existing weatherproofing layers and shall match the existing adjacent finish to the greatest extent that is readily achievable.

Re-paint existing painted exterior and interior doors and door frames to achieve level of finish equivalent to specified wall finish. Do not paint over door hardware, integrated glazing, identification signs, or fire rating labels. Do not paint doors shut or allow wet or tacky paint on adjacent surfaces to come in contact. Existing stained or shellacked doors to remain “as-is” un-painted.

Closely examine existing masonry units and joints for mortar separation, cracking, spalling, or other evidence of damage or failure. Replace damaged masonry units and loose or missing mortar. Re-set and re-point loose but otherwise undamaged masonry units. Re-point damaged mortar that is otherwise still bonded to adjacent masonry units.

After patching, repair and other surface preparation, but prior to painting, replace sealant at perimeters of doors, windows, louvers, grilles, and similar wall/ceiling openings and penetrations at interior and exterior.

Code Compliance

FIRE/LIFE SAFETY

The building appears to be of Type II construction. The presence of automobile parking on the first floor presents some challenges for egress and fire separation, but the existing conditions appear to address these separations.

ACCESSIBILITY

Remove identified and prioritized barriers to program accessibility. Provide accessibility improvements as required by the 2010 ADA Standards for Accessible Design, Chapter 11B of the current edition of the California Building Code (Part 2 of Title 24, California Code of Regulations), and the LAUD Office of the Independent Monitor (OIM).

Provide an accessible path of travel from site arrival points to athletic fields and courts. Site arrival points include the existing pedestrian entrance and accessible parking spaces accessed from S. Mathews Street; the existing accessible parking spaces accessed from E. 6th Street; and the new pedestrian entrance, drop-off and accessible parking spaces accessed from E. 4th Street. Scope includes replacement of grates for area drains and covers for pull-boxes, yard boxes, vaults and similar below-grade components, such that no opening dimension exceeds 1/4" in the dominant direction of travel.

Provide directional and other signage, and verify an accessible path of travel from existing grade level entry points to the existing Library on the third floor. The accessible path of travel includes accessible drinking fountains and restrooms on the third floor.

Mechanical

As-Built Conditions

The classrooms are provided with rooftop packaged heat pumps by Trane.

The existing classroom systems have exceeded their expected life.

The HVAC units use Refrigerant-22 which has been totally phased out since 2010.

Recommendations

REPLACEMENT HVAC SYSTEMS
Replace existing rooftop heat pumps.

REUSE OF EXISTING DUCTWORK
The aerosol duct sealing technology invented and developed by the Energy Performance of Buildings Group at Lawrence Berkeley National Laboratory in 1994 can be used to seal the existing ductwork after cleaning. This technology internally seals leaks in air distribution ducts by injecting a fog of aerosolized sealant particles into a pressurized duct system.

ENERGY MANAGEMENT SYSTEMS
EMS is required for all new projects to comply with the current codes requirements such as “Fault Detection and Diagnostics” and “Demand Controlled Ventilation”.

VENTILATION
The outdoor air flow rates for ventilation is usually much lower than required by current codes.

Electrical

Existing Electrical Service

Building 23 has a dedicated Electrical Equipment Room on the parking level and panelboards in the hallway and Electrical Closet on the upper floors. Existing equipment is in working condition but may be at end of life. Existing equipment may need to be replaced if the building is modernized.

Existing Lighting System

Classroom and interior lighting system is old and inefficient compared to new lighting fixtures available in the market today. Lighting control in classrooms is manual switching. Classroom lighting layouts do not comply with the latest LAUSD Design Criteria. Existing lighting system is in working condition but may be at end of life. Existing lighting system may need to be replaced if the building is modernized.

Plumbing

As-Built Conditions

1. Existing fixtures do not comply with State water conservation guidelines and standards, including maximum flow as follows:
   a. Water Closets: 1.28 gpf.
   b. Urinals: 1/8 gpf or Non-water type.
   c. Lavatory Faucets: 0.5 gpm.
2. Student Restrooms:

a. The following features to reduce maintenance, conserve water and minimize student tampering do not exist:
    i. Water-saving battery-operated infrared-sensored flush valves or manual valves in high vandalism areas.
    ii. Push-button, ADA-metered, self-closing faucets on lavatories.
    iii. Hose-bib with vacuum breaker in recessed box with locking cover.
    iv. Floor drains with trap primers with floors sloped to drain.

3. Faculty and Visitor Restrooms:
    a. The following features to reduce maintenance and conserve water do not exist:
        i. Floor drains with trap primers with floors sloped to drain.
4. Sewer Lines
    a. Existing cast iron soil pipes are more than 30 years old and might have corroded to a point where replacement or lining is necessary.
5. Water systems

1. We have not received any record drawings to date regarding plumbing upgrades.
    a. Galvanized iron pipes exist in lieu of Type L hard copper pipe inside buildings or existing copper piping is over 30 years old and corroded.
    b. Water hammer arrestors required for lavatories, sinks, fountains, water closets, urinal headers, and other fixtures or devices with quick-closing valves, such as clothes washers do not exist or are not functioning.
    c. Vacuum breakers or other required backflow prevention assemblies which are required are missing or not functioning at some of the following locations:
        i. Hose bibs and sill cocks.
        ii. Demonstration tables.
        iii. Fire sprinkler systems.
        iv. Irrigation systems.
6. Gas Piping:
    a. Gas pipes
        i. Above grade pipes within the building are more than 25 years old and require instrument assisted evaluation and possible replacement.
    b. Gas Valves:
        i. DSA approved seismic gas shut-off valves are missing at regulators and gas meter.
7. Seismic restraints for equipment and piping systems in accordance with applicable codes and guidelines are missing at some locations.

Recommendations

1. Replace all existing galvanized piping with copper.
2. Replacement of existing water heaters with high efficiency direct vent water heaters would be required to meet current standards.
3. Replace all water, waste and vent piping in all restrooms which will get accessibility upgrades.
4. Replace all waste piping above grade.

5. Do a video survey of all below grade waste piping that will be retained. Replace all 4" lines if found to be defective. Smaller lines may be replaced or lined.
6. Lining with cured in place material should be considered for underground or difficult to access sanitary sewer and storm drainage piping in lieu of replacement if there are budget restrictions.
7. Do a video survey of all vent piping that will be retained. Replace if defective.
8. For buildings without showers, science laboratories, kitchens and others special areas with higher hot water demand and just require hot water for faculty restrooms and custodian rooms, instantaneous electric water heaters should be considered for the faculty restroom lavatories and a gas tankless hot water for the custodian rooms. There will be substantial initial cost savings through not having to install insulated hot water supply and return piping and circulating pumps. There will also be substantial energy savings from eliminating the standby losses from the water heater storage tanks, supply and return piping and circulating pumps. The instantaneous point of use water heaters only heat the quantity of water that is actually used to the desired temperature. Stored hot water is required to be heated to 140^0F and stored at 140^0F to prevent the growth of Legionella Bacteria. This has to be mixed with cold water to 110^0F before distribution. There is substantial energy loss in doing this. Modern storage water heaters have electric blowers for forced draft combustion and electronic controls. Other high maintenance items such as mixing valves, water temperature limiting control and flue condensate neutralizers are also required. The low flow 0.4 GPM faucets do not get hot water before emptying the cold water in the supply line in a conventional circulated hot water system. 10 Feet of ½" copper pipe holds about 0.2 gallons of water. If the mixing ratio is 5 parts hot water of 110^0F with 1 part cold water of 50^0F to get 100^0F hot water from the faucet, the time delay will be about 36 seconds and nearly a quarter gallon of water will be wasted at each use of the lavatory faucet. A urinal uses only one eighth of a gallon per flush. An instantaneous hot water heater has usually only a few feet of pipe between it and the faucet.

Fire Sprinklers

As-Built Conditions

We have not received any record drawings to date regarding fire sprinklers. Based on the FCI the Library and Classroom building is required to have 100% fire sprinkler system replacement.

Recommendations

Based on recent experience with DSA, partial replacement, repair, expansion or any type of modification of a fire sprinkler system requires verification of system performance through hydraulic calculations. This process entails the modeling of the entire system on an approved fire sprinkler design platform such as SprinkCad and is a major undertaking.

DSA also requires verification and upgrade of fire sprinkler systems designed through the pipe schedule method (which was used before the advent of the hydraulic calculation design software) if there is a major building remodel. This usually results in the removal of the existing system completely and installing a totally new, hydraulically calculated system.

2.5.24 CENTRAL PORTABLES CLUSTER

BUILDINGS: 24 25 26 29 30 31 40 42

Low Voltage Systems

Existing Fire Alarm System

Existing fire alarm systems for the campus is fully automatic fire alarm system. Existing FACP-6 and FATC-LIB are located in the Electrical Equipment Room in Building 23. Existing FATC-2 and FATC-2A are located on the second level Janitor 215. Existing FATC-3 and FATC-3A are located in Electrical Closet 324 on the third level. Existing fire alarm system is in working condition. The campus does not have emergency voice evacuation speakers to meet current code. A new fire alarm system with voice evacuation system to comply with the latest fire alarm code will be installed if the building is modernized.

Existing Signal System

- Existing IDF-3LC is located in Office 323 on the third level of Building 2. Existing IDFs are connected to MDF via underground fiber optic cabling system. There are 8-10 data outlets in each classroom installed in surface mounted outlets.
- A new Wireless LAN system has recently been installed. Upgrading this system will not be required in existing buildings to remain.
- There are surface mounted PA speakers in classrooms as well as PA speakers in corridors and on exterior walls of the buildings.
- Existing main telephone equipment is in Building 5. Telephones are in each classroom.
- Cable television head end is in A/V Equipment Storage on the third floor. Existing cable television service via underground TV signal wiring system. Cable television drops are in the classrooms.
- Existing intrusion and CCTV systems provide partial protection and monitoring. There are CCTV cameras at some entrances to the buildings, parking structure, and interior court yards.
- Existing signaling system in the campus are interconnected via a complex, old, and undocumented conduit duct banks and pull boxes. The existing system will stay up and running in other buildings during modernization projects. Existing signaling equipment may need to be replaced if the building is modernized.

Structural

APPROXIMATE DATE OF DESIGN
1987

NUMBER OF STORIES
3

VERTICAL CARRYING SYSTEM
The roof and third floor framing consist of lightweight concrete over steel deck which is supported by steel beams and girders. The steel beams and girders transfer vertical loads to steel columns and load bearing concrete walls.

The second floor framing consists of a concrete slab over concrete beams and girders which transfer vertical loads to concrete columns and concrete load bearing walls.

LATERAL RESISTING SYSTEM

The typical lateral load resisting system consists of rigid concrete diaphragms which transfer lateral wind and seismic loads to reinforced concrete shear walls.

FOUNDATION SYSTEM

The foundation system consists of slab-on-grade with continuous wall footings at load bearing walls and spread footings at column locations.

Conclusions

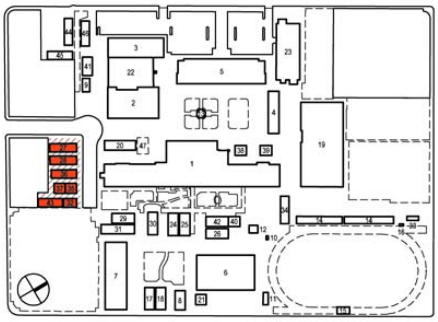
Building #23 looks and feels like one of the older structures on campus even though it is actually the newest permanent building. This is partially due to aesthetics and partially due to craftsmanship and quality of original components, many of which show signs of premature aging (especially at the vertical circulation elements).

END OF 2.5.23: LIBRARY & CLASSROOM BUILDING.

2.5.24: Central Portables Cluster



View along circulation path to east of Cluster



Campus Location of Cluster

AB300	FCI
NO	61.7%

Building Number	Design Year	DSA Application	Building Area (SF)	Occupancy Group(s)	Building Structure	Comments
24	1971	A-34403	1,920	E	Wood Frame	AA-2684
25	1971	A-34403	1,920	E	Wood Frame	AA-2685
26	1958	A-17801	1,792	E	Wood Frame	AA-1917
29	1959	A-19013	1,792	E	Wood Frame	AA-2038
30	1959	A-19013	1,792	E	Wood Frame	AA-2543
31	1961	A-21099	2,688	E	Wood Frame	AA-2249
40	1967	A-28978	896	E	Wood Frame	A-690
42	1967	A-28978	1,792	B, E	Wood Frame	AA-2573

Architectural

Overview

Located to the east of Building #1 and to the west of Buildings #6 and #7, the Central Portables Cluster consists of eight relocatable buildings ("portables"): AA-2684 Building #24, originally built in 1971; AA-2685 Building #25, originally built in 1971; AA-1917 Building #26, originally built in 1959; AA-2038 Building #29, originally built in 1960; AA-2543 Building #30, originally built in 1966; AA-2249 Building #31, originally built in 1961; A-690 Building #40, originally built in 1967; and AA-2573 Building #42, originally built in 1967. Most of the portables contain two classrooms; however, Building #31 contains three classrooms, and the single-room Building #40 has been remodeled and connected to the layout of Building #42, which serves many of the administrative functions for the Magnet school.

Many of the portables in this cluster are served by and connected to a covered walkway that also serves and connects to Building #1.

Educational Facilities

Building #31 contains three (3) classrooms. Buildings #24, #25, #26, #29 and #30 contain two (2) classrooms each. Building #40 contains one (1) classroom.

Building #42 is primarily administrative office space. While it technically contains one (1) classroom space, observation indicates that this is likely used for testing and training rather than academics.

Aesthetics

Most of these portable are old and show their age, but they are still in fair condition overall.

Code Compliance

FIRE/LIFE SAFETY

These "temporary" structures have been in use for at least 34 years and more than 55 in some cases.

ACCESSIBILITY

Like most of the portables on the overall campus, access to many of the buildings is only possible by stair. Door hardware is non-compliant throughout.

Mechanical

Classroom Buildings – As-Built Conditions

The classrooms are provided with wall mounted heat pumps by Bard or Marvair.

The air distribution, ventilation, air filtration and acoustical performance of all the classroom HVAC systems for this building are poor.

The existing classroom systems have exceeded their expected life.

The HVAC units use Refrigerant-22 which has been totally phased out since 2010.

Classroom Buildings – Recommendations

REPLACEMENT HVAC SYSTEMS

The classrooms with wall mounted heat pumps and unit ventilators could be replaced with Variable Refrigerant Flow Systems to reduce the current excessive sound levels. The work would be minimally invasive and the space requirements and weight will be also minimal.

REUSE OF EXISTING DUCTWORK

The aerosol duct sealing technology invented and developed by the Energy Performance of Buildings Group at Lawrence Berkeley National Laboratory in 1994 could be used to seal the existing ductwork after cleaning. This technology internally seals leaks in air distribution ducts by injecting a fog of aerosolized sealant particles into a pressurized duct system.

ENERGY MANAGEMENT SYSTEMS

EMS is required for all new projects to comply with the current codes requirements such as “Fault Detection and Diagnostics” and “Demand Controlled Ventilation”.

VENTILATION

The outdoor air flow rates for ventilation is usually much lower than required by current codes.

Administrative/Classroom Building – As-built conditions

The classrooms are provided with rooftop packaged heat pumps by Trane.

The existing classroom systems have exceeded their expected life.

The HVAC units use Refrigerant-22 which has been totally phased out since 2010.

Administrative/Classroom Building – Recommendations

REPLACEMENT HVAC SYSTEMS

Replacement of existing rooftop heat pumps would....

REUSE OF EXISTING DUCTWORK

The aerosol duct sealing technology invented and developed by the Energy Performance of Buildings Group at Lawrence Berkeley National Laboratory in 1994 could be used to seal the existing ductwork after cleaning. This technology internally seals leaks in air distribution ducts by injecting a fog of aerosolized sealant particles into a pressurized duct system.

ENERGY MANAGEMENT SYSTEMS

EMS is required for all new projects to comply with the current codes requirements such as “Fault Detection and Diagnostics” and “Demand Controlled Ventilation”.

VENTILATION

The outdoor air flow rates for ventilation is usually much lower than required by current codes.

Electrical

Existing Electrical Service

Portable buildings have integrated panelboards. Existing equipment is in working condition but may be at end of life. Portable buildings may be replaced with new building with new service.

Existing Lighting System

Portable buildings have integrated lighting. Existing lighting system is in working condition but may be at end of life. Portable buildings may be replaced with new building.

Plumbing

As-Built Conditions

1. No plumbing except roof drainage, hose bibs and condensate drains for HVAC.
2. Sewer Lines
    a. Existing cast iron soil pipes are more than 30 years old and might have corroded to a point where replacement or lining is necessary.
3. Water systems
    a. We have not received any record drawings to date regarding plumbing upgrades.
    b. Galvanized iron pipes exist in lieu of Type L hard copper pipe inside buildings or existing copper piping is over 30 years old and corroded.
    c. Water hammer arrestors required for lavatories, sinks, fountains, water closets, urinal headers, and other fixtures or devices with quick-closing valves, such as clothes washers do not exist or are not functioning.
    d. Vacuum breakers or other required backflow prevention assemblies which are required are missing or not functioning at some of the following locations:
        i. Hose bibs and sill cocks.
        ii. Fire sprinkler systems.
        iii. Irrigation systems.

Recommendations

1. Replace all existing galvanized piping with copper.
2. Replace all waste piping above grade.
3. Do a video survey of all below grade waste piping that will be retained. Replace all 4" lines if found to be defective. Smaller lines may be replaced or lined.
4. Lining with cured in place material should be considered for underground or difficult to access sanitary sewer and storm drainage piping in lieu of replacement if there are budget restrictions.
5. Do a video survey of all vent piping that will be retained. Replace if defective.

Fire Sprinklers

None of the portables include fire sprinklers.

2.5.27 SOUTH PORTABLES CLUSTER

BUILDINGS: 27 28 32 35 36 37 43

Low Voltage Systems

Existing Fire Alarm System

Existing fire alarm systems for the campus is fully automatic fire alarm system. The main FACP is in the Storage Room next to the Main Office in Building 5. The campus does not have emergency voice evacuation speakers to meet current code.

Existing Signal System

- There are no IDFs in the portable buildings. There are 8-10 data outlets in each classroom installed in surface mounted outlets.
- A new Wireless LAN system has recently been installed. Upgrading this system will not be required in existing buildings to remain.
- There are surface mounted PA speakers in classrooms as well as PA speakers in corridors and on exterior walls of the buildings.
- Existing main telephone equipment is in Building 5. Telephones are in each classroom.
- Existing cable television service via underground TV signal wiring system. Cable television drops are in the classrooms.
- Existing intrusion and CCTV systems provide partial protection and monitoring. There are CCTV cameras at some entrances to the buildings, parking structure, and interior court yards.
- Existing signaling system in the campus are interconnected via a complex, old, and undocumented conduit duct banks and pull boxes. The existing system will stay up and running in other buildings during modernization projects. Existing signaling equipment may need to be replaced if the building is modernized.

Structural

All buildings in this cluster feature the same structural system.

All buildings in this cluster are prefabricated relocatable structures (“portables”). Wood roof sheathing over wood joists supported by wood frame walls likely sheathed with stucco/plaster. Appears to have raised wood floor framing of wood sheathing over wood joists supported by wood frame cripple walls. Cripple walls likely supported on continuous concrete footings. Vertical lateral bracing appears to be provided by wood frame shear walls.

Conclusions

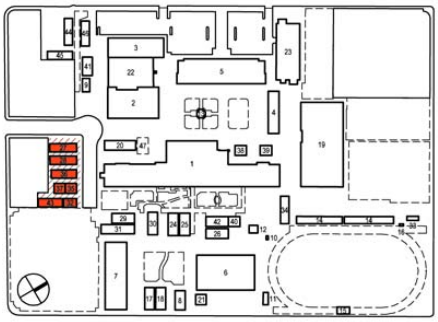
These portables and their systems are well beyond their original lifespan and should be replaced with one or more permanent buildings.

END OF 2.5.24: CENTRAL PORTABLES CLUSTER.

2.5.27: South Portables Cluster



Northeast End of Cluster



Campus Location of Cluster

AB300	FCI
YES	81.7%

Building Number	Design Year	DSA Application	Building Area (SF)	Occupancy Group(s)	Building Structure	Comments
27	1950	A-8097	1,824	E	Wood Frame	AA-923
28	1954	A-11374	1,824	E	Wood Frame	AA-1322
32	1950	A-7702	864	E	Wood Frame	AA-831
35	1966	A-27764	1,728	E	Wood Frame	A-683
36	1950	A-7702	896	E	Wood Frame	AA-828
37	1966	A-27470	1,792	E	Wood Frame	A-651
43	1949?	?	?	E	Wood Frame?	College Track Portable

Architectural

Overview

Located beyond the south end of Building #1, the South Portables Cluster consists of seven relocatable buildings ("portables"): AA-923 Building #27, originally built in 1950; AA-1322 Building #28, originally built in 1953; AA-831 Building #32, originally built in 1950; A-683 Building #35, originally built in 1966; A-828 Building #36, originally built in 1950; A-651 Building #37, originally built in 1966; and "College Track" Building #43, for which there is no further information available. Buildings #32, #35 and #37 are single-room structures, while the rest contain two classrooms each.

Educational Facilities

Buildings #27, #28, #35 and #37 contain two (2) classrooms each. Buildings #32 and #36 each contain a single classroom. Access to Building #43 is restricted, but it is assumed to contain two (2) classrooms.

Aesthetics

Most of these portable are old and show their age, but they are still in fair condition overall. Building #43 is the notable exception; whereas the others have worn stucco walls with aged wood trim, Building #43 has modern synthetic siding and trim.

Code Compliance

FIRE/LIFE SAFETY

These "temporary" structures have been in use for at least 49 years and more than 60 in some cases.

ACCESSIBILITY

Like most of the portables on the overall campus, access to the buildings is only possible by stair. Door hardware is non-compliant throughout.

Mechanical

As-Built Conditions

The classrooms are provided with wall mounted heat pumps by Bard or Marvair.

The air distribution, ventilation, air filtration and acoustical performance of all the classroom HVAC systems for this building are poor.

The existing classroom systems have exceeded their expected life.

The HVAC units use Refrigerant-22 which has been totally phased out since 2010.

Recommendations

REPLACEMENT HVAC SYSTEMS

The classrooms with wall mounted heat pumps and split systems could be replaced with Variable Refrigerant Flow Systems to reduce the current excessive sound levels. The work would be minimally invasive and the space requirements and weight will be also minimal.

REUSE OF EXISTING DUCTWORK

The aerosol duct sealing technology invented and developed by the Energy Performance of Buildings Group at Lawrence Berkeley National Laboratory in 1994 could be used to seal the existing ductwork after cleaning. This technology internally seals leaks in air distribution ducts by injecting a fog of aerosolized sealant particles into a pressurized duct system.

ENERGY MANAGEMENT SYSTEMS

EMS is required for all new projects to comply with the current codes requirements such as “Fault Detection and Diagnostics” and “Demand Controlled Ventilation”.

VENTILATION

The outdoor air flow rates for ventilation is usually much lower than required by current codes.

Electrical

Existing Electrical Service

Portable buildings have integrated panel boards. Existing equipment is in working condition but may be at end of life. Portable buildings may be replaced with new building with new service.

Existing Lighting System

Portable buildings have integrated lighting. Existing lighting system is in working condition but may be at end of life. Portable buildings may be replaced with new building.

Plumbing

As-Built Conditions

1. No plumbing except roof drainage, hose bibs and condensate drains for HVAC.
2. Sewer Lines
   a. Existing cast iron soil pipes are more than 30 years old and might have corroded to a point where replacement or lining is necessary.
3. Water systems
   a. We have not received any record drawings to date regarding plumbing upgrades.
   b. Galvanized iron pipes exist in lieu of Type L hard copper pipe inside buildings or existing copper piping is over 30 years old and corroded.

c. Water hammer arrestors required for lavatories, sinks, fountains, water closets, urinal headers, and other fixtures or devices with quick-closing valves, such as clothes washers do not exist or are not functioning.
d. Vacuum breakers or other required backflow prevention assemblies which are required are missing or not functioning at some of the following locations:
   i. Hose bibs and sill cocks.
   ii. Fire sprinkler systems.
   iii. Irrigation systems.

Recommendations

1. Replace all existing galvanized piping with copper.
2. Replace all waste piping above grade.
3. Do a video survey of all below grade waste piping that will be retained. Replace all 4" lines if found to be defective. Smaller lines may be replaced or lined.
4. Lining with cured in place material should be considered for underground or difficult to access sanitary sewer and storm drainage piping in lieu of replacement if there are budget restrictions.
5. Do a video survey of all vent piping that will be retained. Replace if defective.

Fire Sprinklers

None of the portables include fire sprinklers.

Low Voltage Systems

Existing Fire Alarm System

Existing fire alarm systems for the campus is fully automatic fire alarm system. Existing FATC is located at each portable building. Existing fire alarm system is in working condition. The campus does not have emergency voice evacuation speakers to meet current code. A new fire alarm system with voice evacuation system to comply with the latest fire alarm code will be installed if the building is modernized.

Existing Signal System

- There are no IDFs in the portable buildings. There are 8-10 data outlets in each classroom installed in surface mounted outlets.
- A new Wireless LAN system has recently been installed. Upgrading this system will not be required in existing buildings to remain.
- There are surface mounted PA speakers in classrooms as well as PA speakers in corridors and on exterior walls of the buildings.
- Existing main telephone equipment is in Building 5. Telephones are in each classroom.
- Existing cable television service via underground TV signal wiring system. Cable television drops are in the classrooms.
- Existing intrusion and CCTV systems provide partial protection and monitoring. There are CCTV cameras at some entrances to the buildings, parking structure, and interior court yards.

BUILDINGS: 34

- Existing signaling system in the campus are interconnected via a complex, old, and undocumented conduit duct banks and pull boxes. The existing system will stay up and running in other buildings during modernization projects. Existing signaling equipment may need to be replaced if the building is modernized.

Structural

All buildings in this cluster feature the same structural system.

All buildings in this cluster are prefabricated relocatable structures (“portables”). Wood roof sheathing over wood joists supported by wood frame walls likely sheathed with stucco/plaster. Appears to have raised wood floor framing of wood sheathing over wood joists supported by wood frame cripple walls. Cripple walls likely supported on continuous concrete footings. Vertical lateral bracing appears to be provided by wood frame shear walls.

Conclusions

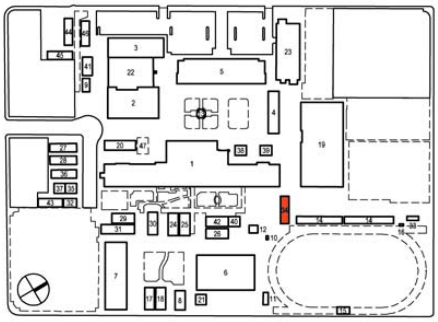
These portables and their systems are well beyond their original lifespan and should be replaced with one or more permanent buildings.

END OF 2.5.27: SOUTH PORTABLES CLUSTER.

2.5.34: Portable AA-0955



Southwest corner of AA-0955



Campus Location of Building

AB300	FCI
NO	70.8%

Building Number	Design Year	DSA Application	Building Area (SF)	Occupancy Group(s)	Building Structure	Comments
34	1950	A-8093	1,728	E	Wood Frame	AA-955

Architectural

Overview

Originally built in 1950, AA-955 Building #34 is the only relocatable building ("portable") not clustered in the immediate vicinity of other portables. An ornate paved court separates this multi-room portable from Building #1 to the west and southwest, Building #40 to the south, Building #12 to the southeast, and Building #10 to the east. Handball courts are located to the north (between Building #14 and Building #19), and the Stadium Cluster is located to the east and northeast.

Educational Facilities

Building #34 contains two (2) classrooms. The east classroom only has a single exterior door for access.

Aesthetics

This portable is old and shows its age. It is in fair to poor condition. Odors of moisture and microbial growth were present near the entrance doors to both classrooms.

Code Compliance

FIRE/LIFE SAFETY

This "temporary" structure has been in use for over 65 years.

ACCESSIBILITY

Like most of the portables on the overall campus, access to this building is only possible by stair. Door hardware is non-compliant throughout.

Mechanical

As-Built Conditions

The classrooms are provided with wall mounted heat pumps by Bard or Marvair.

The air distribution, ventilation, air filtration and acoustical performance of all the classroom HVAC systems for this building are poor.

The existing classroom systems have exceeded their expected life.

The HVAC units use Refrigerant-22 which has been totally phased out since 2010.

Recommendations

REPLACEMENT HVAC SYSTEMS

The classrooms with wall mounted heat pumps and unit ventilators should be replaced with Variable Refrigerant Flow Systems to reduce the current excessive sound levels. The work will be minimally invasive and the space requirements and weight will be also minimal.

REUSE OF EXISTING DUCTWORK

The aerosol duct sealing technology invented and developed by the Energy Performance of Buildings Group at Lawrence Berkeley National Laboratory in 1994 can be used to seal the existing ductwork after cleaning. This technology internally seals leaks in air distribution ducts by injecting a fog of aerosolized sealant particles into a pressurized duct system.

ENERGY MANAGEMENT SYSTEMS

EMS is required for all new projects to comply with the current codes requirements such as “Fault Detection and Diagnostics” and “Demand Controlled Ventilation”.

VENTILATION

The outdoor air flow rates for ventilation is usually much lower than required by current codes.

Electrical

Existing Electrical Service

Portable buildings have integrated panelboards. Existing equipment is in working condition but may be at end of life.

Existing Lighting System

Portable buildings have integrated lighting. Existing lighting system is in working condition but may be at end of life.

Plumbing

As-Built Conditions

1. No plumbing except roof drainage, hose bibs and condensate drains for HVAC.
2. Sewer Lines
   a. Existing cast iron soil pipes are more than 30 years old and might have corroded to a point where replacement or lining is necessary.
3. Water systems
   a. We have not received any record drawings to date regarding plumbing upgrades.
   b. Galvanized iron pipes exist in lieu of Type L hard copper pipe inside buildings or existing copper piping is over 30 years old and corroded.
   c. Water hammer arrestors required for lavatories, sinks, fountains, water closets, urinal headers, and other fixtures or devices with quick-closing valves, such as clothes washers do not exist or are not functioning.
   d. Vacuum breakers or other required backflow prevention assemblies which are required are missing or not functioning at some of the following locations:
      i. Hose bibs and sill cocks.
      ii. Fire sprinkler systems.
      iii. Irrigation systems.

Recommendations

1. Replace all existing galvanized piping with copper.
2. Replace all waste piping above grade.
3. Do a video survey of all below grade waste piping that will be retained. Replace all 4" lines if found to be defective. Smaller lines may be replaced or lined.
4. Lining with cured in place material should be considered for underground or difficult to access sanitary sewer and storm drainage piping in lieu of replacement if there are budget restrictions.
5. Do a video survey of all vent piping that will be retained. Replace if defective.

Fire Sprinklers

None of the portables include fire sprinklers.

Low Voltage Systems

Existing Fire Alarm System

Existing fire alarm systems for the campus is fully automatic fire alarm system. Existing FATC is located in Classroom B-8. Existing fire alarm system is in working condition. The campus does not have emergency voice evacuation speakers to meet current code. A new fire alarm system with voice evacuation system to comply with the latest fire alarm code will be installed if the building is modernized.

Existing Signal System

- There are no IDFs in the portable buildings. There are 8-10 data outlets in each classroom installed in surface mounted outlets.
- A new Wireless LAN system has recently been installed. Upgrading this system will not be required in existing buildings to remain.
- There are surface mounted PA speakers in classrooms as well as PA speakers in corridors and on exterior walls of the buildings.
- Existing main telephone equipment is in Building 5. Telephones are in each classroom.
- Existing cable television service via underground TV signal wiring system. Cable television drops are in the classrooms.
- Existing intrusion and CCTV systems provide partial protection and monitoring. There are CCTV cameras at some entrances to the buildings, parking structure, and interior court yards.
- Existing signaling system in the campus are interconnected via a complex, old, and undocumented conduit duct banks and pull boxes. The existing system will stay up and running in other buildings during modernization projects. Existing signaling equipment may need to be replaced if the building is modernized.

Structural

This building is a prefabricated relocatable structure (“portable”). Wood roof sheathing over wood joists supported by wood frame walls likely sheathed with stucco/plaster. Appears to have raised wood floor

BUILDINGS: 38 39

framing of wood sheathing over wood joists supported by wood frame cripple walls. Cripple walls likely supported on continuous concrete footings. Vertical lateral bracing appears to be provided by wood frame shear walls.

Conclusions

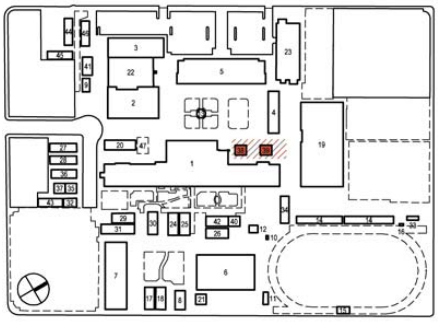
This portable and its systems are well beyond their original lifespan and should be replaced permanent buildings.

END OF 2.5.34: PORTABLE AA-0955.

2.5.38: Quad Portables Cluster



Mural at North End of Building #39



Campus Location of Cluster

AB300	FCI
NO	45.2%

Building Number	Design Year	DSA Application	Building Area (SF)	Occupancy Group(s)	Building Structure	Comments
38	1966	A-27470	896	E	Wood Frame	A-652
39	1966	A-27470	896	E	Wood Frame	A-653

Architectural

Overview

This cluster is located at the northwest corner of Building #1 and consists of two relocatable buildings ("portables"): A-652 Building #38 and A-653 Building #39, both originally built in 1955. These two single-room portables help form the northeast edge of the central commons or "quad." Part of Building #39 has been built out to provide storage or similar function, but the remaining space is no longer large enough to be considered a classroom.

Educational Facilities

Building #38 contains one (1) classroom. As noted above, the remaining space in Building #39 is currently used as a classroom but does not meet the 800-square-foot minimum size.

Aesthetics

These portable are old and show their age, but they are still in fair condition overall.

Code Compliance

FIRE/LIFE SAFETY

These "temporary" structures have been in use for almost 50 years.

ACCESSIBILITY

Access to Building #38 is only possible by stair, but Building #39 includes a ramp for access to its southern door. Door hardware is non-compliant throughout.

Mechanical

As-Built Conditions

The classrooms are provided with split system heat pumps with the outdoor section on the roof.

The air distribution, ventilation, air filtration and acoustical performance of all the classroom HVAC systems for this building are poor.

The existing classroom systems have exceeded their expected life.

The HVAC units use Refrigerant-22 which has been totally phased out since 2010.

Recommendations

REPLACEMENT HVAC SYSTEMS

The classrooms with wall mounted heat pumps and unit ventilators should be replaced with Variable Refrigerant Flow Systems to reduce the current excessive sound levels. The work would be minimally invasive and the space requirements and weight will be also minimal.

REUSE OF EXISTING DUCTWORK

The aerosol duct sealing technology invented and developed by the Energy Performance of Buildings Group at Lawrence Berkeley National Laboratory in 1994 could be used to seal the existing ductwork after cleaning. This technology internally seals leaks in air distribution ducts by injecting a fog of aerosolized sealant particles into a pressurized duct system.

ENERGY MANAGEMENT SYSTEMS

EMS is required for all new projects to comply with the current codes requirements such as “Fault Detection and Diagnostics” and “Demand Controlled Ventilation”.

VENTILATION

The outdoor air flow rates for ventilation is usually much lower than required by current codes.

Electrical

Existing Electrical Service

Portable buildings have integrated panelboards. Existing equipment is in working condition but may be at end of life.

Existing Lighting System

Portable buildings have integrated lighting. Existing lighting system is in working condition but may be at end of life.

Plumbing

As-Built Conditions

1. No plumbing except roof drainage, hose bibs and condensate drains for HVAC.
2. Sewer Lines
   a. Existing cast iron soil pipes are more than 30 years old and might have corroded to a point where replacement or lining is necessary.
3. Water systems
   a. We have not received any record drawings to date regarding plumbing upgrades.
   b. Galvanized iron pipes exist in lieu of Type L hard copper pipe inside buildings or existing copper piping is over 30 years old and corroded.
   c. Water hammer arrestors required for lavatories, sinks, fountains, water closets, urinal headers, and other fixtures or devices with quick-closing valves, such as clothes washers do not exist or are not functioning.
   d. Vacuum breakers or other required backflow prevention assemblies which are required are missing or not functioning at some of the following locations:
      i. Hose bibs and sill cocks.
      ii. Fire sprinkler systems.
      iii. Irrigation systems.

Recommendations

1. Replace all existing galvanized piping with copper.
2. Replace all waste piping above grade.
3. Do a video survey of all below grade waste piping that will be retained. Replace all 4" lines if found to be defective. Smaller lines may be replaced or lined.
4. Lining with cured in place material should be considered for underground or difficult to access sanitary sewer and storm drainage piping in lieu of replacement if there are budget restrictions.
5. Do a video survey of all vent piping that will be retained. Replace if defective.

Fire Sprinklers

None of the portables include fire sprinklers.

Low Voltage Systems

Existing Fire Alarm System

Existing fire alarm systems for the campus is fully automatic fire alarm system. Existing FATC is located at each portable building. Existing fire alarm system is in working condition. The campus does not have emergency voice evacuation speakers to meet current code. A new fire alarm system with voice evacuation system to comply with the latest fire alarm code should be installed if the building is modernized.

Existing Signal System

- There are no IDFs in the portable buildings. There are 8-10 data outlets in each classroom installed in surface mounted outlets.
- A new Wireless LAN system has recently been installed. Upgrading this system will not be required in existing buildings to remain.
- There are surface mounted PA speakers in classrooms as well as PA speakers in corridors and on exterior walls of the buildings.
- Existing main telephone equipment is in Building 5. Telephones are in each classroom.
- Existing cable television service via underground TV signal wiring system. Cable television drops are in the classrooms.
- Existing intrusion and CCTV systems provide partial protection and monitoring. There are CCTV cameras at some entrances to the buildings, parking structure, and interior court yards.
- Existing signaling system in the campus are interconnected via a complex, old, and undocumented conduit duct banks and pull boxes. The existing system will stay up and running in other buildings during modernization projects. Existing signaling equipment may need to be replaced if the building is modernized.

Structural

All buildings in this cluster feature the same structural system.

2.5.41 INFANT CARE CLUSTER

BUILDINGS: (41) (46)

All buildings in this cluster are prefabricated relocatable structures (“portables”). Wood roof sheathing over wood joists supported by wood frame walls likely sheathed with stucco/plaster. Appears to have raised wood floor framing of wood sheathing over wood joists supported by wood frame cripple walls. Cripple walls likely supported on continuous concrete footings. Vertical lateral bracing appears to be provided by wood frame shear walls.

Conclusions

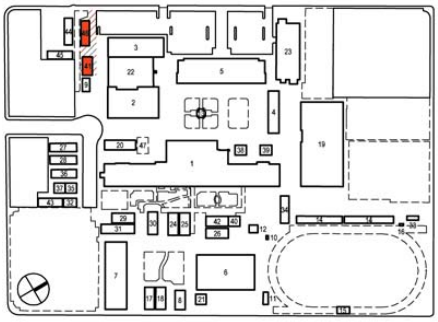
These portables and their systems are well beyond their original lifespan and should be replaced with one or more permanent buildings.

END OF 2.5.38: QUAD PORTABLES CLUSTER.

2.5.41: Infant Care Cluster



Building #41 in foreground with Building #46 beyond



Campus Location of Cluster

AB300	FCI
NO	47.0%

Building Number	Design Year	DSA Application	Building Area (SF)	Occupancy Group(s)	Building Structure	Comments
41	1972	A-35207	1,456	E	Wood Frame	A-748
46	1953	A-10565	1,728	E	Wood Frame	AA-1287

Architectural

Overview

Located at the southwest corner of the campus just north of the Continuation School Cluster, the Infant and Early Education Center occupies two relocatable buildings ("portables"): A-748 Building #41, originally built in 1972; and AA-1287 Building #46, originally built in 1953. These two multi-room portables are arranged in a single east-west row between Garage Building #9 and the west property line and just south of the Cafeteria-Classroom Cluster. A semi-enclosed covered exterior play space is located just north of Building #46.

Educational Facilities

Building #41 contains one large space that could be considered a classroom but is currently used for office equipment storage. At the east end of this space are "Kindergarten" and "Adult" scale counters with sinks, plus a single-occupancy restroom; at the west end of the space is a small office zone enclosed by partial-height glazed partitions.

Access to Building #46 is strictly controlled; therefore, while its current interior layout is unknown, it is assumed to contain two (2) classrooms, though these spaces may not be used as such.

Aesthetics

These portable are old and show their age, but they are still in fair condition overall.

Code Compliance

FIRE/LIFE SAFETY
These "temporary" buildings have been in use for 45 to over 60 years.

ACCESSIBILITY
Unlike most of the portables on the overall campus, a ramp provides access to the elevated entrances of Building #41. Access to Building #46 is only possible by stair. Door hardware is non-compliant throughout.

Mechanical

As-Built Conditions

The classrooms are provided with rooftop packaged units.

The air distribution, ventilation, air filtration and acoustical performance of all the classroom HVAC systems for this building are poor.

The existing classroom systems have exceeded their expected life.

The HVAC units use Refrigerant-22 which has been totally phased out since 2010.

Recommendations

REPLACEMENT HVAC SYSTEMS
Replace with packaged rooftop units of higher efficiency.

REUSE OF EXISTING DUCTWORK
The aerosol duct sealing technology invented and developed by the Energy Performance of Buildings Group at Lawrence Berkeley National Laboratory in 1994 can be used to seal the existing ductwork after cleaning. This technology internally seals leaks in air distribution ducts by injecting a fog of aerosolized sealant particles into a pressurized duct system.

ENERGY MANAGEMENT SYSTEMS
EMS is required for all new projects to comply with the current codes requirements such as “Fault Detection and Diagnostics” and “Demand Controlled Ventilation”.

VENTILATION
The outdoor air flow rates for ventilation is usually much lower than required by current codes.

Electrical

Existing Electrical Service

Portable buildings have integrated panel boards. Existing equipment is in working condition but may be at end of life. Portable buildings may be replaced with new building with new service.

Existing Lighting System

Portable buildings have integrated lighting. Existing lighting system is in working condition but may be at end of life. Portable buildings may be replaced with new building.

Plumbing

As-Built Conditions

1. Existing fixtures do not comply with State water conservation guidelines and standards, including maximum flow as follows:
    a. Water Closets: 1.28 gpf.
    b. Urinals: 1/8 gpf or Non-water type.
    c. Lavatory Faucets: 0.5 gpm.
2. Student Restrooms:
    a. The following features to reduce maintenance, conserve water and minimize student tampering do not exist:
        i. Water-saving battery-operated infrared-sensored flush valves or manual valves in high vandalism areas.
        ii. Push-button, ADA-metered, self-closing faucets on lavatories.
        iii. Hose-bib with vacuum breaker in recessed box with locking cover.

iv. Floor drains with trap primers with floors sloped to drain.

3. Faculty and Visitor Restrooms:
   a. The following features to reduce maintenance and conserve water do not exist:
      i. Floor drains with trap primers with floors sloped to drain.
4. Sewer Lines
   a. Existing cast iron soil pipes are more than 30 years old and might have corroded to a point where replacement or lining is necessary.
5. Water systems
   a. We have not received any record drawings to date regarding plumbing upgrades.
   b. Galvanized iron pipes exist in lieu of Type L hard copper pipe inside buildings or existing copper piping is over 30 years old and corroded.
   c. Water hammer arrestors required for lavatories, sinks, fountains, water closets, urinal headers, and other fixtures or devices with quick-closing valves, such as clothes washers do not exist or are not functioning.
   d. Vacuum breakers or other required backflow prevention assemblies which are required are missing or not functioning at some of the following locations:
      i. Hose bibs and sill cocks.
      ii. Demonstration tables.
      iii. Fire sprinkler systems.
      iv. Irrigation systems.
6. Gas Piping:
   a. Gas pipes
      i. Above grade pipes within the building are more than 25 years old and require instrument assisted evaluation and possible replacement.
   b. Gas Valves:
      i. DSA approved seismic gas shut-off valves are missing at regulators and gas meter.
7. Seismic restraints for equipment and piping systems in accordance with applicable codes and guidelines are missing at some locations.

Recommendations

1. Replace all existing galvanized piping with copper.
2. Replacement of existing water heaters with high efficiency direct vent water heaters would be required to meet current standards.
3. Replace all water, waste and vent piping in all restrooms which will get accessibility upgrades.
4. Replace all waste piping above grade.
5. Do a video survey of all below grade waste piping that will be retained. Replace all 4" lines if found to be defective. Smaller lines may be replaced or lined.
6. Lining with cured in place material should be considered for underground or difficult to access sanitary sewer and storm drainage piping in lieu of replacement if there are budget restrictions.
7. Do a video survey of all vent piping that will be retained. Replace if defective.
8. For buildings without showers, science laboratories, kitchens and others special areas with higher hot water demand and just require hot water for faculty restrooms and custodian rooms,

BUILDINGS: (44) (45)

instantaneous electric water heaters should be considered for the faculty restroom lavatories and a gas tankless hot water for the custodian rooms. There will be substantial initial cost savings through not having to install insulated hot water supply and return piping and circulating pumps. There will also be substantial energy savings from eliminating the standby losses from the water heater storage tanks, supply and return piping and circulating pumps. The instantaneous point of use water heaters only heat the quantity of water that is actually used to the desired temperature. Stored hot water is required to be heated to 140^0F and stored at 140^0F to prevent the growth of Legionella Bacteria. This has to be mixed with cold water to 110^0F before distribution. There is substantial energy loss in doing this. Modern storage water heaters have electric blowers for forced draft combustion and electronic controls. Other high maintenance items such as mixing valves, water temperature limiting control and flue condensate neutralizers are also required. The low flow 0.4 GPM faucets do not get hot water before emptying the cold water in the supply line in a conventional circulated hot water system. 10 Feet of ½" copper pipe holds about 0.2 gallons of water. If the mixing ratio is 5 parts hot water of 110^0F with 1 part cold water of 50^0F to get 100^0F hot water from the faucet, the time delay will be about 36 seconds and nearly a quarter gallon of water will be wasted at each use of the lavatory faucet. A urinal uses only one eighth of a gallon per flush. An instantaneous hot water heater has usually only a few feet of pipe between it and the faucet.

Fire Sprinklers

None of the portables include fire sprinklers.

Low Voltage Systems

Existing Fire Alarm System

Existing fire alarm systems for the campus is fully automatic fire alarm system. Existing FATC is located at each portable building. Existing fire alarm system is in working condition. The campus does not have emergency voice evacuation speakers to meet current code. A new fire alarm system with voice evacuation system to comply with the latest fire alarm code will be installed if the building is modernized.

Existing Signal System

- There are no IDFs in the portable buildings. There are 8-10 data outlets in each classroom installed in surface mounted outlets.
- A new Wireless LAN system has recently been installed. Upgrading this system will not be required in existing buildings to remain.
- There are surface mounted PA speakers in classrooms as well as PA speakers in corridors and on exterior walls of the buildings.
- Existing main telephone equipment is in Building 5. Telephones are in each classroom.
- Existing cable television service via underground TV signal wiring system. Cable television drops are in the classrooms.

- Existing intrusion and CCTV systems provide partial protection and monitoring. There are CCTV cameras at some entrances to the buildings, parking structure, and interior court yards.
- Existing signaling system in the campus are interconnected via a complex, old, and undocumented conduit duct banks and pull boxes. The existing system will stay up and running in other buildings during modernization projects. Existing signaling equipment may need to be replaced if the building is modernized.

Structural

All buildings in this cluster feature the same structural system.

All buildings in this cluster are prefabricated relocatable structures ("portables"). Wood roof sheathing over wood joists supported by wood frame walls likely sheathed with stucco/plaster. Appears to have raised wood floor framing of wood sheathing over wood joists supported by wood frame cripple walls. Cripple walls likely supported on continuous concrete footings. Vertical lateral bracing appears to be provided by wood frame shear walls.

Conclusions

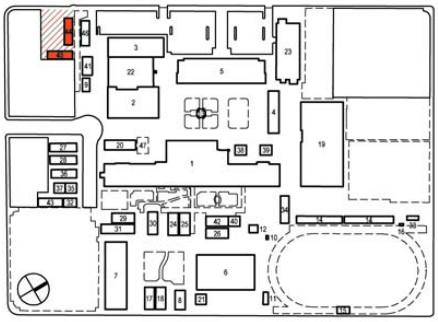
These portables and their systems are well beyond their original lifespan and should be replaced with one or more permanent buildings.

END OF 2.5.41: INFANT CARE CLUSTER.

2.5.44: Continuation School Cluster



Continuation School Courtyard



Campus Location of Cluster

AB300	FCI
NO	48.2%

Building Number	Design Year	DSA Application	Building Area (SF)	Occupancy Group(s)	Building Structure	Comments
44	1949	A-7056	1,824	E	Wood Frame	AA-586
45	1955	A-13472	1,728	E	Wood Frame	AA-1493

Architectural

Overview

Located at the southwest corner of the campus just south of the Infant Care Cluster, the Boyle Heights Continuation High School occupies two relocatable buildings ("portables"): AA-586 Building #44, originally built in 1949; and AA-1493 Building #45, originally built in 1955. These two multi-room portables are arranged in an "L" configuration along the north and east edges of the Continuation school zone, framing an outdoor space for student gathering and recreation.

Aesthetics

These portable are old and show their age, but they are still in fair condition overall.

Code Compliance

FIRE/LIFE SAFETY

No access to buildings. These "temporary" structures have been in use for 60 years or longer.

ACCESSIBILITY

No access to buildings. Like most of the portables on the overall campus, access to the buildings is only possible by stair. Door hardware is likely non-compliant throughout.

Mechanical

Classroom Building – As-Built Conditions

The classrooms are provided with wall mounted heat pumps by Bard or Marvair.

The air distribution, ventilation, air filtration and acoustical performance of all the classroom HVAC systems for this building are poor.

The existing classroom systems have exceeded their expected life.

The HVAC units use Refrigerant-22 which has been totally phased out since 2010.

Classroom Building – Recommendations

REPLACEMENT HVAC SYSTEMS

The classrooms with wall mounted heat pumps and unit ventilators should be replaced with Variable Refrigerant Flow Systems to reduce the current excessive sound levels. The work will be minimally invasive and the space requirements and weight will be also minimal.

REUSE OF EXISTING DUCTWORK

The aerosol duct sealing technology invented and developed by the Energy Performance of Buildings Group at Lawrence Berkeley National Laboratory in 1994 can be used to seal the existing ductwork after cleaning.

This technology internally seals leaks in air distribution ducts by injecting a fog of aerosolized sealant particles into a pressurized duct system.

ENERGY MANAGEMENT SYSTEMS
EMS is required for all new projects to comply with the current codes requirements such as “Fault Detection and Diagnostics” and “Demand Controlled Ventilation”.

VENTILATION
The outdoor air flow rates for ventilation is usually much lower than required by current codes.

Library Classroom Building – As-Built Conditions

The classrooms are provided with rooftop packaged heat pumps by Trane.

The existing classroom systems have exceeded their expected life.

The HVAC units use Refrigerant-22 which has been totally phased out since 2010.

Library Classroom Building – Recommendations

REPLACEMENT HVAC SYSTEMS
Replace existing rooftop heat pumps.

REUSE OF EXISTING DUCTWORK
The aerosol duct sealing technology invented and developed by the Energy Performance of Buildings Group at Lawrence Berkeley National Laboratory in 1994 can be used to seal the existing ductwork after cleaning. This technology internally seals leaks in air distribution ducts by injecting a fog of aerosolized sealant particles into a pressurized duct system.

ENERGY MANAGEMENT SYSTEMS
EMS is required for all new projects to comply with the current codes requirements such as “Fault Detection and Diagnostics” and “Demand Controlled Ventilation”.

VENTILATION
The outdoor air flow rates for ventilation is usually much lower than required by current codes.

Electrical

Existing Electrical Service

Portable buildings have integrated panel boards. Existing equipment is in working condition but may be at end of life. Portable buildings may be replaced with new building with new service.

Existing Lighting System

Portable buildings have integrated lighting. Existing lighting system is in working condition but may be at end of life. Portable buildings may be replaced with new building.

Plumbing

As-Built Conditions

1. No plumbing except roof drainage, hose bibs and condensate drains for HVAC.
2. Sewer Lines
    a. Existing cast iron soil pipes are more than 30 years old and might have corroded to a point where replacement or lining is necessary.
3. Water systems
    a. We have not received any record drawings to date regarding plumbing upgrades.
    b. Galvanized iron pipes exist in lieu of Type L hard copper pipe inside buildings or existing copper piping is over 30 years old and corroded.
    c. Water hammer arrestors required for lavatories, sinks, fountains, water closets, urinal headers, and other fixtures or devices with quick-closing valves, such as clothes washers do not exist or are not functioning.
    d. Vacuum breakers or other required backflow prevention assemblies which are required are missing or not functioning at some of the following locations:
        i. Hose bibs and sill cocks.
        ii. Fire sprinkler systems.
        iii. Irrigation systems.

Recommendations

1. Replace all existing galvanized piping with copper.
2. Replace all waste piping above grade.
3. Do a video survey of all below grade waste piping that will be retained. Replace all 4" lines if found to be defective. Smaller lines may be replaced or lined.
4. Lining with cured in place material should be considered for underground or difficult to access sanitary sewer and storm drainage piping in lieu of replacement if there are budget restrictions.
5. Do a video survey of all vent piping that will be retained. Replace if defective.

Fire Sprinklers

None of the portables include fire sprinklers.

Low Voltage Systems

Existing Fire Alarm System

Existing fire alarm systems for the campus is fully automatic fire alarm system. Existing FATC is located at each portable building. Existing fire alarm system is in working condition. The campus does not have emergency voice evacuation speakers to meet current code. A new fire alarm system with voice evacuation system to comply with the latest fire alarm code will be installed if the building is modernized.

Existing Signal System

- There are no IDFs in the portable buildings. There are 8-10 data outlets in each classroom installed in surface mounted outlets.
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Structural

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All buildings in this cluster are prefabricated relocatable structures (“portables”). Wood roof sheathing over wood joists supported by wood frame walls likely sheathed with stucco/plaster. Appears to have raised wood floor framing of wood sheathing over wood joists supported by wood frame cripple walls. Cripple walls likely supported on continuous concrete footings. Vertical lateral bracing appears to be provided by wood frame shear walls.

Conclusions

These portables and their systems are well beyond their original lifespan and should be replaced with one or more permanent buildings.

END OF 2.5.44: CONTINUATION SCHOOL CLUSTER.

2.6 CORE FACILITIES ANALYSIS



CORE FACILITIES ANALYSIS

10' 25' 50' 100' 250'

BUILDING INDEX

1. AUDITORIUM AND CLASSROOM
2. CAFETERIA
3. WEST CLASSROOM
4. MUSIC
5. ADMINISTRATION AND CLASSROOM
6. INDUSTRIAL ARTS
7. EAST CLASSROOM
8. INSTRUMENTAL MUSIC
9. GARAGE / STORAGE - INFANT CARE
10. FLAMMABLE STORAGE
11. FIELD SANITARY
12. EQUIPMENT FIELD STORAGE
13. GAZEBO
14. HOME BLEACHERS
15. VISITORS BLEACHERS
16. FIELD LIGHT CONTROLS
17. CLASSROOM
18. CLASSROOM
19. PHYSICAL EDUCATION
20. UTILITY
21. AUTO SERVICE
22. ARCADE / LUNCH SHELTER
23. LIBRARY AND CLASSROOM
24. TWO / THREE UNIT RELOCATABLE
25. TWO / THREE UNIT RELOCATABLE
26. TWO / THREE UNIT RELOCATABLE
27. TWO / THREE UNIT RELOCATABLE
28. TWO / THREE UNIT RELOCATABLE
29. TWO / THREE UNIT RELOCATABLE
30. TWO / THREE UNIT RELOCATABLE
31. TWO / THREE UNIT RELOCATABLE
32. TWO / THREE UNIT RELOCATABLE
33. SANITARY RELOCATABLE
34. TWO / THREE UNIT RELOCATABLE
35. SINGLE UNIT RELOCATABLE
36. TWO / THREE UNIT RELOCATABLE
37. SINGLE UNIT RELOCATABLE
38. SINGLE UNIT RELOCATABLE
39. SINGLE UNIT RELOCATABLE
40. SINGLE UNIT RELOCATABLE
41. SINGLE UNIT RELOCATABLE - INFANT CARE
42. TWO / THREE UNIT RELOCATABLE
43. CLASSROOM RELO-DOH / PARENT CENTER
44. TWO / THREE UNIT RELOCATABLE (BOYLE HEIGHTS CONT.)
45. TWO / THREE UNIT RELOCATABLE (BOYLE HEIGHTS CONT.)
46. TWO / THREE UNIT RELOCATABLE - INFANTCARE
47. CHILLER YARD

LEGEND

- FOOD SERVICES
- AUDITORIUM / MULTIPURPOSE
- LIBRARY
- ADMINISTRATION
- GYMNASIUM

2.6.1 FOOD SERVICES

The Food Services buildings were built in 1977 and are comprised of the Cafeteria Building (2) and the Lunch Arcade (22). They are situated near the west corner of the campus, adjacent to the West Classroom Building (3) and the Infant Care relocatable (41). These single-story wood-frame buildings feature deep perimeter overhangs enclosed by arcades. Most rooms open directly to one of these covered exterior spaces. The only enclosed part of the Lunch Shelter/Arcade is a small kiosk on the north side; the rest of Building 22 is open to the elements, including several large roof openings. The lunch shelter is adjacent to the vehicular entrance from East Sixth Street, and the campus trash collection area serviced by that entrance. As such, smells from the collection site were observed from the shelter.

While there are no stairs within the buildings, there are stairs and ramps immediately adjacent to the south and east that provide access to lower portions of the site. Most door hardware appears to be non-compliant. Restrooms were not surveyed but it can be assumed by their age that they do not comply with current construction related accessibility standards.

2.6.2 AUDITORIUM / MULTIPURPOSE ROOM

The Auditorium / Multipurpose Building (1) is the oldest building on the campus. It is located in the center of, and bisects the campus. It primarily houses classrooms- both basic and science, and a large assembly room.

The original 1922 design featured extensive exterior ornamentation, including decorative glazed tiles and dramatic gamble pediments; however, the 1924 addition of a south wing was more subdued, and subsequent seismic strengthening projects in 1936 and 1954 removed almost all of the original design features. A fire resulted in the removal of the original fourth floor, leaving a three-story building that mitigates some of the campus site slope through a first floor that is essentially a basement at its north end. The most significant parts of the building are its performance auditorium with balcony seating and a large double-height lobby. The exterior entrance to the lobby and some of the interior of the auditorium are the only remaining traces of the original design ornament, and the latter is actually a product of the 1936 seismic remodel.

Almost every exterior door, including official building entrances, requires the use of stairs. Existing stairs do not meet current accessibility requirements, particularly for handrails. An elevator was retrofit at the extreme south end of the building at some point, but the travel distance between it and the north end of the building greatly exceeds 200 feet. Most restrooms are not only not currently accessible but unlikely to be easily retrofit for accessibility due to existing size limitations.

2.6.3 LIBRARY

The Library is located on the third floor of Building 23, at the north west edge of the campus. It is to the north of the Administration and Classroom Building (5) and the Music Building (4), and is south of Roosevelt Public Pool. It houses a mixture of classrooms, labs, administration, and some operational support, and was built in 1990.

The first floor of the building is a semi-enclosed parking garage; the second floor contains classrooms, including some that appear to have been retrofit for science use; and the third floor contains a mix of classrooms, computer labs, and the campus library. The Library is accessible by stairs, as well as an elevator.

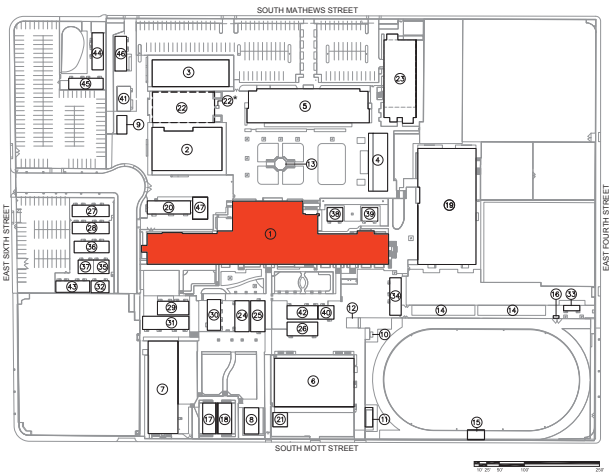
2.6.4 ADMINISTRATION

The Administrative facilities are located on the first floor of Building 5, which was built in 1972. This building serves as the main entrance to the campus, and is adjacent to the two parking lots along Mathews Street to the north west. To the south east of the building is the central commons “quad”. The first floor houses mostly administrative offices and support areas, while the second and third floors house mostly basic classrooms and specialty classrooms.

2.6.5 GYMNASIUM

The Gymnasium is located in the Physical Education Building (19) at the north corner of the site. It is adjacent to many of the athletic programs on the site, including the Tennis Courts, Playground Field, and the Track and Field Course. The large functions within the Gymnasium are the exercise rooms on the first floor and the locker rooms on the first and second floors.

AUDITORIUM & CLASSROOM BUILDING
BUILDING: 1



RED CHART KEY PLAN

General Overview
Building 1 is the primary, oldest, and largest building on the Roosevelt High School campus. The north wing and auditorium were originally constructed as a four-story building in 1922, but were later reduced to three stories. Subsequent work in 1924 added a three-story wing of classrooms to the south of the auditorium. In addition to 48 classrooms (many of which are less than 800 square feet in area) and the campus auditorium, Building 1 currently houses a wellness center, textbook storage, and administrative offices. Building 1 is in moderate physical condition.

Seismic Evaluation
Building 1 is on the AB300 list. The building uses a concrete frame for vertical loads and a combination of wood and concrete for horizontal loads; as a general rule, corridor floors are concrete while classroom floors are wood. The original 1922 building was seismically strengthened in 1936, but similar work did not occur for the 1922 south wing until 1954. The original building features a mix of flexible and rigid diaphragm regions at all upper story levels with some horizontal steel bracing in select areas; whereas the south wing features flexible diaphragms at classrooms and horizontal steel bracing at the corridors.

Facility Condition Index
The FCI for Building 1 is listed as 51.0% by LAUSD, which is 3.0% above the weighted campus average of 48.0%. However, based on the DLR Group “RED Chart” analysis, Building 1 should have an adjusted FCI of 78.1%, which is 7.9% above the average campus adjusted FCI of 70.2%.

Preliminary Code Review
Based on its size and structural elements (mostly a mix of wood and concrete), the existing building cannot comply with current building codes unless it is subdivided by multiple vertically continuous fire walls.

Accessibility
Almost every exterior door requires the use of stairs, most of which do not meet current accessibility requirements. The existing elevator retrofit does not comply with travel distance limits. Most existing restrooms are too small to be retrofit for compliance.

Our Recommendation
Replace the building with several modern structures, including at least one new classroom building and a new auditorium or multipurpose building.

Estimated Construction Cost
To remodel this building is approximate $55,042,672

BUILDING 1 — AUDITORIUM AND CLASSROOM BUILDING

1

a/k/a "R Building"

CAFM 21585

Year Built 1922 (93 YEARS OLD)

FCI Priority Scope Cost	**$32,277,785**	$298.12/SF	
relative to			
Basic Replacement Cost	$36,216,315	$334.50/SF	
Basic Replacement $ Δ	$3,938,530	OVER FCI COST	
Basic Replacement % Δ	12.20%	OF FCI COST OVER FCI COST	
Cost Adjustment Factor	A	(BASELINE COST)	

Existing Occupied Floors	Existing Building Area	Existing Building FCI
3	108,270 SQUARE FEET (SF)	51.0%
Existing Classrooms		**Adjusted FCI**
48		**78.1%** (27.0%)

$6.00/SF Hazmat Abatement (*ASSUMED*): $649,620

32.1% Interior Construction (and Interior Finishes) (*DESIGN RECOMMENDATION*): $4,114,260 — REPLACE

BUILDING COMPONENT FCI SYSTEMS / *DESIGN RECOMMENDATION*

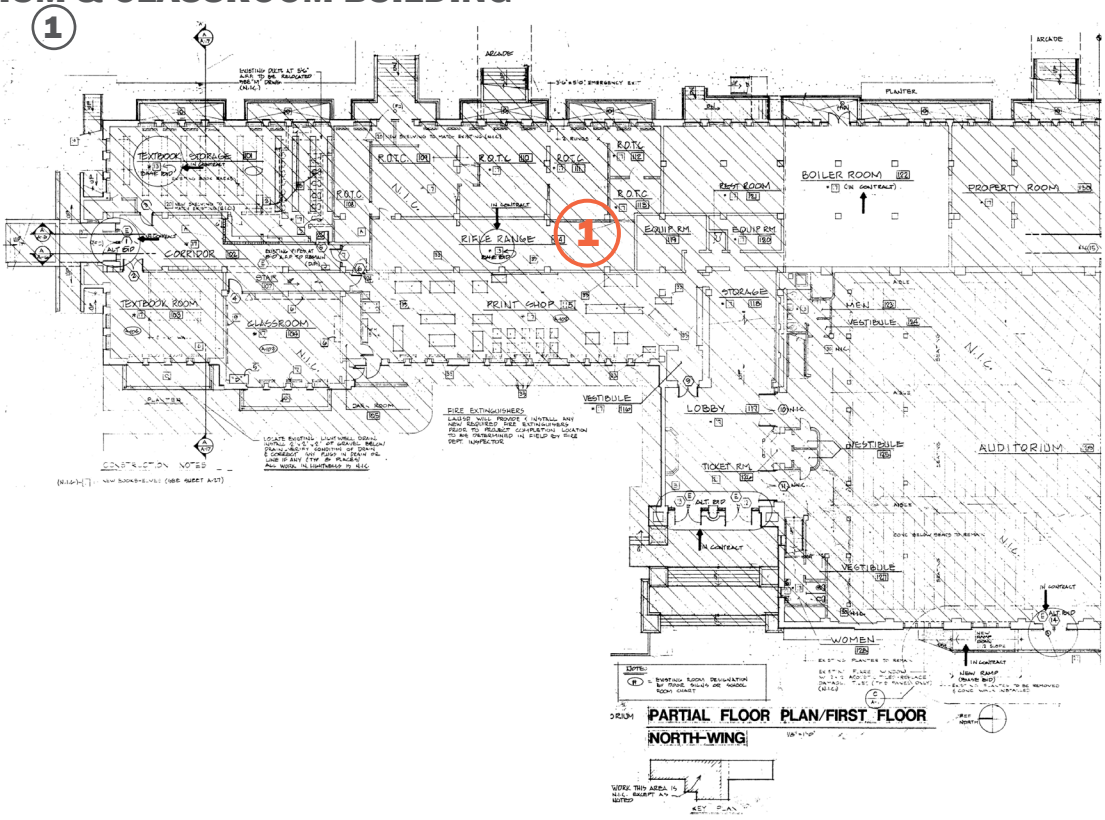
FCI %	FCI SYSTEM	STATUS	COST	COMMENTS
100.0%	Super Structure	REPLACE	$8,120,250	AB300, extensive structural work triggers replacement of interior construction.
12.2%	Exterior Enclosure	MODERNIZE	$3,789,450	Energy efficient windows & doors, repair plaster/trim, new paint.
85.8%	Roofing	REPLACE	$1,245,105	Structural and HVAC work trigger replacement.
100.0%	HVAC	REPLACE	$4,547,340	End of life, noise/vibration, poor ventilation, obsolete refrigerant.
77.0%	Plumbing	REPLACE	$1,678,185	Near end of life, galvanized piping, noncompliant fixtures.
96.5%	Fire Protection	REPLACE	$812,025	End of life, extensive structural work triggers replacement.
74.8%	Electrical	REPLACE	$4,114,260	Near end of life, noncompliant fixtures, insufficient capacity for modern use.

VERTICAL CIRCULATION FCI SYSTEMS / *DESIGN RECOMMENDATION*

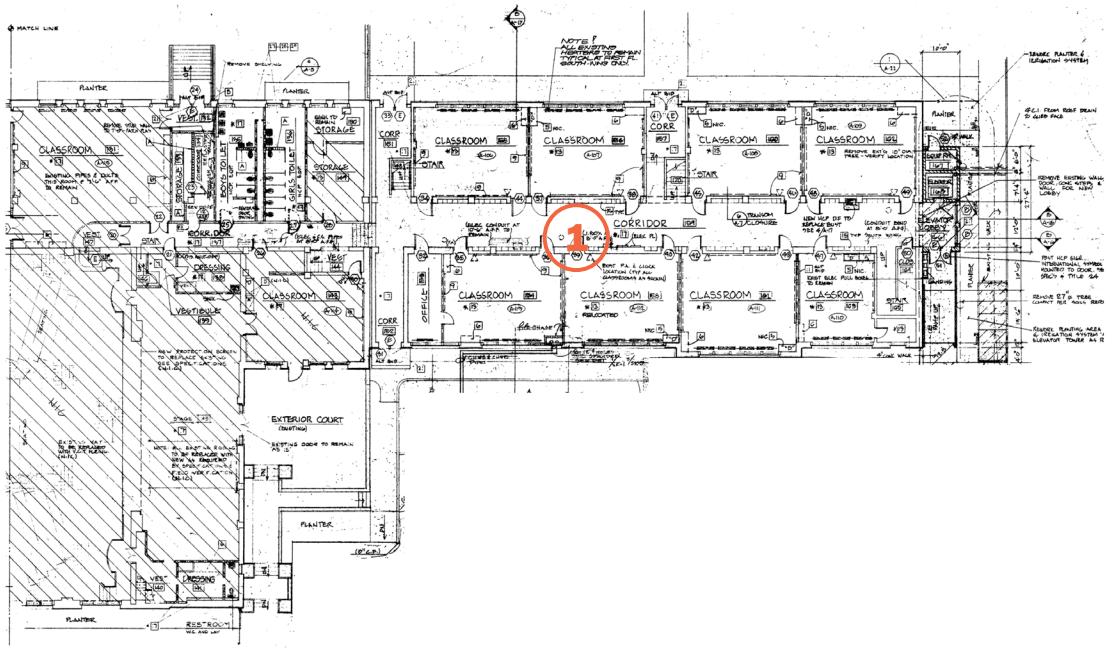
FCI %	FCI SYSTEM		STATUS	COST	COMMENTS
N/A	Elevator (existing)		MODERNIZE	$60,000	Refresh existing elevator.
-	# New Elevators →	1	ADD	$120,000	Locate new elevator near center of building and Auditorium to serve north end.
0.3%	Stairs (existing)	× 8	MODERNIZE	$104,000	Upgrade handrails, guards and stepping surfaces.
-	# New Stairs →	0	NONE	#N/A	Not required.

INFRASTRUCTURE FCI SYSTEMS / *DESIGN RECOMMENDATION*

FCI %	FCI SYSTEM	STATUS	COST	COMMENTS
N/A	Site Improvements & Utilities	REPLACE	$2,923,290	Existing noncompliant VCP under building.

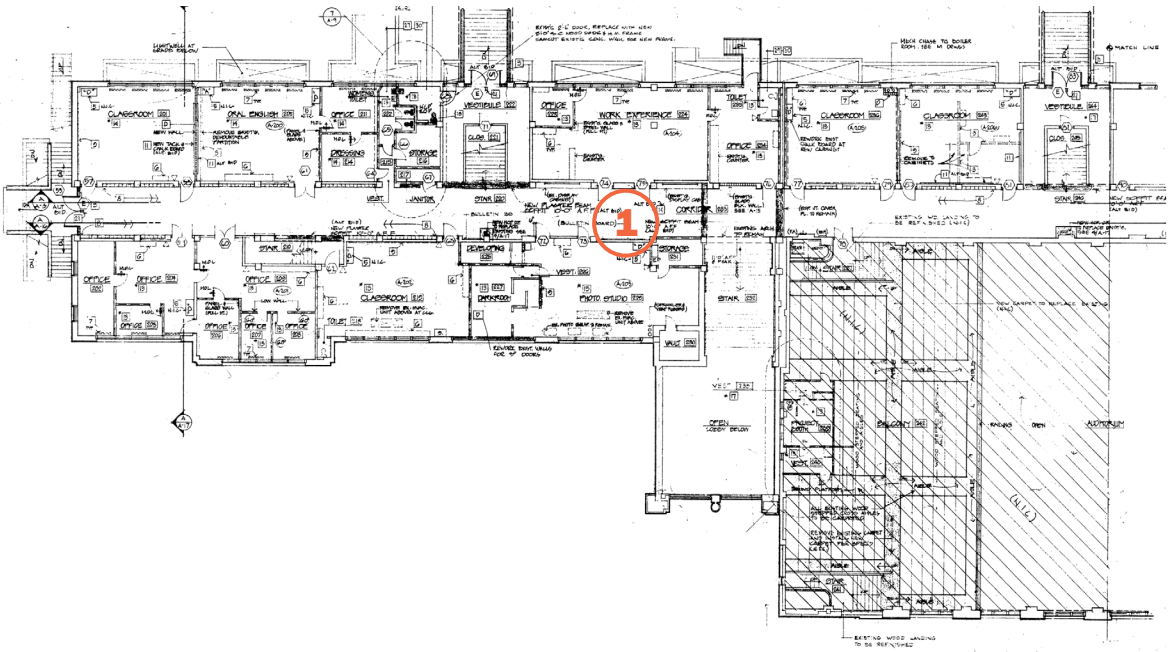


PARTIAL FLOOR PLAN/FIRST FLOOR
NORTH-WING

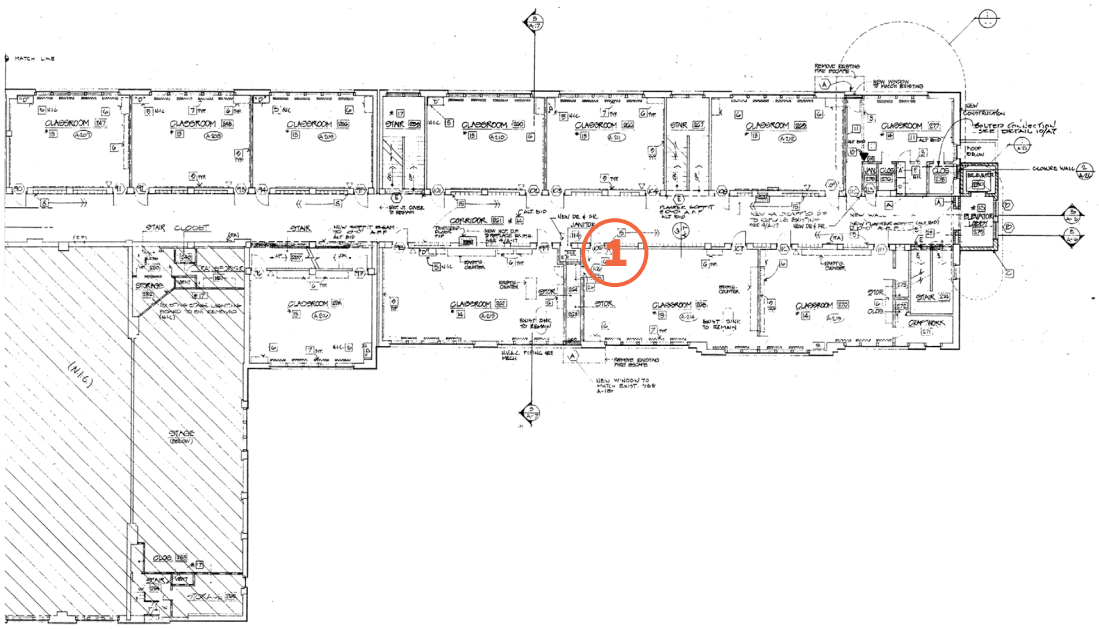


PARTIAL FLOOR PLAN/FIRST FLOOR
SOUTH-WING

1ST FLOOR PLAN



PARTIAL FLOOR PLAN/SECOND FLOOR
NORTH-WING

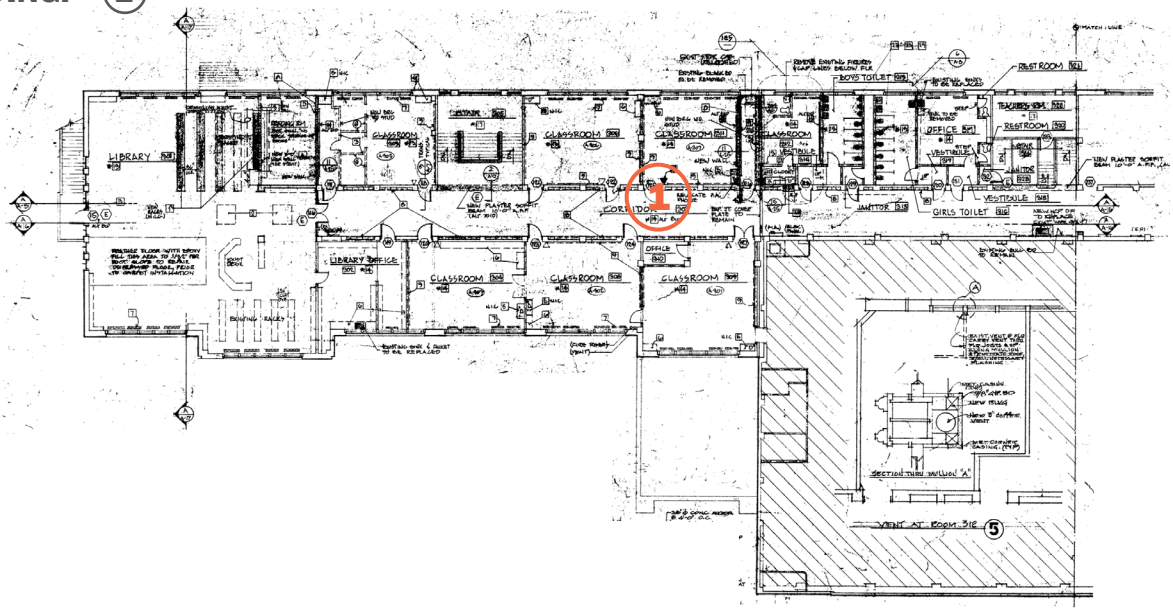


PARTIAL FLOOR PLAN/SECOND FLOOR
SOUTH-WING

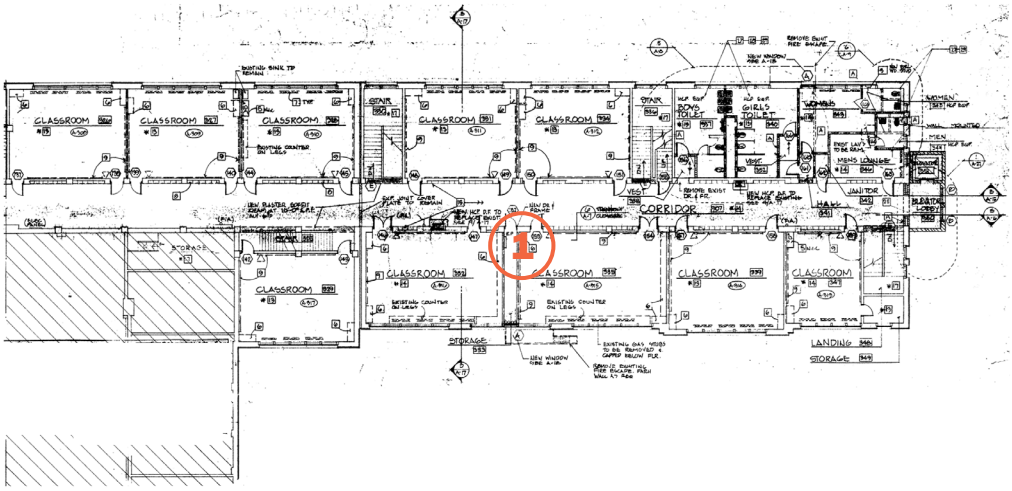
2ND FLOOR PLAN

AUDITORIUM & CLASSROOM BUILDING

BUILDING: (1)



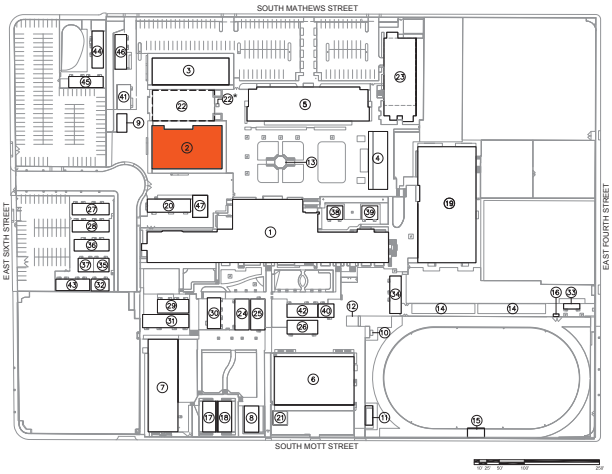
PARTIAL FLOOR PLAN/THIRD FLOOR
NORTH WING



PARTIAL FLOOR PLAN/THIRD FLOOR
SOUTH WING

3RD FLOOR PLAN

CAFETERIA BUILDING
BUILDING: (2)



RED CHART KEY PLAN

General Overview
Building 2 was constructed under the same 1975 DSA Application as Buildings 3, 4, 13, 22, and 22.1, which also included relocation of Building 9. In addition to the primary food services and indoor dining facilities for both students and faculty, Building 2 provides overflow and after-school educational space for various clubs and extracurricular activities. The existing food service facilities are awkwardly positioned for convenient campus access. Building 2 is in generally poor to moderate physical condition.

Seismic Evaluation
Building 2 is not on the AB300 list. It is a one-story wood-frame structure with some steel columns for gravity loads, flexible wood diaphragms, and plywood shear walls.

Facility Condition Index
The FCI for Building 2 is listed as 45.7% by LAUSD, which is 2.3% below the weighted campus average of 48.0%. However, based on the DLR Group “RED Chart” analysis, Building 2 should have an adjusted FCI of 67.5%, which is 2.7% below the average campus adjusted FCI of 70.2%.

Preliminary Code Review
Building 2 is assumed to be Type VA construction due to allowable floor area limits and the presence of the central kitchen facility.

Accessibility
Most door hardware is non-compliant. Restrooms are assumed to be non-compliant. Adjacent site stairs and ramps are non-compliant.

Our Recommendation
Replace with new food service facilities: indoor and outdoor dining and food service for students and faculty. The building is larger than a campus of this size requires, which means a new, fully modern (though smaller) food service facility could be constructed for less money than modernizing this existing structure.

Estimated Construction Cost
To remodel this building is approximate $8,379,669

BUILDING 2 — CAFETERIA BUILDING

2

a/k/a "Food Service"

CAFM 15158

Year Built 1977 (38 YEARS OLD)

FCI Priority Scope Cost	$3,149,647	$250.25/SF
relative to		
Basic Replacement Cost	$4,335,877	$344.50/SF
Basic Replacement $ Δ	$1,186,231	OVER FCI COST
Basic Replacement % Δ	37.66%	OF FCI COST OVER FCI COST
Cost Adjustment Factor	A	(BASELINE COST)

Existing Occupied Floors	Existing Building Area	Existing Building FCI
1	12,586 SQUARE FEET (SF)	45.7%

Existing Classrooms: 0

Adjusted FCI: 67.5% (21.7%)

$6.00/SF Hazmat Abatement: $75,516 (ASSUMED)

22.9% Interior Construction (and Interior Finishes): $251,720 MODERNIZE (DESIGN RECOMMENDATION)

BUILDING COMPONENT FCI SYSTEMS / *DESIGN RECOMMENDATION*

FCI %	FCI SYSTEM	STATUS	COST	COMMENTS
100.0%	Super Structure	REPLACE	$943,950	End of life, assumed deficient based on FCI (no detailed analysis).
14.6%	Exterior Enclosure	MODERNIZE	$440,510	Energy efficient windows & doors, repair plaster/trim, new paint.
100.0%	Roofing	REPLACE	$144,739	End of life, HVAC work triggers replacement.
100.0%	HVAC	REPLACE	$528,612	End of life, obsolete refrigerant.
37.7%	Plumbing	MODERNIZE	$75,516	Galvanized piping, noncompliant fixtures.
50.0%	Fire Protection	MODERNIZE	$59,784	Assume moderate level of modernization necessary.
69.9%	Electrical	REPLACE	$478,268	Near end of life, noncompliant fixtures.

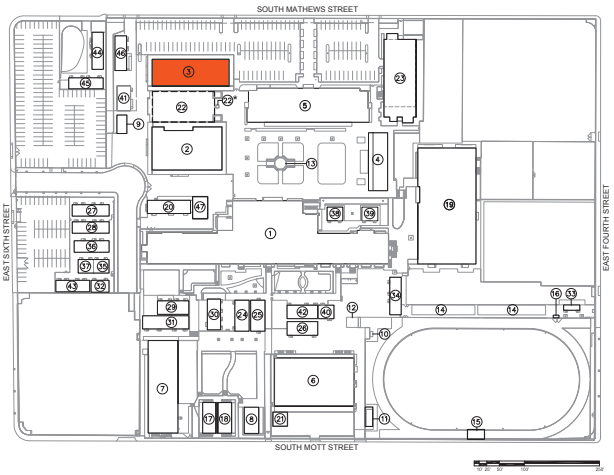
VERTICAL CIRCULATION FCI SYSTEMS / *DESIGN RECOMMENDATION*

FCI %	FCI SYSTEM		STATUS	COST	COMMENTS
N/A	Elevator (existing)		NONE	$0	Single story, not required.
-	# New Elevators →	0	NONE	#N/A	Single story, not required.
N/A	Stairs (existing)	× 0	NONE	$0	Single story, not required.
-	# New Stairs →	0	NONE	#N/A	Single story, not required.

INFRASTRUCTURE FCI SYSTEMS / *DESIGN RECOMMENDATION*

FCI %	FCI SYSTEM	STATUS	COST	COMMENTS
N/A	Site Improvements & Utilities	MODERNIZE	$151,032	Video existing utilities, pothole fixes.

CLASSROOM BUILDING #1
BUILDING: 3



RED CHART KEY PLAN

General Overview
Building 3 was constructed under the same 1975 DSA Application as Buildings 2, 4, 13, 22, and 22.1, which also included relocation of Building 9. This building includes 8 classrooms as well as student and staff restrooms. Building 3 is in generally poor to moderate physical condition.

Seismic Evaluation
Building 3 is not on the AB300 list. It is a one-story wood-frame structure with some steel columns for gravity loads, flexible wood diaphragms, and plywood shear walls.

Facility Condition Index
The FCI for Building 1 is listed as 51.0% by LAUSD, which is 3.0% above the weighted campus average of 48.0%. However, based on the DLR Group “RED Chart” analysis, Building 1 should have an adjusted FCI of 78.1%, which is 7.9% above the average campus adjusted FCI of 70.2%.

Preliminary Code Review
Building 3 is assumed to be Type VA construction due to allowable floor area limits and its connection to Buildings 2 and 22.

Accessibility
Most door hardware is non-compliant. Restrooms are mostly non-compliant. Adjacent site stairs and ramps are non-compliant.

Our Recommendation
Moderate modernization (light at classrooms, heavy at restrooms) to maintain the existing building until future replacement classroom facilities are constructed.

Estimated Construction Cost
To remodel this building is approximate $4,593,001

BUILDING 3 — CLASSROOM BUILDING #1

3

a/k/a "E Building"

CAFM: 24081

Year Built: 1977 (38 YEARS OLD)

FCI Priority Scope Cost	**$1,756,960**	$197.50/SF
relative to		
Basic Replacement Cost	$3,064,672	$344.50/SF
Basic Replacement $ Δ	$1,307,712	OVER FCI COST
Basic Replacement % Δ	74.43%	OF FCI COST OVER FCI COST
Cost Adjustment Factor	A	(BASELINE COST)

Existing Occupied Floors	Existing Building Area	Existing Building FCI
1	8,896 SQUARE FEET (SF)	45.9%

Existing Classrooms: 8

Adjusted FCI: 68.0% (22.2%)

$6.00/SF Hazmat Abatement: $53,376 *ASSUMED*

26.7% Interior Construction: $0 — KEEP (and Interior Finishes) *DESIGN RECOMMENDATION*

BUILDING COMPONENT FCI SYSTEMS / *DESIGN RECOMMENDATION*

FCI %	FCI SYSTEM	STATUS	COST	COMMENTS
0.0%	Super Structure	MODERNIZE	$266,880	Assumed deficiencies based on relationship to Buildings 2 & 4.
3.1%	Exterior Enclosure	MODERNIZE	$311,360	Energy efficient windows & doors, repair plaster/trim, new paint.
100.0%	Roofing	REPLACE	$102,304	End of life, HVAC work triggers replacement.
100.0%	HVAC	REPLACE	$373,632	End of life, obsolete refrigerant.
75.8%	Plumbing	REPLACE	$137,888	Near end of life, galvanized piping, noncompliant fixtures.
100.0%	Fire Protection	REPLACE	$66,720	End of life.
97.3%	Electrical	REPLACE	$338,048	Near end of life, noncompliant fixtures.

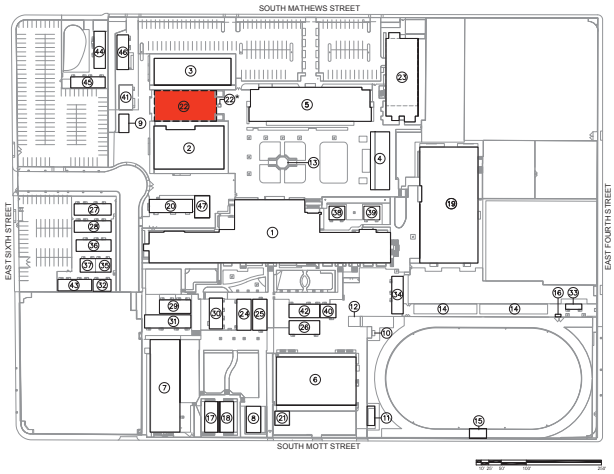
VERTICAL CIRCULATION FCI SYSTEMS / *DESIGN RECOMMENDATION*

FCI %	FCI SYSTEM		STATUS	COST	COMMENTS
N/A	Elevator (existing)		NONE	$0	Single story, not required.
-	# New Elevators →	0	NONE	#N/A	Single story, not required.
N/A	Stairs (existing)	× 0	NONE	$0	Single story, not required.
-	# New Stairs →	0	NONE	#N/A	Single story, not required.

INFRASTRUCTURE FCI SYSTEMS / *DESIGN RECOMMENDATION*

FCI %	FCI SYSTEM	STATUS	COST	COMMENTS
N/A	Site Improvements & Utilities	MODERNIZE	$106,752	Video existing utilities, pothole fixes.

LUNCH PAVILION
BUILDING: 22



RED CHART KEY PLAN

General Overview
Building 22 was constructed under the same 1975 DSA Application as Buildings 2, 3, 4, 13, and 22.1, which also included relocation of Building 9. This building consists of covered outdoor dining facilities (under skylights) that span between Buildings 2 and 3. Building 22 is in generally poor physical condition.

Seismic Evaluation
Building 22 is not on the AB300 list. It is a one-story wood-frame structure with flexible wood diaphragms spanning between Buildings 2 and 3; however, the existing building separation joints appear to be insufficient, such that there is a high probability of structural damage in a seismic event.

Facility Condition Index
The FCI for Building 22 is listed as 56.4% by LAUSD, which is 8.4% above the weighted campus average of 48.0%. However, based on the DLR Group "RED Chart" analysis, Building 22 should have an adjusted FCI of 82.3%, which is 12.1% above the average campus adjusted FCI of 70.2%.

Preliminary Code Review
Building 22 is assumed to be Type VA construction due to its connection to Buildings 2 and 3.

Accessibility
The finished floor surface is sloped to drain at significantly more than 2.0%, perhaps even greater than 8.33% near the area drains, enough so that the dining tables are noticeably sloped.

Our Recommendation
Building 22 represents a seismic safety hazard in its current configuration, so we recommend demolition and replacement.

Estimated Construction Cost
N/A

BUILDING 22 — LUNCH PAVILION

22

FCI Priority Scope Cost	**$750,720**	$138.00/SF	
relative to			
Basic Replacement Cost	$731,680	$134.50/SF	
Basic Replacement $ Δ	-$19,040	OVER FCI COST	
Basic Replacement % Δ	-2.54%	OF FCI COST OVER FCI COST	
Cost Adjustment Factor	A	(BASELINE COST)	

Existing Occupied Floors	Existing Building Area	Existing Building FCI
1	5,440 SQUARE FEET (SF)	56.4%
Existing Classrooms		Adjusted FCI
0		82.3% (25.9%)

CAFM	Year Built		
36022	1977		
	38 YEARS OLD		

$6.00/SF Hazmat Abatement	N/A Interior Construction	(and Interior Finishes)
$32,640	$0	NONE
ASSUMED	*DESIGN RECOMMENDATION*	

BUILDING COMPONENT FCI SYSTEMS — *DESIGN RECOMMENDATION*

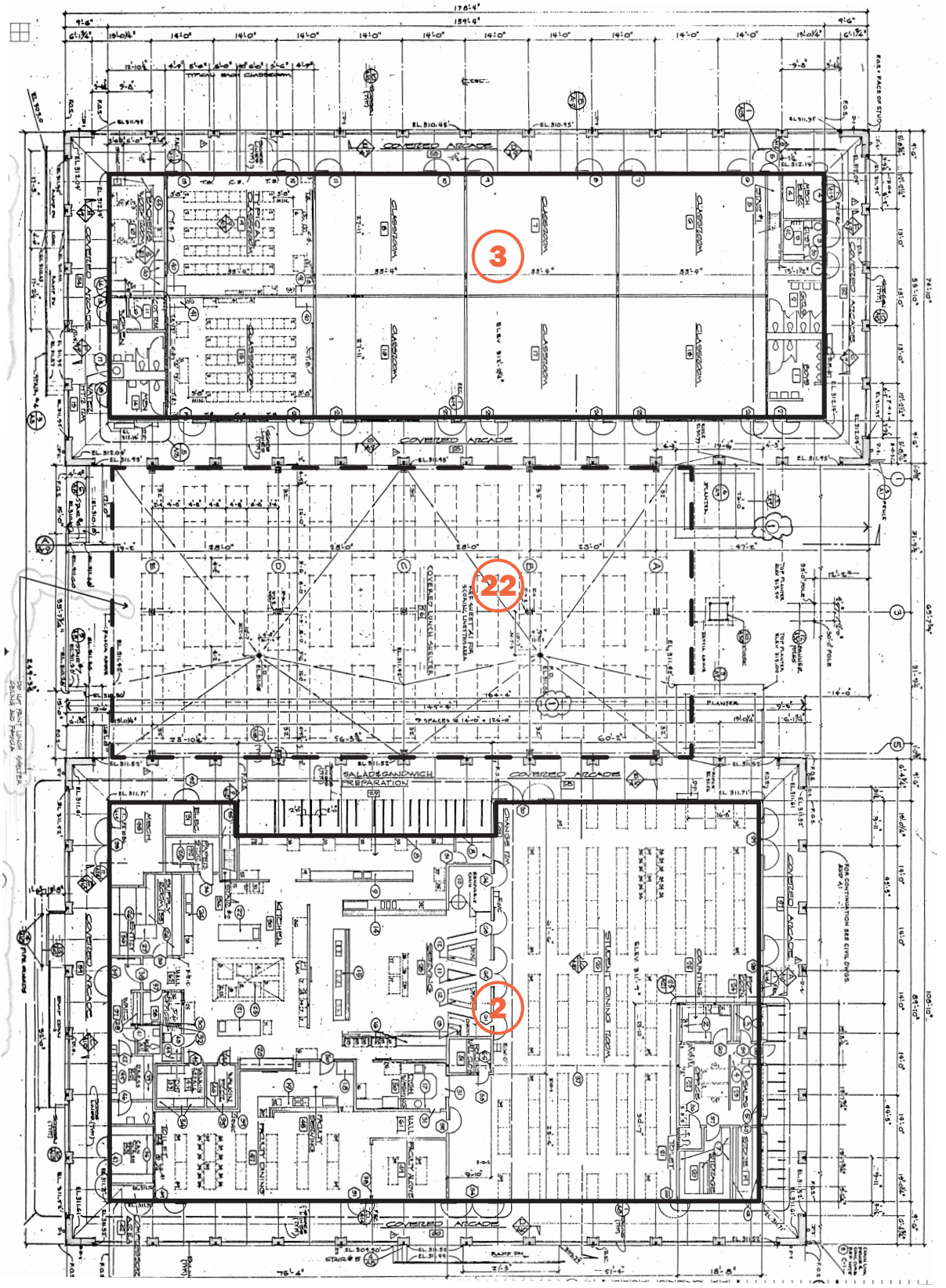
FCI %	FCI SYSTEM	STATUS	COST	COMMENTS
100.0%	Super Structure	REPLACE	$408,000	Likely seismic damage due to postion between Buildings 2 & 3.
N/A	Exterior Enclosure	NONE	$0	Exterior unenclosed space.
100.0%	Roofing	REPLACE	$62,560	End of life.
N/A	HVAC	KEEP	$0	Exterior unconditioned space.
N/A	Plumbing	NONE	$0	No plumbing fixtures.
100.0%	Fire Protection	REPLACE	$40,800	End of life.
29.3%	Electrical	MODERNIZE	$141,440	Near end of life, noncompliant fixtures.

VERTICAL CIRCULATION FCI SYSTEMS — *DESIGN RECOMMENDATION*

FCI %	FCI SYSTEM		STATUS	COST	COMMENTS
N/A	Elevator (existing)		NONE	$0	Single story, not required.
-	# New Elevators →	0	NONE	#N/A	Single story, not required.
N/A	Stairs (existing)	× 0	NONE	$0	Single story, not required.
-	# New Stairs →	0	NONE	#N/A	Single story, not required.

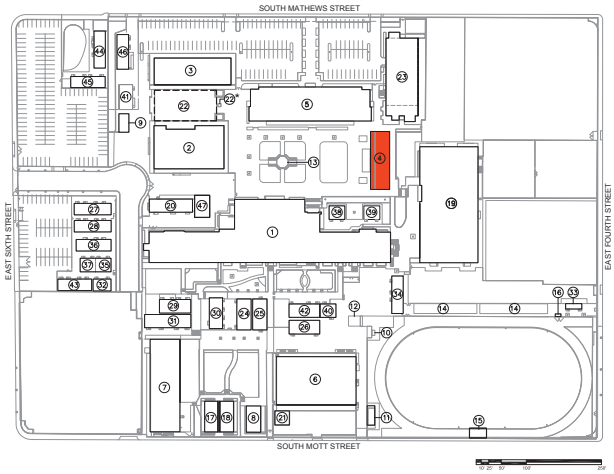
INFRASTRUCTURE FCI SYSTEMS — *DESIGN RECOMMENDATION*

FCI %	FCI SYSTEM	STATUS	COST	COMMENTS
N/A	Site Improvements & Utilities	MODERNIZE	$65,280	Modify existing drainage for accessibility.



1ST FLOOR PLAN

MUSIC BUILDING
BUILDING: 4



RED CHART KEY PLAN

General Overview
Building 4 was constructed under the same 1975 DSA Application as Buildings 2, 3, 13, 22, and 22.1, which also included relocation of Building 9. This building includes 2 large, high-bay music classrooms plus accessory storage rooms that open onto an arcade facing the central quad. Building 4 is in generally poor to fair physical condition.

Seismic Evaluation
Building 4 is not on the AB300 list. It is a one-story wood-frame structure with flexible wood diaphragms and plywood shear walls.

Facility Condition Index
The FCI for Building 4 is listed as 82.6% by LAUSD, which is 34.6% above the weighted campus average of 48.0%. However, based on the DLR Group “RED Chart” analysis, Building 4 should have an adjusted FCI of 75.8%, which is 5.6% above the average campus adjusted FCI of 70.2%.

Preliminary Code Review
Building 4 is assumed to be Type VB construction.

Accessibility
Most door hardware is non-compliant. There is no designated wheelchair seating in the built-in choral risers.

Our Recommendation
Replacement with new facility that consolidates currently dispersed music program.

Estimated Construction Cost
N/A

BUILDING 4 — MUSIC BUILDING

4

a/k/a "M Building"

CAFM 21641

Year Built 1977 (38 YEARS OLD)

FCI Priority Scope Cost	$1,108,965	$305.50/SF	
relative to			
Basic Replacement Cost	$1,250,535	$344.50/SF	
Basic Replacement $ Δ	$141,570	OVER FCI COST	
Basic Replacement % Δ	12.77%	OF FCI COST OVER FCI COST	
Cost Adjustment Factor	A	(BASELINE COST)	

Existing Occupied Floors	Existing Building Area	Existing Building FCI
1	3,630 SQUARE FEET (SF)	82.6%

Existing Classrooms: 2

Adjusted FCI: 75.8% (-6.8%)

$6.00/SF Hazmat Abatement: $21,780 (ASSUMED)

85.5% Interior Construction (and Interior Finishes): $137,940 REPLACE (DESIGN RECOMMENDATION)

BUILDING COMPONENT FCI SYSTEMS — *DESIGN RECOMMENDATION*

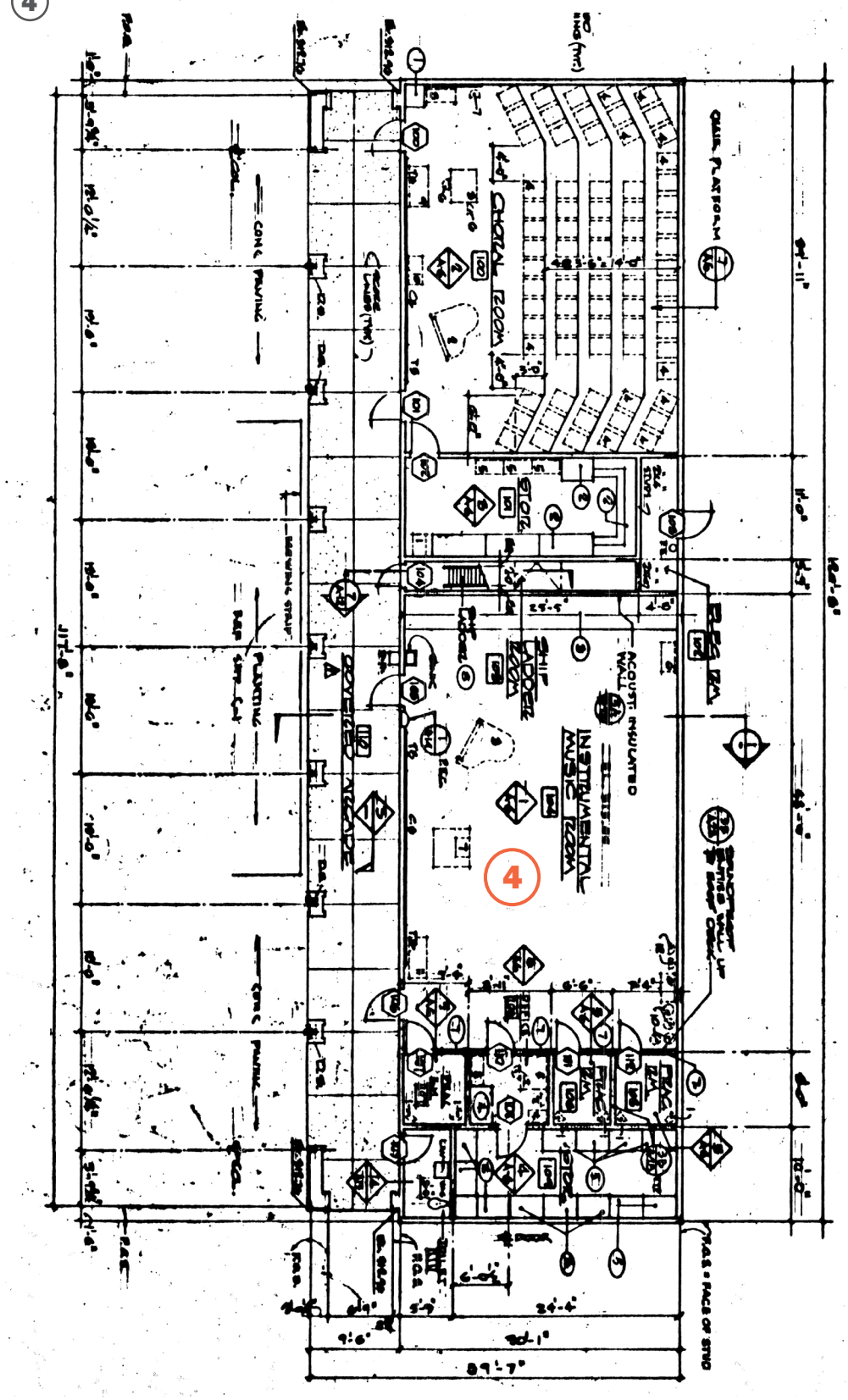
FCI %	FCI SYSTEM	STATUS	COST	COMMENTS
100.0%	Super Structure	REPLACE	$272,250	End of life, assumed deficient based on FCI (no detailed analysis).
41.2%	Exterior Enclosure	REPLACE	$254,100	Energy efficient windows & doors, repair plaster/trim, new paint.
100.0%	Roofing	REPLACE	$41,745	End of life, HVAC work triggers replacement.
100.0%	HVAC	REPLACE	$152,460	End of life, obsolete refrigerant.
40.5%	Plumbing	MODERNIZE	$21,780	Limited plumbing scope but assumed aged based on FCI.
N/A	Fire Protection	ADD	$25,410	Provide fire sprinklers in educational/assembly occupancy.
73.1%	Electrical	REPLACE	$137,940	Near end of life, noncompliant fixtures.

VERTICAL CIRCULATION FCI SYSTEMS — *DESIGN RECOMMENDATION*

FCI %	FCI SYSTEM		STATUS	COST	COMMENTS
N/A	Elevator (existing)		NONE	$0	Single story, not required.
-	# New Elevators →	0	NONE	#N/A	Single story, not required.
N/A	Stairs (existing)	× 0	NONE	$0	Single story, not required.
-	# New Stairs →	0	NONE	#N/A	Single story, not required.

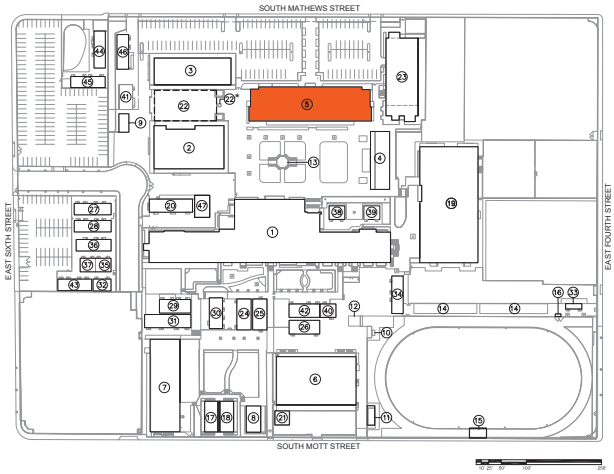
INFRASTRUCTURE FCI SYSTEMS — *DESIGN RECOMMENDATION*

FCI %	FCI SYSTEM	STATUS	COST	COMMENTS
N/A	Site Improvements & Utilities	MODERNIZE	$43,560	Video existing utilities, pothole fixes.



1ST FLOOR PLAN

ADMINISTRATIVE & CLASSROOM BUILDING
BUILDING: 5



RED CHART KEY PLAN

General Overview
Building 5 was constructed in 1972 as a new western edge of campus. This three-story building includes 19 classrooms (8 of which are science labs), plus a juvenile community court facility on the "mezzanine" roof level. The first floor houses administrative functions, the parent center, and offices for the Roosevelt Community Adult School. Building 5 is in generally good to fair condition.

Seismic Evaluation
Building 5 is not on the AB300 list; however, further structural analysis is recommended for this steel and masonry building.

Facility Condition Index
The FCI for Building 5 is listed as 55.1% by LAUSD, which is 7.1% above the weighted campus average of 48.0%. However, based on the DLR Group "RED Chart" analysis, Building 5 should have an adjusted FCI of 65.2%, which is 5.0% below the average campus adjusted FCI of 70.2%.

Preliminary Code Review
Building 5 is assumed to be Type II construction. Unenclosed stairs at each of the building serve the three primary floors, with separate enclosed stairs between the third floor and the roof and between the first floor and the partial basement.

Accessibility
A retrofit elevator near the south end of the building serves the three primary floors and the "mezzanine" roof level. There are some minor non-compliant elements such as anti-sliding tabs on stair handrails.

Our Recommendation
Light modernization with some reconfiguration of the first floor administrative spaces. While the campus location of Building 5 is inconvenient and the small, infrequent windows are not ideal for classroom daylighting, the structure appears to be sound and most spaces are at least as large as current design standards require.

Estimated Construction Cost
Light modernization with some reconfiguration of the first floor administrative spaces. While the campus location of Building 5 is inconvenient and the small, infrequent windows are not ideal for classroom daylighting, the structure appears to be sound and most spaces are at least as large as current design standards require.

BUILDING 5 — ADMINISTRATION AND CLASSROOM BUILDING

5

a/k/a "A Building"

CAFM 23689

Year Built 1972 (43 YEARS OLD)

FCI Priority Scope Cost	$12,353,745	$214.07/SF	
relative to			
Basic Replacement Cost	$19,303,661	$334.50/SF	
Basic Replacement $ Δ	$6,949,916	OVER FCI COST	
Basic Replacement % Δ	56.26%	OF FCI COST OVER FCI COST	
Cost Adjustment Factor	A	(BASELINE COST)	

Existing Occupied Floors	Existing Building Area	Existing Building FCI
3	57,709 SQUARE FEET (SF)	55.1%
Existing Classrooms		Adjusted FCI
19		65.2% (10.0%)

$6.00/SF Hazmat Abatement: $346,254 (ASSUMED)

36.4% Interior Construction (and Interior Finishes): $1,154,180 — MODERNIZE (DESIGN RECOMMENDATION)

BUILDING COMPONENT FCI SYSTEMS — *DESIGN RECOMMENDATION*

FCI %	FCI SYSTEM	STATUS	COST	COMMENTS
9.9%	Super Structure	MODERNIZE	$1,731,270	Questionable FCI (pre-1978 building), some structural work expected.
3.8%	Exterior Enclosure	MODERNIZE	$2,019,815	Energy efficient windows & doors, repair plaster/trim, new paint.
100.0%	Roofing	REPLACE	$663,654	End of life, HVAC work triggers replacement.
100.0%	HVAC	MODERNIZE	$2,019,815	Questionable FCI (replaced in 2008?), but increased ventilation required.
74.8%	Plumbing	REPLACE	$894,490	Near end of life, galvanized piping, noncompliant fixtures.
99.5%	Fire Protection	REPLACE	$432,818	End of life.
68.1%	Electrical	REPLACE	$2,192,942	Near end of life, panelboards located in corridors, noncompliant fixtures.

VERTICAL CIRCULATION FCI SYSTEMS — *DESIGN RECOMMENDATION*

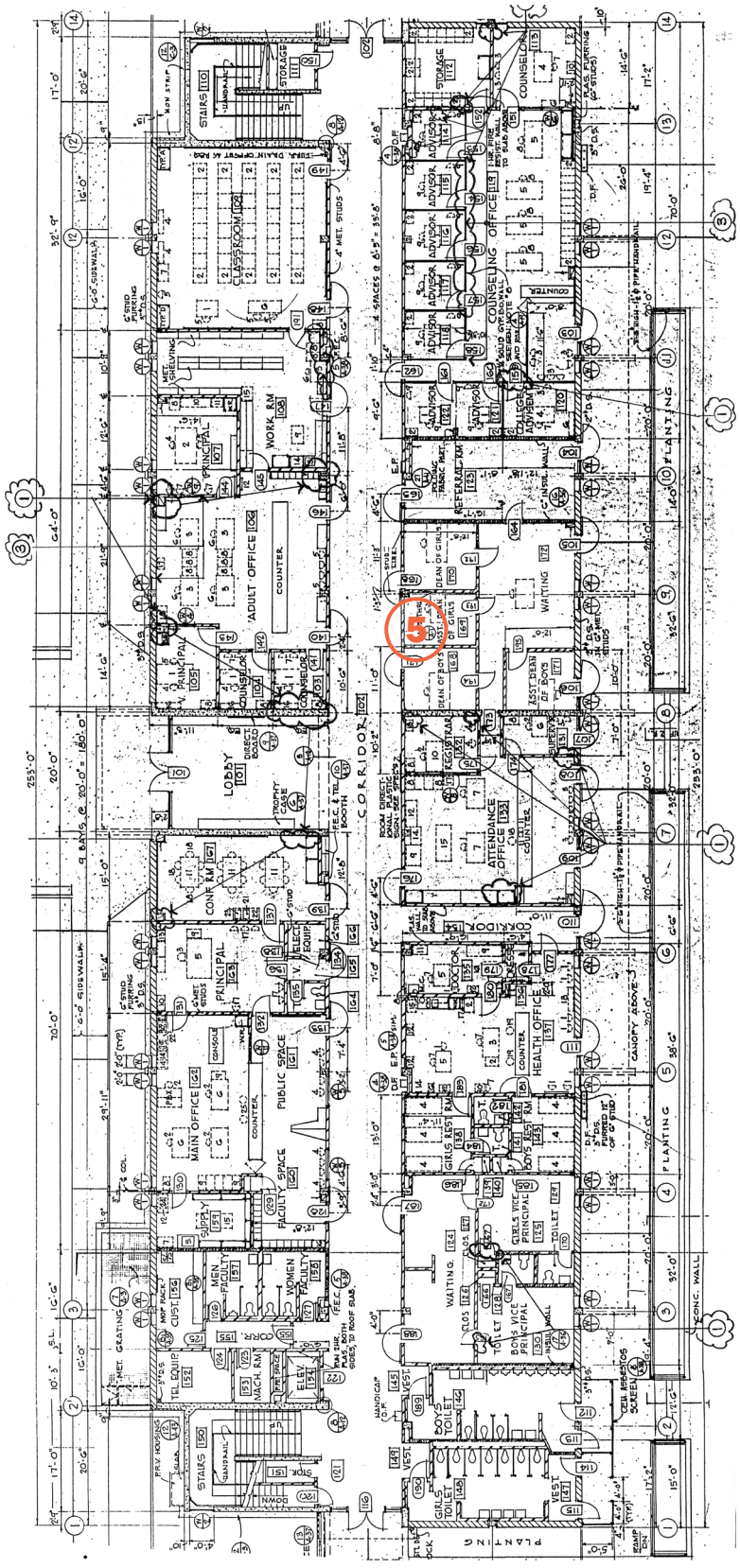
FCI %	FCI SYSTEM		STATUS	COST	COMMENTS
N/A	Elevator (existing)		MODERNIZE	$60,000	Refresh existing elevator.
-	# New Elevators →	1	ADD	$120,000	Locate new elevator near center of building and Auditorium.
0.0%	Stairs (existing)	× 2	MODERNIZE	$26,000	Upgrade handrails, guards and stepping surfaces.
-	# New Stairs →	0	NONE	#N/A	Not required.

INFRASTRUCTURE FCI SYSTEMS — *DESIGN RECOMMENDATION*

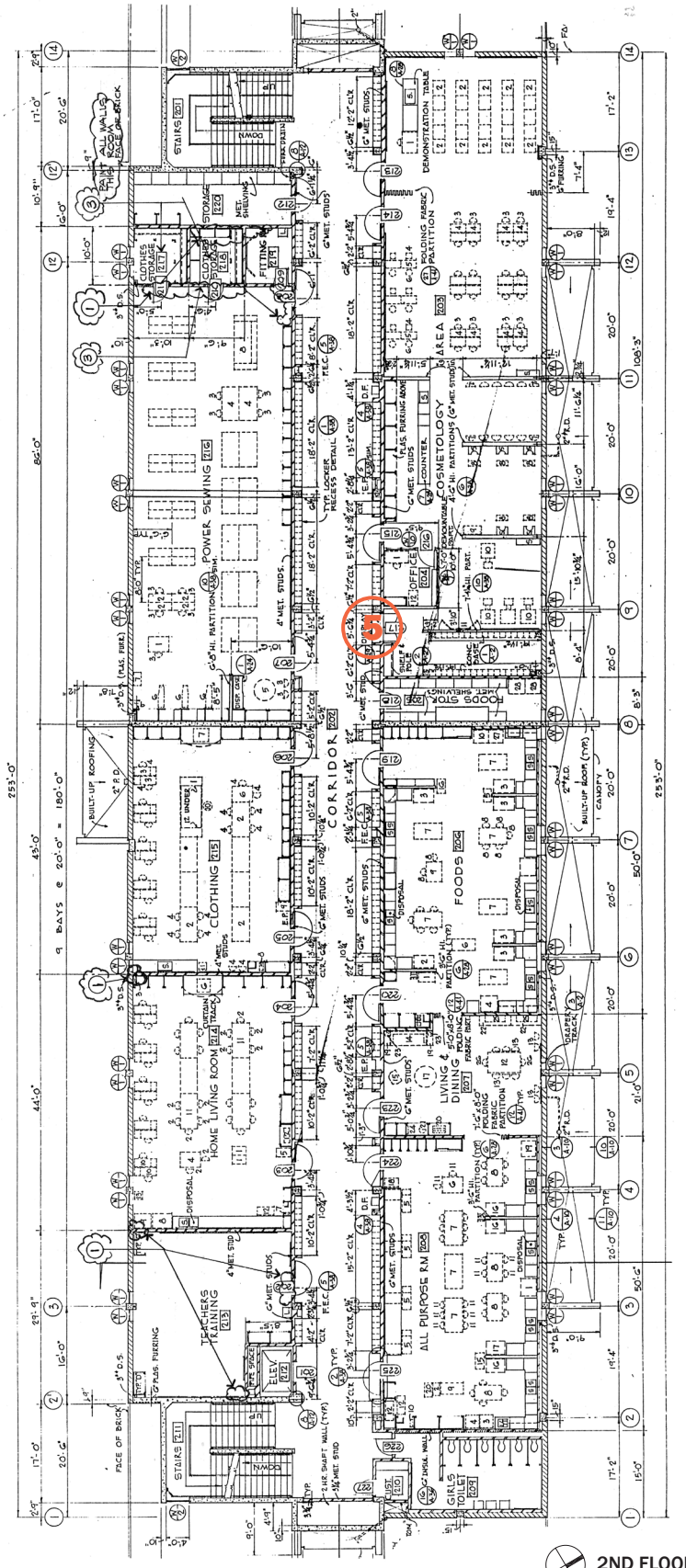
FCI %	FCI SYSTEM	STATUS	COST	COMMENTS
N/A	Site Improvements & Utilities	MODERNIZE	$692,508	Video existing utilities, pothole fixes.

ADMINISTRATIVE & CLASSROOM BUILDING

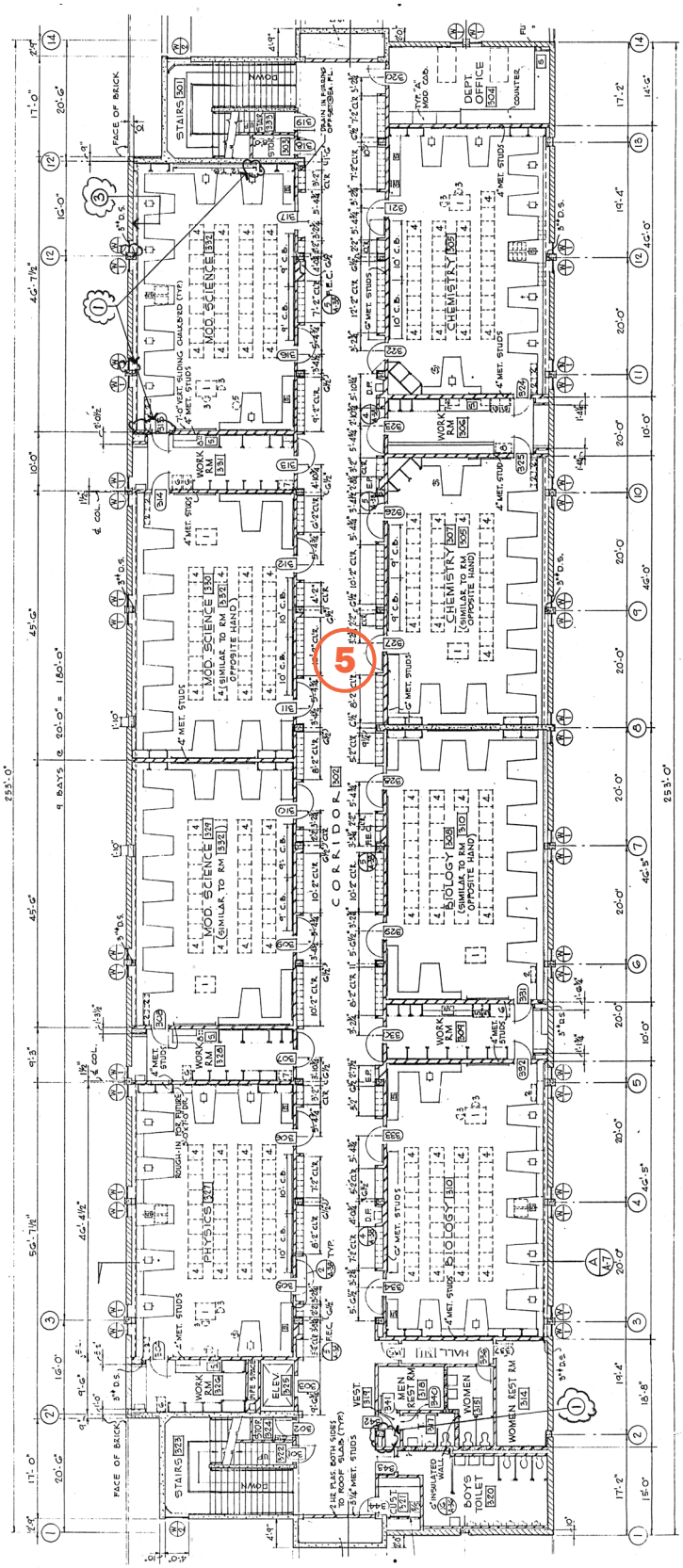
BUILDING: 5



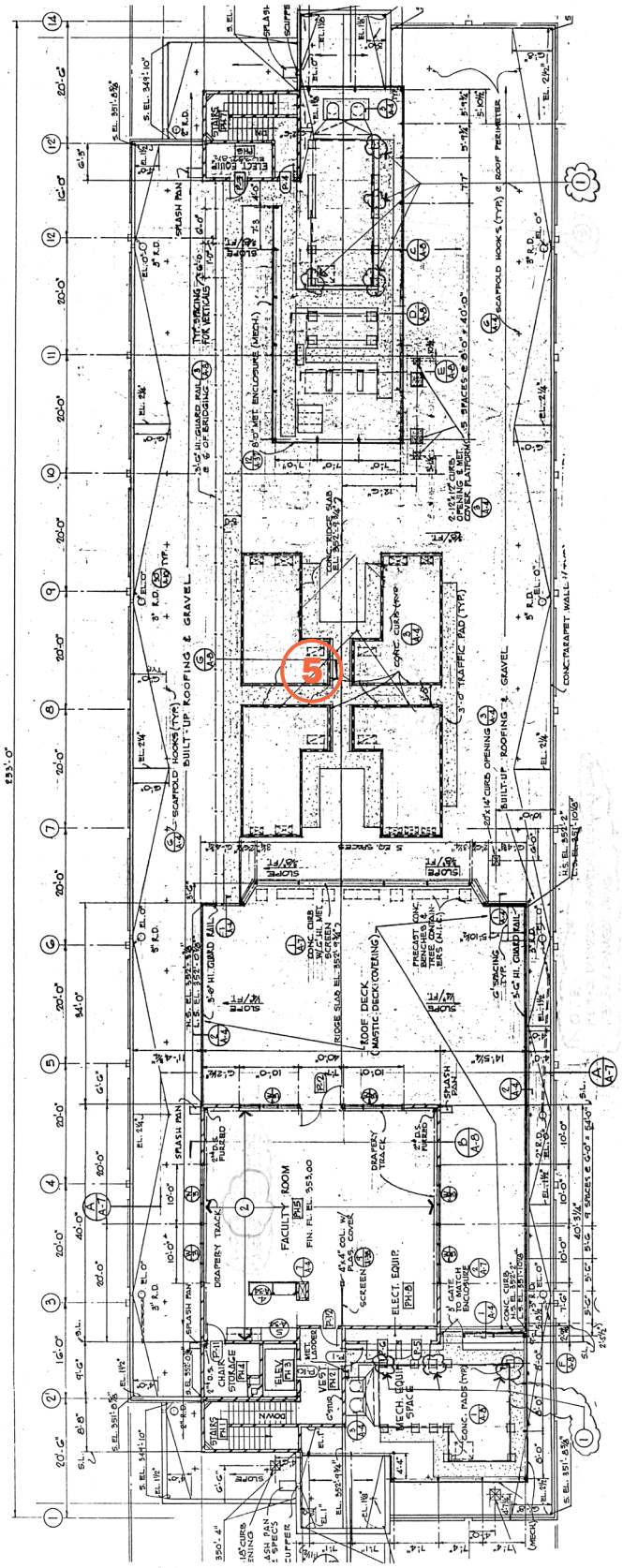
1ST FLOOR PLAN



2ND FLOOR PLAN

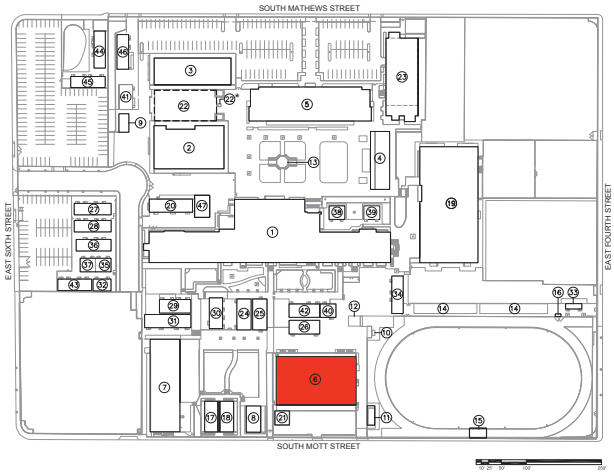


3RD FLOOR PLAN



4TH FLOOR PLAN

INDUSTRIAL ARTS
BUILDING: 6



RED CHART KEY PLAN

General Overview
Building 6 is a two-story, steel and masonry building featuring large classrooms designed and used for industrial education and fine arts. The second floor is only half the size of the first floor, which steps down slightly to conform to site elevation changes. The current configuration features several small classroom spaces carved from a former large classroom, plus seven other large classrooms. Building 6 is in generally good to fair condition.

Seismic Evaluation
Composite roof decks on wood roof joists and steel beams transfer loads to tapered steel girders supported by steel columns, concrete pilasters, and load-bearing masonry walls. Roof diaphragms – rigid at the high roof and flexible at the low roof – transfer lateral loads to masonry walls.

Facility Condition Index
The FCI for Building 6 is listed as 54.4% by LAUSD, which is 6.4% above the weighted campus average of 48.0%. However, based on the DLR Group "RED Chart" analysis, Building 6 should have an adjusted FCI of 84.5%, which is 14.3% above the average campus adjusted FCI of 70.2%.

Preliminary Code Review
Building 6 appears to be a Type II building, though it might be classified as Type III for convenience of interior construction materials.

Accessibility
The second floor and portions of the first floor are only accessible by stairs. Some door hardware is noncompliant. Restrooms appear to be recently renovated but are not fully compliant.

Our Recommendation
Replacement with new large-format classroom facilities located elsewhere on campus. While Building 6 is still serviceable, its current location prevents expansion of the existing undersized track and field facility to provide regulation athletic facilities.

Estimated Construction Cost
To remodel this building is approximate $12,260,297

BUILDING 6 — INDUSTRIAL ARTS

6

a/k/a "T Building"

CAFM 24215

Year Built 1968 — 47 YEARS OLD

FCI Priority Scope Cost	$7,258,653	$284.14/SF	
relative to			
Basic Replacement Cost	$8,609,002	$337.00/SF	
Basic Replacement $ Δ	$1,350,349	OVER FCI COST	
Basic Replacement % Δ	18.60%	OF FCI COST OVER FCI COST	
Cost Adjustment Factor	A	(BASELINE COST)	

Existing Occupied Floors	Existing Building Area	Existing Building FCI
2	25,546 SQUARE FEET (SF)	54.4%

Existing Classrooms: 11

Adjusted FCI: 84.5% (30.1%)

$6.00/SF Hazmat Abatement (ASSUMED): $153,276

26.8% Interior Construction (and Interior Finishes) (DESIGN RECOMMENDATION): $970,748 — REPLACE

BUILDING COMPONENT FCI SYSTEMS / *DESIGN RECOMMENDATION*

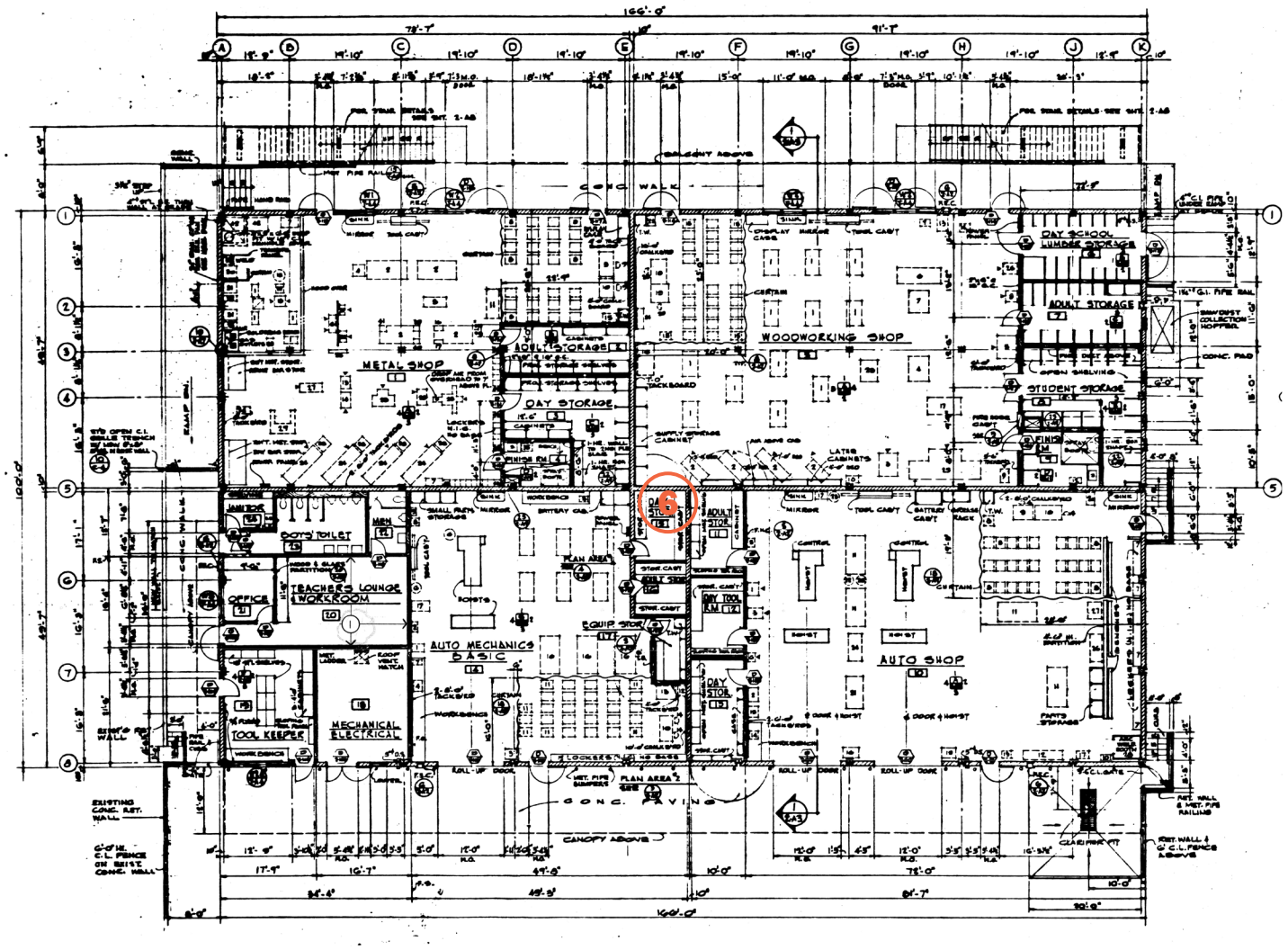
FCI %	FCI SYSTEM	STATUS	COST	COMMENTS
100.0%	Super Structure	REPLACE	$1,915,950	AB300, extensive structural work triggers replacement of interior construction.
6.6%	Exterior Enclosure	MODERNIZE	$894,110	Energy efficient windows & doors, repair plaster/finish/trim, new paint.
98.4%	Roofing	REPLACE	$293,779	Structural and HVAC work trigger replacement.
98.1%	HVAC	REPLACE	$1,072,932	End of life, obsolete design and refrigerant.
100.0%	Plumbing	REPLACE	$395,963	End of life, galvanized piping, noncompliant fixtures.
100.0%	Fire Protection	REPLACE	$191,595	End of life, extensive structural work triggers replacement.
88.1%	Electrical	REPLACE	$970,748	Near end of life, noncompliant fixtures.

VERTICAL CIRCULATION FCI SYSTEMS / *DESIGN RECOMMENDATION*

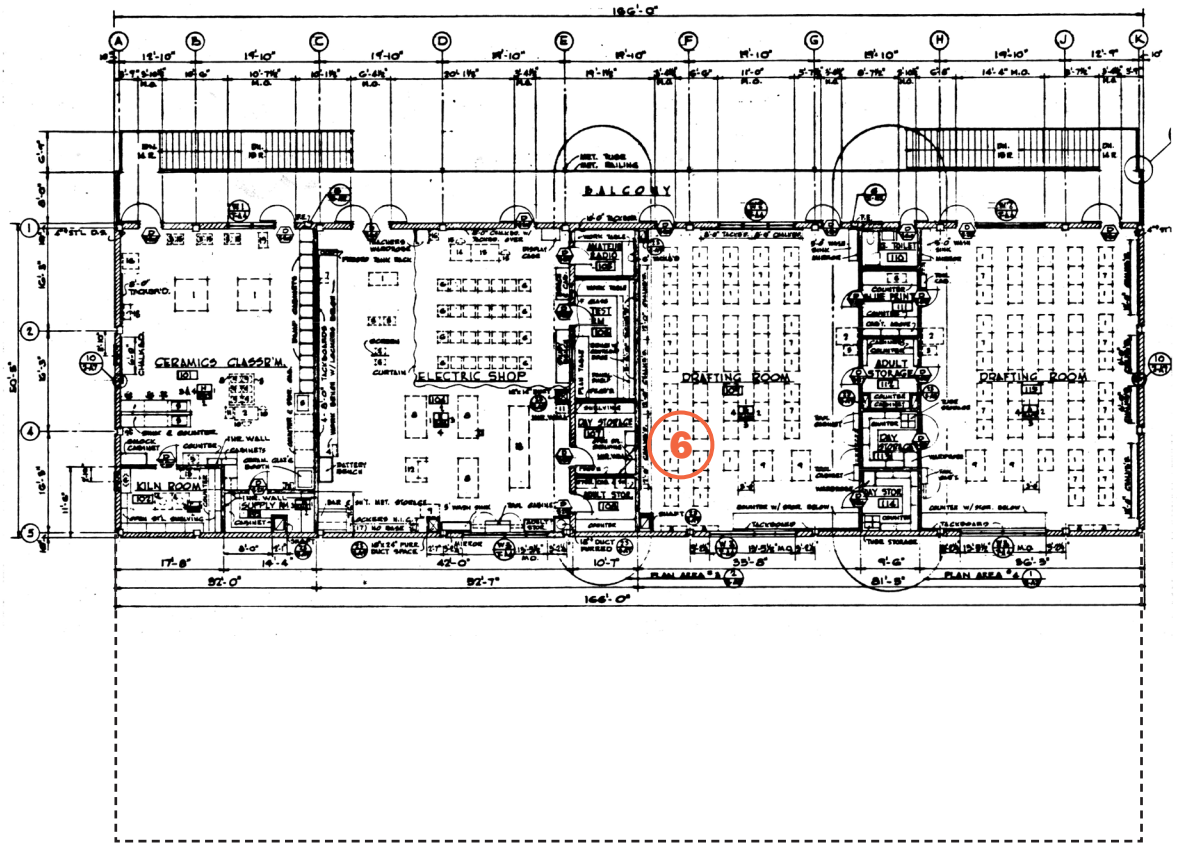
FCI %	FCI SYSTEM		STATUS	COST	COMMENTS
N/A	Elevator (existing)		NONE	$0	No existing elevator.
-	# New Elevators →	1	ADD	$80,000	Add exterior service for second floor walkway.
0.0%	Stairs (existing)	× 2	MODERNIZE	$13,000	Upgrade handrails, guards and stepping surfaces.
-	# New Stairs →	0	NONE	#N/A	Not required.

INFRASTRUCTURE FCI SYSTEMS / *DESIGN RECOMMENDATION*

FCI %	FCI SYSTEM	STATUS	COST	COMMENTS
N/A	Site Improvements & Utilities	MODERNIZE	$306,552	Video existing utilities, pothole fixes.

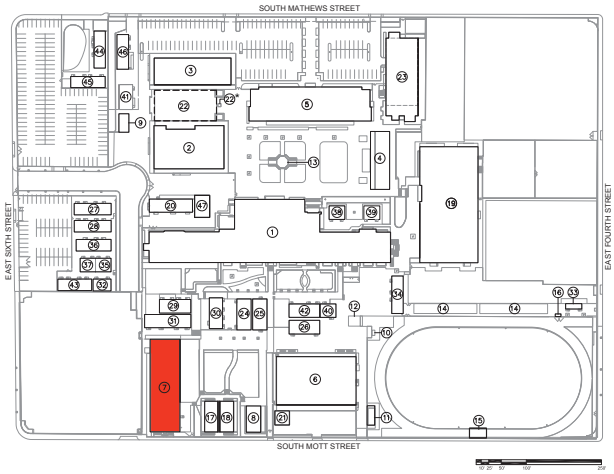


1ST FLOOR PLAN



2ND FLOOR PLAN

CLASSROOM BUILDING #2
BUILDING: 7



RED CHART KEY PLAN

General Overview
Building 7 is the second oldest building still standing on the Roosevelt High School campus. The two story concrete building consists of 15 classrooms (some of which are less than 800 square feet in area). Building 7 is in generally good to fair physical condition.

Seismic Evaluation
Building 7 is not on the AB300 list. Rigid concrete diaphragms transfer lateral loads to concrete shear walls interspersed with concrete beams and girders supporting concrete floors.

Facility Condition Index
The FCI for Building 7 is listed as 50.2% by LAUSD, which is 2.2% above the weighted campus average of 48.0%. However, based on the DLR Group “RED Chart” analysis, Building 7 should have an adjusted FCI of 82.8%, which is 12.6% above the average campus adjusted FCI of 70.2%.

Preliminary Code Review
Building 7 is assumed to be Type II or Type III construction.

Accessibility
Entrances are not accessible due to threshold height at the west end and immediately adjacent site stairs at the east end. Restrooms are located exclusively at a half-level stair flight down from the first floor and at a half-level stair flight up from the second floor; in addition, the restrooms are too small to be converted to accessible sanitary facilities. Stairs are generally non-compliant. There is no elevator to service the second floor, which includes spaces that could be considered unique (not equivalent at the first floor).

Our Recommendation
Light to moderate modernization at classroom spaces and heavy modernization at stairs and restrooms. Eventual replacement with new classroom facilities, but Building 7 remains serviceable for the near future.

Estimated Construction Cost
To remodel this building is approximate $11,704,273

BUILDING 7 — CLASSROOM BUILDING #2

7

a/k/a "C Building"

CAFM 17199

Year Built 1937 (78 YEARS OLD)

FCI Priority Scope Cost	$6,281,844	$240.71/SF	
relative to			
Basic Replacement Cost	$8,794,689	$337.00/SF	
Basic Replacement $ Δ	$2,512,846	OVER FCI COST	
Basic Replacement % Δ	40.00%	OF FCI COST OVER FCI COST	
Cost Adjustment Factor	A	(BASELINE COST)	

Existing Occupied Floors	Existing Building Area	Existing Building FCI
2	26,097 SQUARE FEET (SF)	50.2%
Existing Classrooms		Adjusted FCI
15		82.8% (32.6%)

$6.00/SF Hazmat Abatement: $156,582 (ASSUMED)

26.4% Interior Construction (and Interior Finishes): $991,686 — REPLACE (DESIGN RECOMMENDATION)

BUILDING COMPONENT FCI SYSTEMS / *DESIGN RECOMMENDATION*

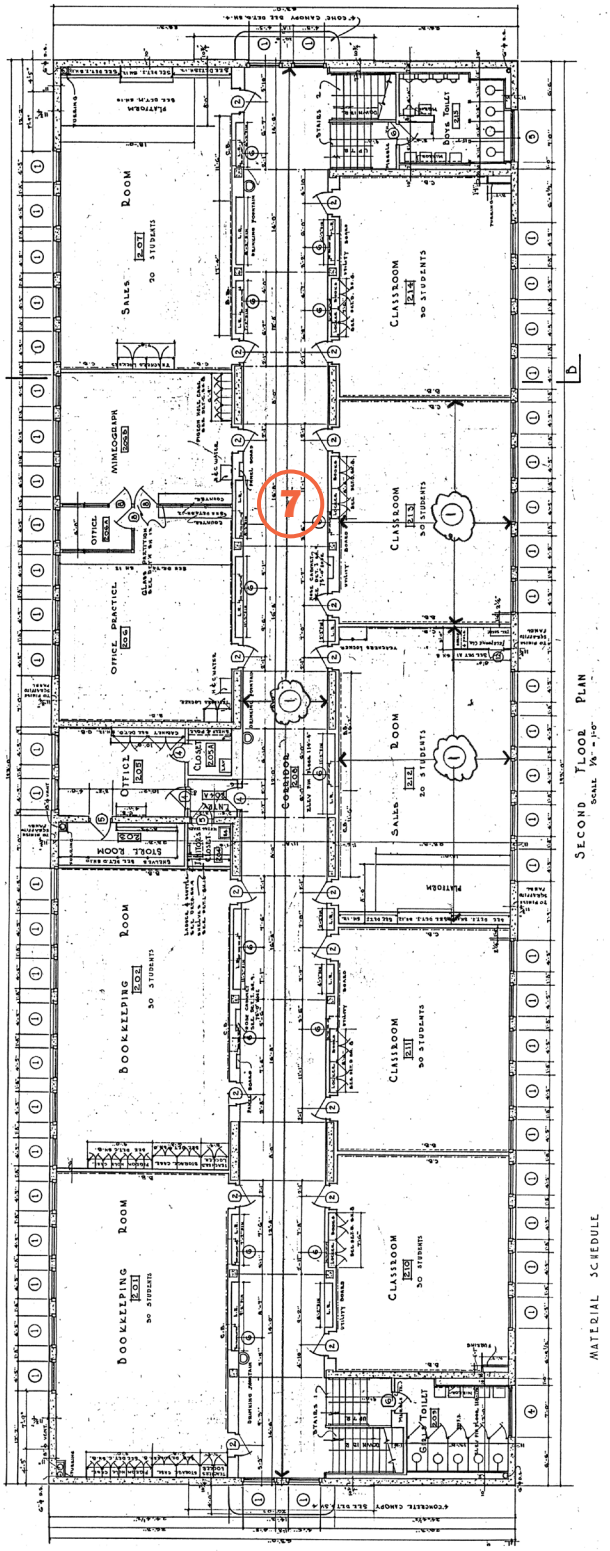
FCI %	FCI SYSTEM	STATUS	COST	COMMENTS
100.0%	Super Structure	MODERNIZE	$782,910	End of life, but post-Field Act reinforced concrete throughout.
0.0%	Exterior Enclosure	MODERNIZE	$913,395	Energy efficient windows & doors, repair plaster/trim, new paint.
100.0%	Roofing	REPLACE	$300,116	Structural and HVAC work trigger replacement.
100.0%	HVAC	REPLACE	$1,096,074	End of life, poor ventilation, obsolete refrigerant.
93.0%	Plumbing	REPLACE	$404,504	End of life, galvanized piping, noncompliant fixtures.
100.0%	Fire Protection	REPLACE	$195,728	End of life, extensive structural work triggers replacement.
86.6%	Electrical	REPLACE	$991,686	Near end of life, noncompliant fixtures, insufficient capacity for modern use.

VERTICAL CIRCULATION FCI SYSTEMS / *DESIGN RECOMMENDATION*

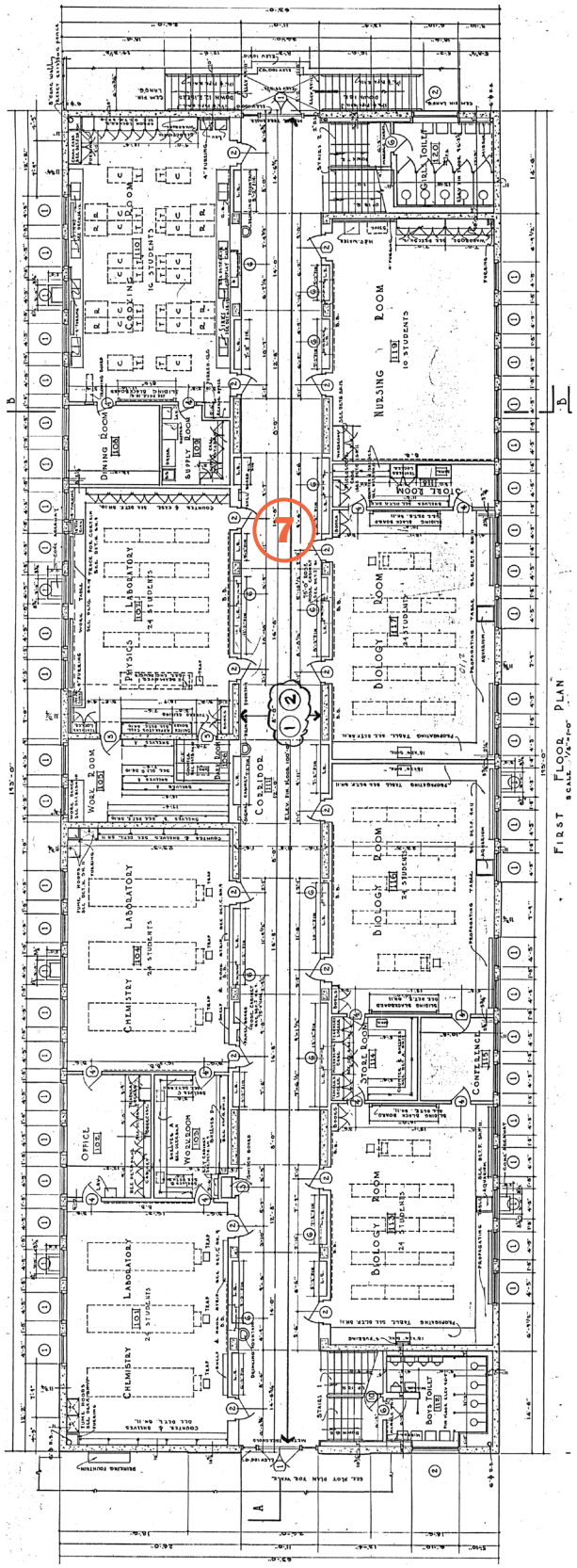
FCI %	FCI SYSTEM		STATUS	COST	COMMENTS
N/A	Elevator (existing)		NONE	$0	No existing elevator.
-	# New Elevators →	1	ADD	$80,000	Add near center of building (probable loss of 1-2 classrooms).
0.0%	Stairs (existing)	× 2	REPLACE	$56,000	Full replacement required due to existing conditions.
-	# New Stairs →	0	NONE	#N/A	Not required.

INFRASTRUCTURE FCI SYSTEMS / *DESIGN RECOMMENDATION*

FCI %	FCI SYSTEM	STATUS	COST	COMMENTS
N/A	Site Improvements & Utilities	MODERNIZE	$313,164	Video existing utilities, pothole fixes.

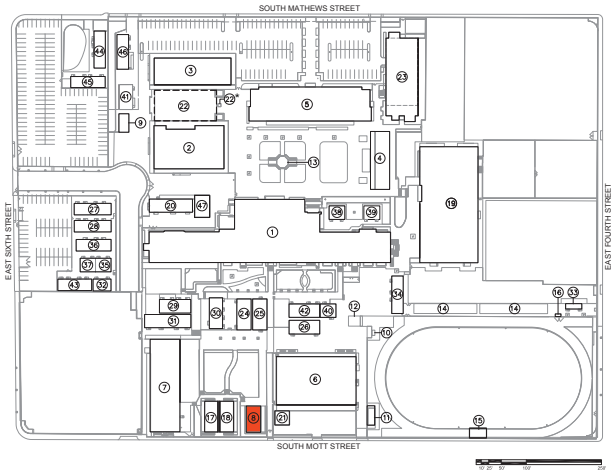


1ST FLOOR PLAN



2ND FLOOR PLAN

INSTRUMENTAL MUSIC BUILDING
BUILDING: 8



RED CHART KEY PLAN

General Overview
Building 8 dates from the late 1950s. This one-story building has a single high-bay music classroom with four small practice rooms. Building 8 is in generally poor physical condition.

Seismic Evaluation
Building 8 is not on the AB300 list.

Facility Condition Index
The FCI for Building 8 is listed as 50.3% by LAUSD, which is 2.3% above the weighted campus average of 48.0%. However, based on the DLR Group “RED Chart” analysis, Building 8 should have an adjusted FCI of 74.8%, which is 4.6% above the average campus adjusted FCI of 70.2%.

Preliminary Code Review
Building 8 is assumed to be Type VB construction. Missing door handles on half of the exterior doors. Exterior circulation creates a dead-end condition.

Accessibility
Building signage, room signage, and door hardware are non-compliant.

Our Recommendation
Replacement with new facility that consolidates currently dispersed music program.

Estimated Construction Cost
To remodel this building is approximate $851,681

BUILDING 8 — INSTRUMENTAL MUSIC

8

a/k/a "Music"

CAFM 21890

Year Built 1959 (56 YEARS OLD)

FCI Priority Scope Cost	$450,000	$250.00/SF	
relative to			
Basic Replacement Cost	$620,100	$344.50/SF	
Basic Replacement $ Δ	$170,100	OVER FCI COST	
Basic Replacement % Δ	37.80%	OF FCI COST OVER FCI COST	
Cost Adjustment Factor	A	(BASELINE COST)	

Existing Occupied Floors	Existing Building Area	Existing Building FCI
1	1,800 SQUARE FEET (SF)	50.3%

Existing Classrooms: 1

Adjusted FCI: 74.8% (24.5%)

$6.00/SF Hazmat Abatement: $10,800 *ASSUMED*

17.4% Interior Construction (and Interior Finishes): $36,000 MODERNIZE *DESIGN RECOMMENDATION*

BUILDING COMPONENT FCI SYSTEMS / *DESIGN RECOMMENDATION*

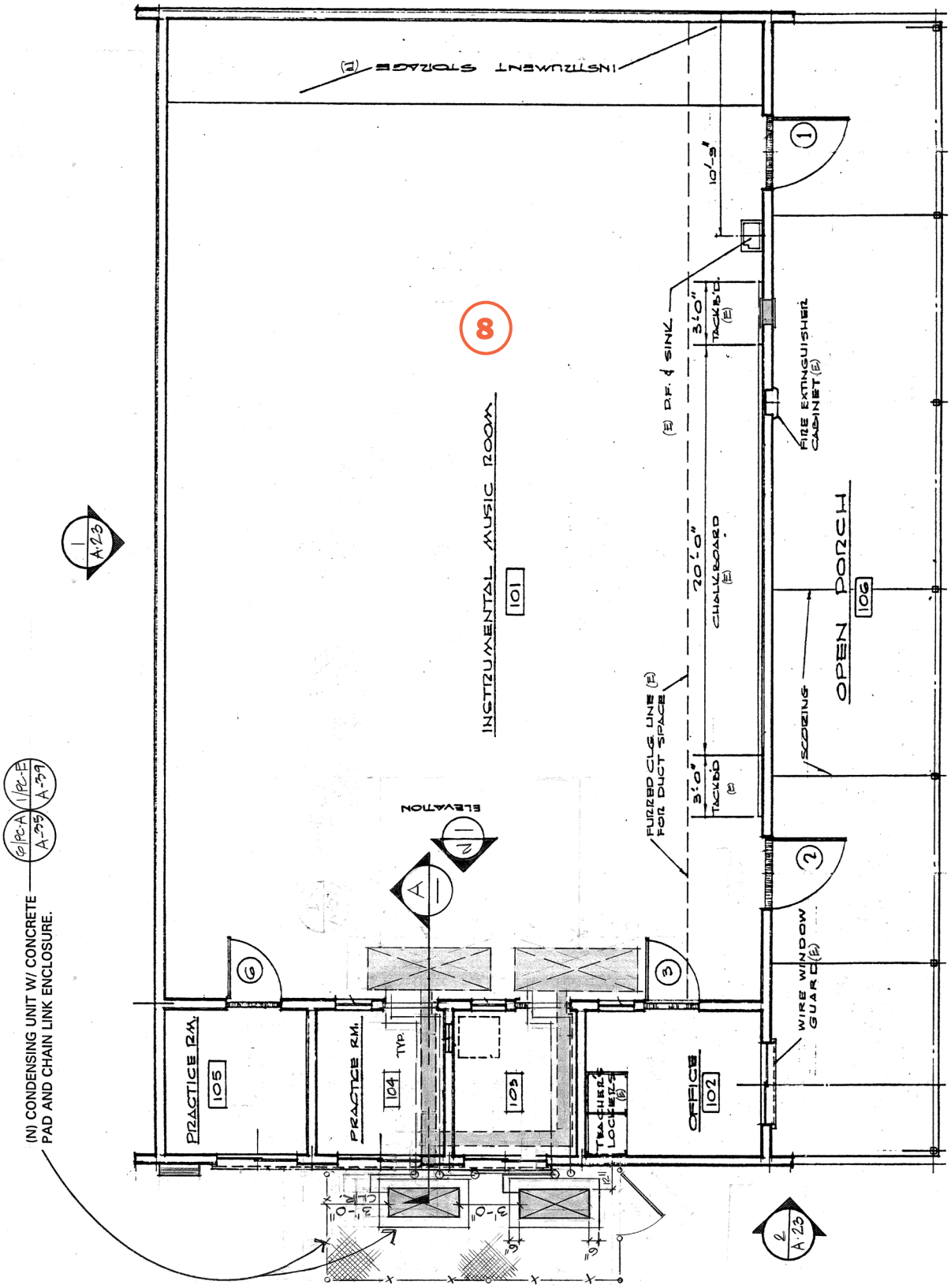
FCI %	FCI SYSTEM	STATUS	COST	COMMENTS
100.0%	Super Structure	REPLACE	$135,000	End of life, assumed deficient based on FCI (no detailed analysis).
16.3%	Exterior Enclosure	MODERNIZE	$63,000	Energy efficient windows & doors, repair plaster/trim, new paint.
100.0%	Roofing	REPLACE	$20,700	End of life, HVAC work triggers replacement.
100.0%	HVAC	REPLACE	$75,600	End of life, obsolete refrigerant.
100.0%	Plumbing	REPLACE	$27,900	Limited plumbing scope but assumed aged based on FCI.
N/A	Fire Protection	ADD	$12,600	Provide fire sprinklers in educational/assembly occupancy.
32.5%	Electrical	MODERNIZE	$46,800	Noncompliant fixtures.

VERTICAL CIRCULATION FCI SYSTEMS / *DESIGN RECOMMENDATION*

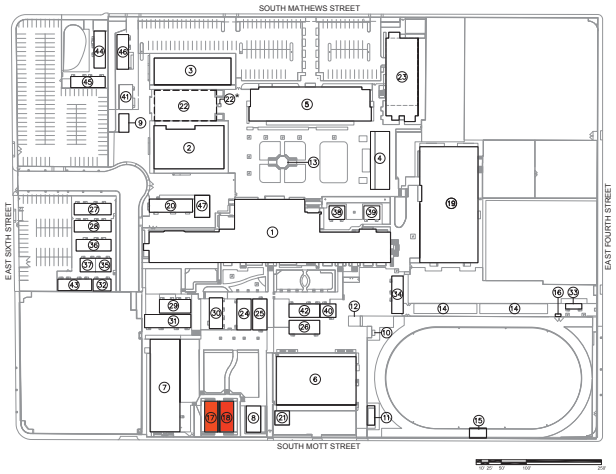
FCI %	FCI SYSTEM		STATUS	COST	COMMENTS
N/A	Elevator (existing)		NONE	$0	Single story, not required.
-	# New Elevators →	0	NONE	#N/A	Single story, not required.
N/A	Stairs (existing)	× 0	NONE	$0	Single story, not required.
-	# New Stairs →	0	NONE	#N/A	Single story, not required.

INFRASTRUCTURE FCI SYSTEMS / *DESIGN RECOMMENDATION*

FCI %	FCI SYSTEM	STATUS	COST	COMMENTS
N/A	Site Improvements & Utilities	MODERNIZE	$21,600	Video existing utilities, pothole fixes.


8
INSTRUMENTAL MUSIC ROOM
101
INSTRUMENT STORAGE (E)
OPEN PORCH
106
PRACTICE RM.
105
PRACTICE RM.
104
TYP.
105
OFFICE
102
TEACHERS LOCKERS (E)
(E) D.F. & SINK
FIRE EXTINGUISHER CABINET (E)
CHALKBOARD (E)
TACKB'D. (E)
SCORING
FURRED CLG. LINE (E) FOR DUCT SPACE
WIRE WINDOW GUARD (E)
ELEVATION
(N) CONDENSING UNIT W/ CONCRETE PAD AND CHAIN LINK ENCLOSURE.
1/A23
1/PC-A A-39
6/PC-A A-39
2/A23
1ST FLOOR PLAN

CLASSROOM BUILDING A
BUILDING: 17



RED CHART KEY PLAN

General Overview
Part of the "Federal" cluster with Building 18, Building 17 is a two-story classroom building with two classrooms on each floor. Building 17 is in generally fair physical condition.

Seismic Evaluation
Building 17 is not on the AB300 list. Two-story wood-framed building with flexible plywood diaphragms that transfer lateral loads to plywood shear walls.

Facility Condition Index
The FCI for Building 17 is listed as 41.9% by LAUSD, which is 6.1% below the weighted campus average of 48.0%. However, based on the DLR Group "RED Chart" analysis, Building 17 should have an adjusted FCI of 72.4%, which is 2.2% above the average campus adjusted FCI of 70.2%.

Preliminary Code Review
Assumed to be Type V construction. Building 17 is likely considered to be the same building as Building 18 due to proximity. Stair access on the east side is encroached by campus perimeter fencing.

Accessibility
The first floor is accessible only by site stairs, and the second floor is accessible only by metal building stairs. Signage and door hardware is non-compliant.

Our Recommendation
Moderate modernizations to address vertical accessibility and maintain the existing building until future replacement classroom facilities are constructed.

Estimated Construction Cost
To remodel this building is approximate $1,785,767

BUILDING 17 — BUILDING A

17

a/k/a "Federal A"

CAFM 23829

Year Built 1964 (51 YEARS OLD)

FCI Priority Scope Cost	$987,380	$250.60/SF
relative to		
Basic Replacement Cost	$1,327,780	$337.00/SF
Basic Replacement $ Δ	$340,400	OVER FCI COST
Basic Replacement % Δ	34.48%	OF FCI COST OVER FCI COST
Cost Adjustment Factor	A	(BASELINE COST)

Existing Occupied Floors	Existing Building Area	Existing Building FCI
2	3,940 SQUARE FEET (SF)	41.9%

Existing Classrooms: 4

Adjusted FCI: 72.4% (30.5%)

$6.00/SF Hazmat Abatement: $23,640 (ASSUMED)

6.4% Interior Construction (and Interior Finishes): $78,800 MODERNIZE (DESIGN RECOMMENDATION)

BUILDING COMPONENT FCI SYSTEMS / *DESIGN RECOMMENDATION*

FCI %	FCI SYSTEM	STATUS	COST	COMMENTS
N/A	Super Structure	MODERNIZE	$118,200	Not listed in FCI; assumed some structural work advisable.
0.0%	Exterior Enclosure	MODERNIZE	$137,900	Energy efficient windows & doors, repair plaster/trim, new paint.
34.1%	Roofing	MODERNIZE	$23,640	Light modernization triggered by HVAC replacement.
100.0%	HVAC	REPLACE	$165,480	End of life, obsolete design and refrigerant.
100.0%	Plumbing	REPLACE	$61,070	End of life, galvanized piping, noncompliant fixtures.
100.0%	Fire Protection	REPLACE	$29,550	End of life.
100.0%	Electrical	REPLACE	$149,720	End of life, noncompliant fixtures.

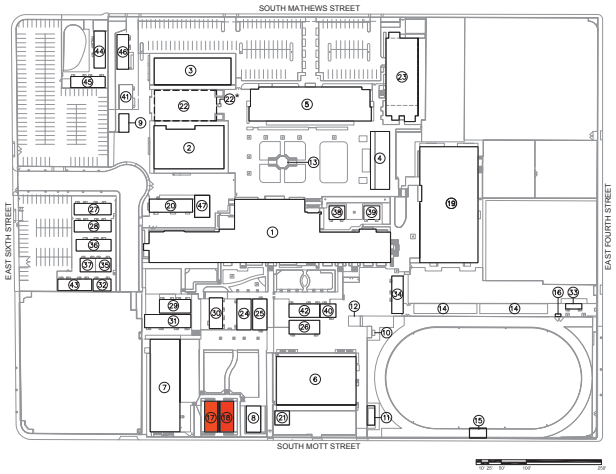
VERTICAL CIRCULATION FCI SYSTEMS / *DESIGN RECOMMENDATION*

FCI %	FCI SYSTEM		STATUS	COST	COMMENTS
N/A	Elevator (existing)		NONE	$0	No existing elevator.
-	# New Elevators →	1	ADD	$80,000	Add exterior service for second floor walkway.
N/A	Stairs (existing)	× 2	MODERNIZE	$13,000	Upgrade handrails, guards and stepping surfaces.
-	# New Stairs →	0	NONE	#N/A	Not required.

INFRASTRUCTURE FCI SYSTEMS / *DESIGN RECOMMENDATION*

FCI %	FCI SYSTEM	STATUS	COST	COMMENTS
N/A	Site Improvements & Utilities	REPLACE	$106,380	Add site ramp for accessibility to building; video existing utilities, pothole fixes.

CLASSROOM BUILDING B
BUILDING: 18



RED CHART KEY PLAN

General Overview
Part of the "Federal" cluster with Building 17, Building 18 is a two-story classroom building with two classrooms on each floor. Building 18 is in generally fair physical condition.

Seismic Evaluation
Building 18 is not on the AB300 list. Two-story wood-framed building with flexible plywood diaphragms that transfer lateral loads to plywood shear walls.

Facility Condition Index
The FCI for Building 18 is listed as 32.2% by LAUSD, which is 15.8% below the weighted campus average of 48.0%. However, based on the DLR Group "RED Chart" analysis, Building 18 should have an adjusted FCI of 80.3%, which is 10.1% above the average campus adjusted FCI of 70.2%.

Preliminary Code Review
Assumed to be Type V construction. Building 18 is likely considered to be the same building as Building 17 due to proximity. Stair access on the east side is encroached by campus perimeter fencing.

Accessibility
The first floor is accessible only by site stairs, and the second floor is accessible only by metal building stairs. Signage and door hardware is non-compliant.

Our Recommendation
Moderate modernizations to address vertical accessibility and maintain the existing building until future replacement classroom facilities are constructed.

Estimated Construction Cost
To remodel this building is approximate $1,702,357

BUILDING 18 — BUILDING B

DLR Group

18

a/k/a "Federal B"

CAFM 21628

Year Built 1964 — 51 YEARS OLD

FCI Priority Scope Cost	$1,009,050	$256.10/SF	
relative to			
Basic Replacement Cost	$1,327,780	$337.00/SF	
Basic Replacement $ Δ	$318,730	OVER FCI COST	
Basic Replacement % Δ	31.59%	OF FCI COST OVER FCI COST	
Cost Adjustment Factor	A	(BASELINE COST)	

Existing Occupied Floors	Existing Building Area	Existing Building FCI
2	3,940 SQUARE FEET (SF)	32.2%
Existing Classrooms		Adjusted FCI
4		80.3% (48.1%)

$6.00/SF Hazmat Abatement: $23,640 (ASSUMED)

0.0% Interior Construction (and Interior Finishes): $78,800 MODERNIZE (DESIGN RECOMMENDATION)

BUILDING COMPONENT FCI SYSTEMS / *DESIGN RECOMMENDATION*

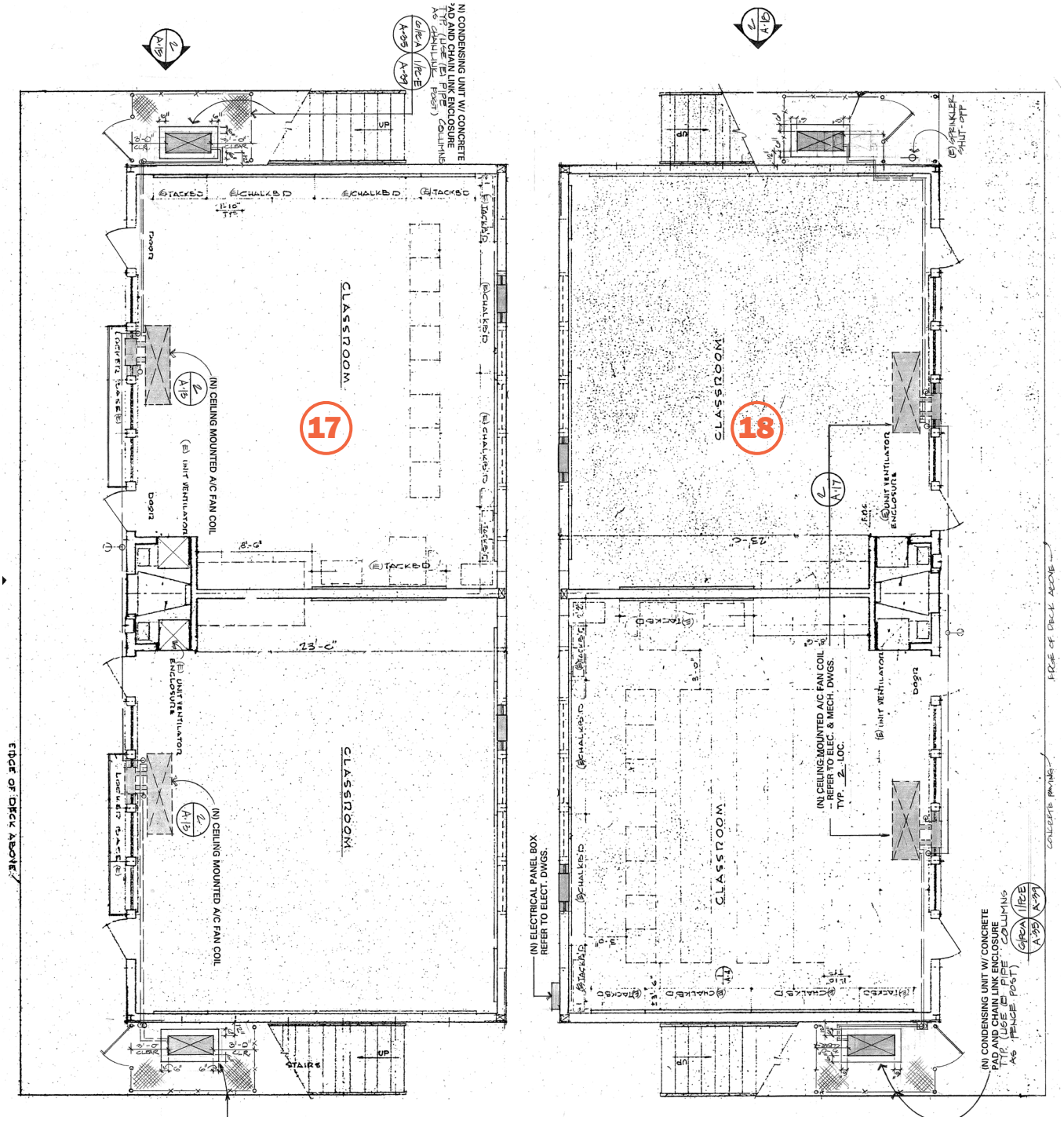
FCI %	FCI SYSTEM	STATUS	COST	COMMENTS
N/A	Super Structure	MODERNIZE	$118,200	Not listed in FCI; assumed some structural work advisable.
0.0%	Exterior Enclosure	MODERNIZE	$137,900	Energy efficient windows & doors, repair plaster/trim, new paint.
96.1%	Roofing	REPLACE	$45,310	Near end of life, HVAC work also triggers replacement.
100.0%	HVAC	REPLACE	$165,480	End of life, obsolete design and refrigerant.
100.0%	Plumbing	REPLACE	$61,070	End of life, galvanized piping, noncompliant fixtures.
100.0%	Fire Protection	REPLACE	$29,550	End of life.
85.8%	Electrical	REPLACE	$149,720	End of life, noncompliant fixtures.

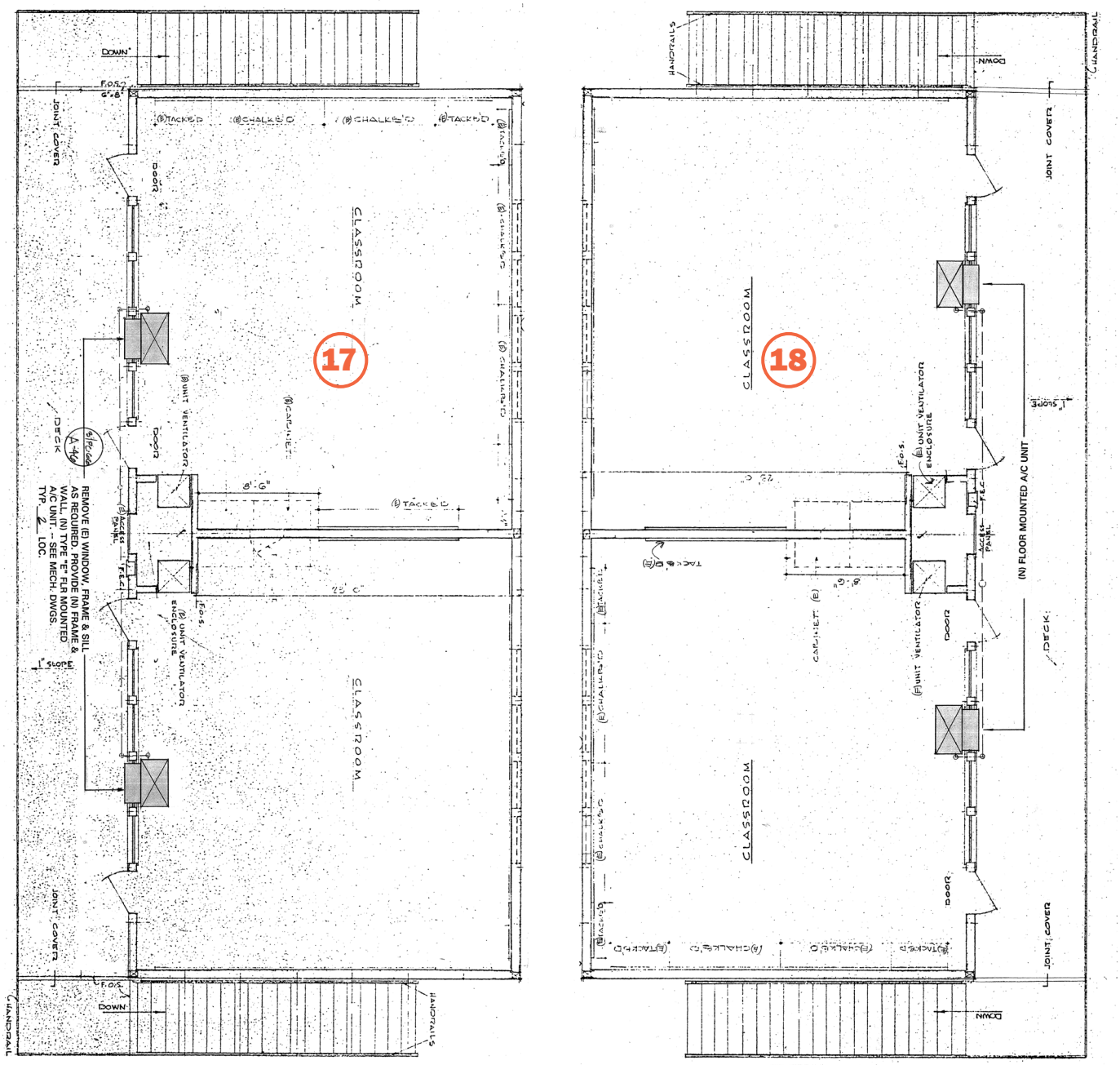
VERTICAL CIRCULATION FCI SYSTEMS / *DESIGN RECOMMENDATION*

FCI %	FCI SYSTEM		STATUS	COST	COMMENTS
N/A	Elevator (existing)		NONE	$0	No existing elevator.
-	# New Elevators →	1	ADD	$80,000	Add exterior service for second floor walkway.
0.0%	Stairs (existing)	× 2	MODERNIZE	$13,000	Upgrade handrails, guards and stepping surfaces.
-	# New Stairs →	0	NONE	#N/A	Not required.

INFRASTRUCTURE FCI SYSTEMS / *DESIGN RECOMMENDATION*

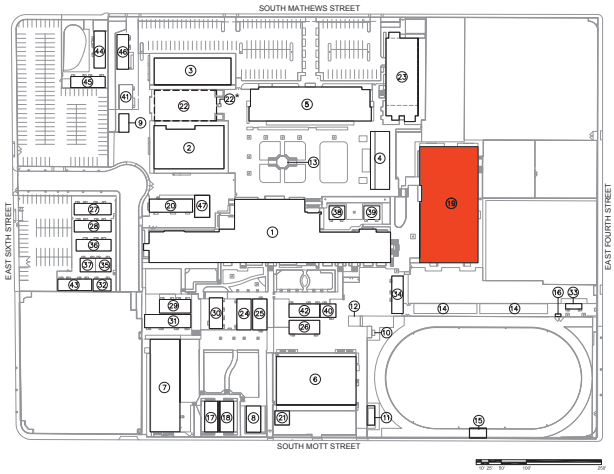
FCI %	FCI SYSTEM	STATUS	COST	COMMENTS
N/A	Site Improvements & Utilities	REPLACE	$106,380	Add site ramp for accessibility to building; video existing utilities, pothole fixes.


17
18
CLASSROOM
(N) CEILING MOUNTED A/C FAN COIL
(E) UNIT VENTILATOR
(E) UNIT VENTILATOR ENCLOSURE
(E) CHALKBD
(E) TACKBD
23'-6"
EDGE OF DECK ABOVE
(N) ELECTRICAL PANEL BOX REFER TO ELECT. DWGS.
(N) CEILING MOUNTED A/C FAN COIL - REFER TO ELEC. & MECH. DWGS. TYP. 2 LOC.
(N) CONDENSING UNIT W/ CONCRETE PAD AND CHAIN LINK ENCLOSURE TYP. (USE (E) PIPE COLUMNS AS FENCE POST)
(E) SPRINKLER SHUT-OFF
STAIRS
UP
1ST FLOOR PLAN



2ND FLOOR PLAN

PHYSICAL EDUCATION BUILDING
BUILDING: 19



RED CHART KEY PLAN

General Overview
Building 19 dates from the late 1960s. This one-story building takes advantage of its sloped portion of the campus property with a partial basement level open to grade. The Building contains the primary gymnasium and an auxiliary gym practice gym.

Seismic Evaluation
Building 19 is on the AB300 list. The one-story concrete and masonry building has a wood assembly roof supported by either wood joists or steel beams. The second level floor slab is supported by concrete beams & columns. Extensive structural work is needed. Its structural work triggers replacement of interior construction, as well roofing replacement is triggered by HVAC replacement and structural upgrades.

Facility Condition Index
The FCI for Building 19 is listed as 39.8% by LAUSD, which is 8.2% below the weighted campus average of 48.0%. However, based on the DLR Group “RED Chart” analysis, Building 19 should have an adjusted FCI of 76.7%, which is 6.5% above the average campus adjusted FCI of 70.2%.

Preliminary Code Review
The building is presumably Type III construction. Fire Protection has approached its end of life. Accessible access to north end is necessary.

Accessibility
The primary entrance level is in the upper floor making its accessibility challenging, but an exterior enclosed wheelchair lift located near the main entrance lobby provides vertical access between the lower and upper athletic functions. Accessible signage needs to be amended. As well addition of new site wheelchair platform lift and a new elevator near center of building and Auditorium are necessary to serve the north end.

Our Recommendation
Moderate modernization to address structural deficiencies and vertical accessibility.

Estimated Construction Cost
To remodel this building is approximate $17,711,323

BUILDING 19 — PHYSICAL EDUCATION BUILDING

19

a/k/a "Gym Building"

CAFM 20906

Year Built 1968 — 47 YEARS OLD

FCI Priority Scope Cost	$8,190,192	$211.09/SF
relative to		
Basic Replacement Cost	$13,075,263	$337.00/SF
Basic Replacement $ Δ	$4,885,071	OVER FCI COST
Basic Replacement % Δ	59.65%	OF FCI COST OVER FCI COST
Cost Adjustment Factor	A	(BASELINE COST)

Existing Occupied Floors	Existing Building Area	Existing Building FCI
2	38,799 SQUARE FEET (SF)	39.8%
Existing Classrooms		Adjusted FCI
0		76.7% (36.9%)

$6.00/SF Hazmat Abatement: $232,794 (ASSUMED)

24.0% Interior Construction (and Interior Finishes): $775,980 — MODERNIZE (DESIGN RECOMMENDATION)

BUILDING COMPONENT FCI SYSTEMS / *DESIGN RECOMMENDATION*

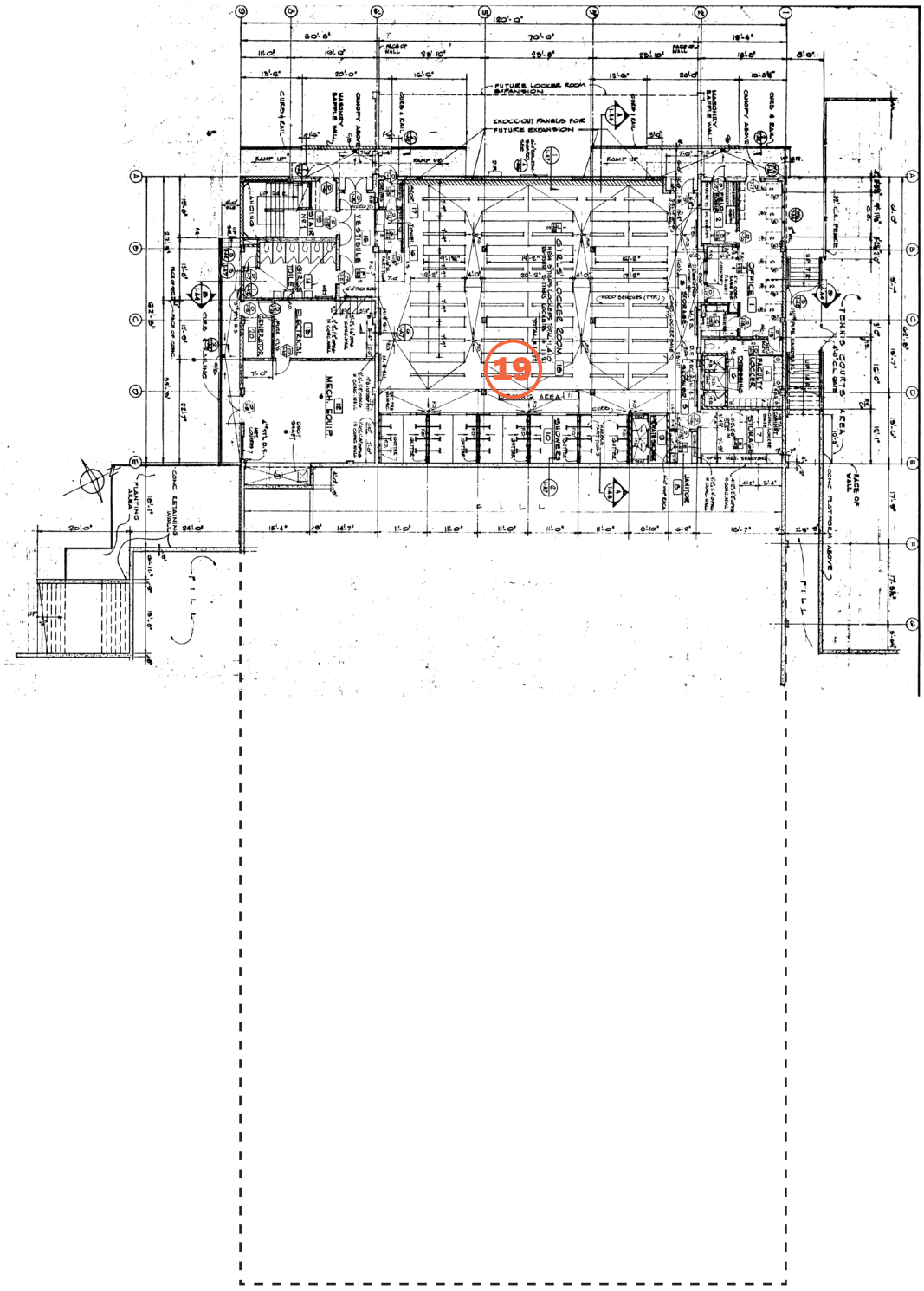
FCI %	FCI SYSTEM	STATUS	COST	COMMENTS
99.5%	Super Structure	MODERNIZE	$1,163,970	AB300, extensive structural work triggers replacement of interior construction.
16.8%	Exterior Enclosure	MODERNIZE	$1,357,965	Energy efficient windows & doors, repair plaster/finish/trim, new paint.
99.7%	Roofing	REPLACE	$446,189	Structural and HVAC work trigger replacement.
100.0%	HVAC	REPLACE	$1,629,558	End of life, questionable/obsolete design.
32.2%	Plumbing	MODERNIZE	$232,794	Galvanized piping, noncompliant fixtures.
100.0%	Fire Protection	REPLACE	$290,993	Near end of life.
88.4%	Electrical	REPLACE	$1,474,362	Near end of life, noncompliant fixtures, insufficient capacity for modern use.

VERTICAL CIRCULATION FCI SYSTEMS / *DESIGN RECOMMENDATION*

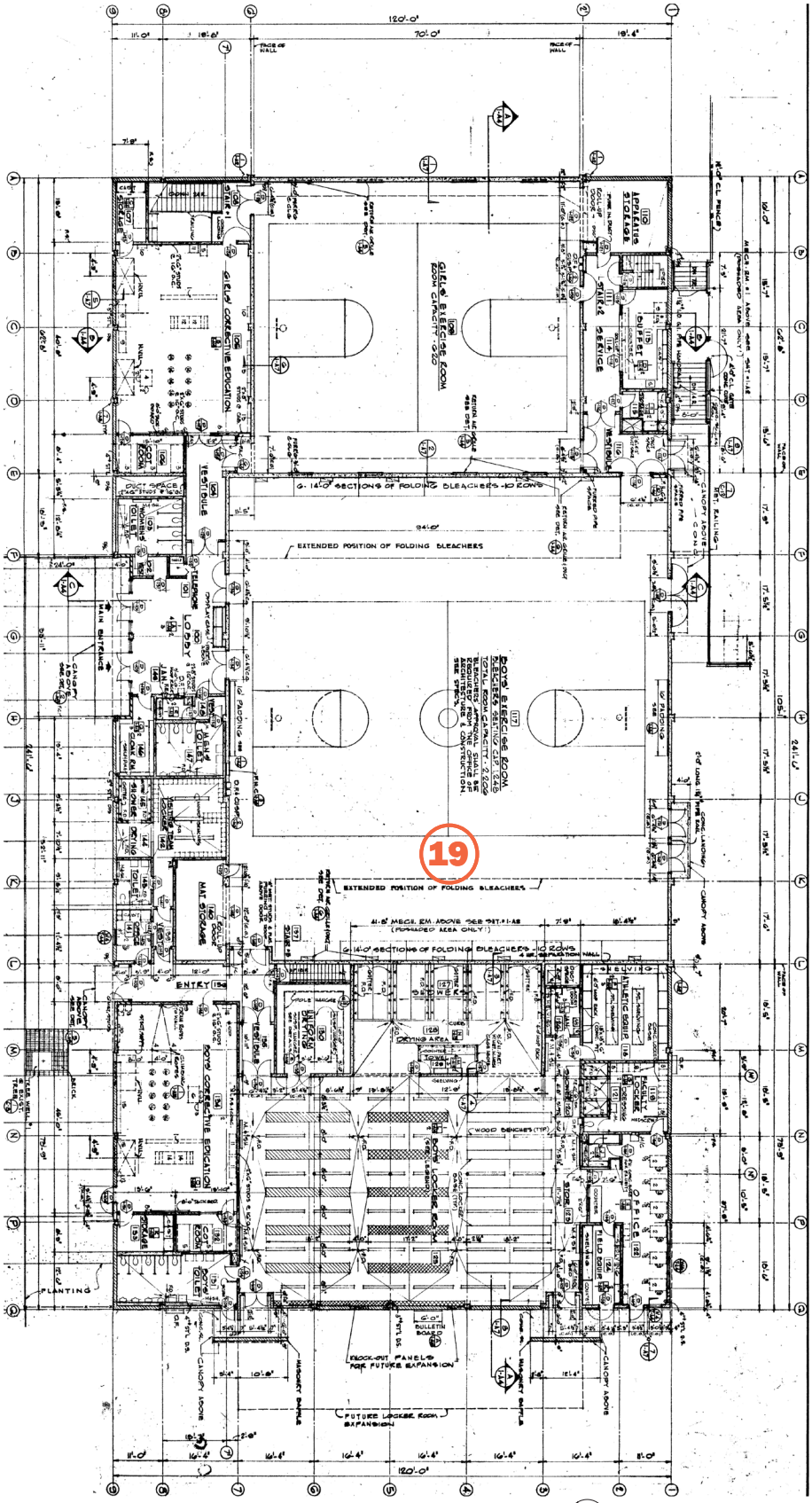
FCI %	FCI SYSTEM		STATUS	COST	COMMENTS
N/A	Elevator (existing)		MODERNIZE	$40,000	Refresh existing site wheelchair (platform) lift.
-	# New Elevators →	1	ADD	$80,000	Provide site wheelchair (platform) lift for access to north fields from lower level.
0.0%	Stairs (existing)	× 0	NONE	$0	Exterior (site) stairs only.
-	# New Stairs →	0	NONE	#N/A	Not required.

INFRASTRUCTURE FCI SYSTEMS / *DESIGN RECOMMENDATION*

FCI %	FCI SYSTEM	STATUS	COST	COMMENTS
100.0%	Site Improvements & Utilities	MODERNIZE	$465,588	Video existing utilities, pothole fixes.

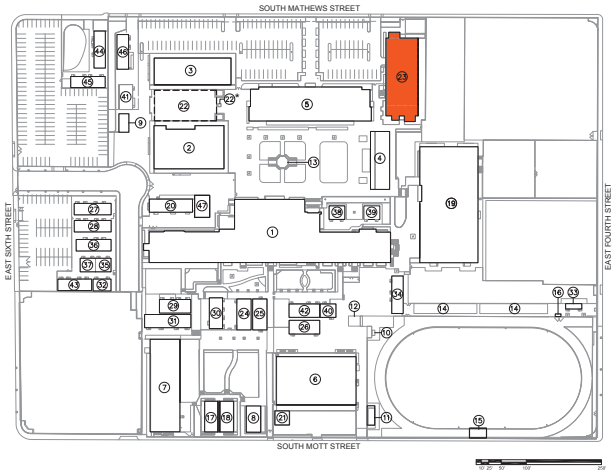


GROUND FLOOR PLAN



MAIN FLOOR PLAN

LIBRARY/CLASSROOM BUILDING
BUILDING: 23



RED CHART KEY PLAN

General Overview
Building 23 was built in 1990, with the exception of the stadium bleachers; its construction date makes it the youngest building on the campus. Its first floor is a semi-enclosed parking garage, the second and third floor contain a mix of retrofitted science classrooms and regular classrooms, and the campus library.

Seismic Evaluation
Building 23 is not on the AB300 list. The building consists of concrete columns and concrete bearing walls, and roof consists of steel deck and steel beams and girders.

Facility Condition Index
The FCI for Building 23 is listed as 32.7% by LAUSD, which is 15.3% below the weighted campus average of 48.0%. However, based on the DLR Group “RED Chart” analysis, Building 23 should have an adjusted FCI of67.1%, which is 3.1% below the average campus adjusted FCI of 70.2%.

Preliminary Code Review
Building 23 appears to be a Type II construction. The presence of automobile parking on the first floor presents some challenges for egress and fire separation, but existing conditions appear to address these separations. Vertical accessibility near center of the building or north west end is necessary.

Accessibility
An elevator exists at the extreme east of the building which places it more than 200 feet from the stair on the west end of the building. The elevator is accessed through a vestibule off of a covered exterior stair landing.

Our Recommendation
Slight modernization to address vertical accessibility and stair upgrades.

Estimated Construction Cost
To remodel this building is approximate $15,878,088

BUILDING 23 — LIBRARY/CLASSROOM BUILDING

23

a/k/a "L Building"

CAFM 20796

Year Built 1990 (25 YEARS OLD)

FCI Priority Scope Cost	$7,172,760	$204.24/SF
relative to		
Basic Replacement Cost	$11,747,640	$334.50/SF
Basic Replacement $ Δ	$4,574,880	OVER FCI COST
Basic Replacement % Δ	63.78%	OF FCI COST OVER FCI COST
Cost Adjustment Factor	A	(BASELINE COST)

Existing Occupied Floors	Existing Building Area	Existing Building FCI
3	35,120 SQUARE FEET (SF)	32.7%

Existing Classrooms: 10

Adjusted FCI: 67.1% (34.4%)

$6.00/SF Hazmat Abatement: $210,720 (ASSUMED)

17.8% Interior Construction (and Interior Finishes): $702,400 MODERNIZE (DESIGN RECOMMENDATION)

BUILDING COMPONENT FCI SYSTEMS / *DESIGN RECOMMENDATION*

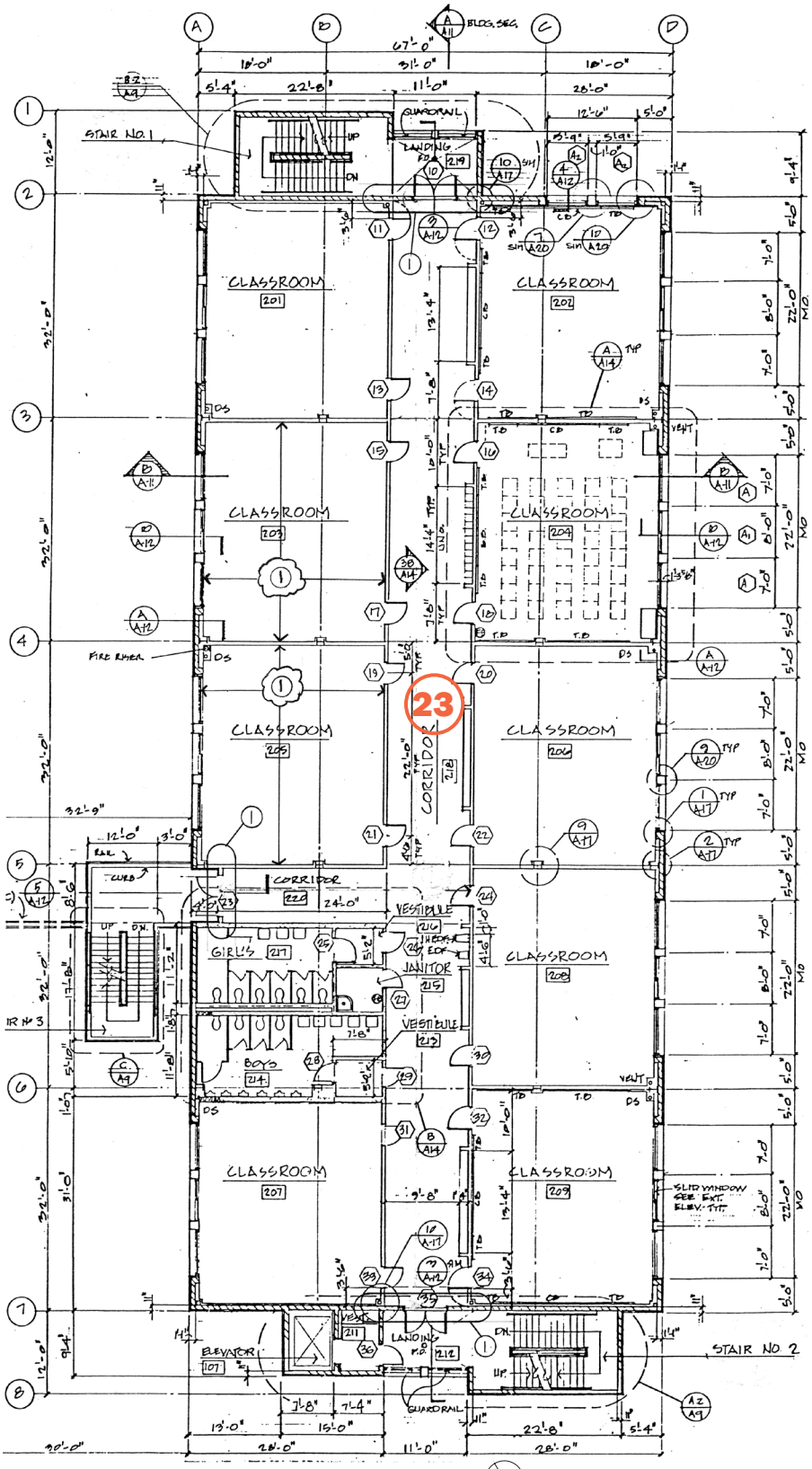
FCI %	FCI SYSTEM	STATUS	COST	COMMENTS
100.0%	Super Structure	MODERNIZE	$1,053,600	Questionable FCI, assumed some structural modernization work required.
7.9%	Exterior Enclosure	MODERNIZE	$1,229,200	Energy efficient windows & doors, repair finish/trim, new paint.
100.0%	Roofing	REPLACE	$403,880	End of life, HVAC work triggers replacement.
100.0%	HVAC	REPLACE	$1,475,040	End of life, obsolete refrigerant.
98.9%	Plumbing	REPLACE	$544,360	End of life, galvanized piping, noncompliant fixtures.
0.4%	Fire Protection	KEEP	$0	Assumed sufficient for existing (unchanged) uses.
62.8%	Electrical	MODERNIZE	$913,120	Near end of life, panelboards located in corridors, noncompliant fixtures.

VERTICAL CIRCULATION FCI SYSTEMS / *DESIGN RECOMMENDATION*

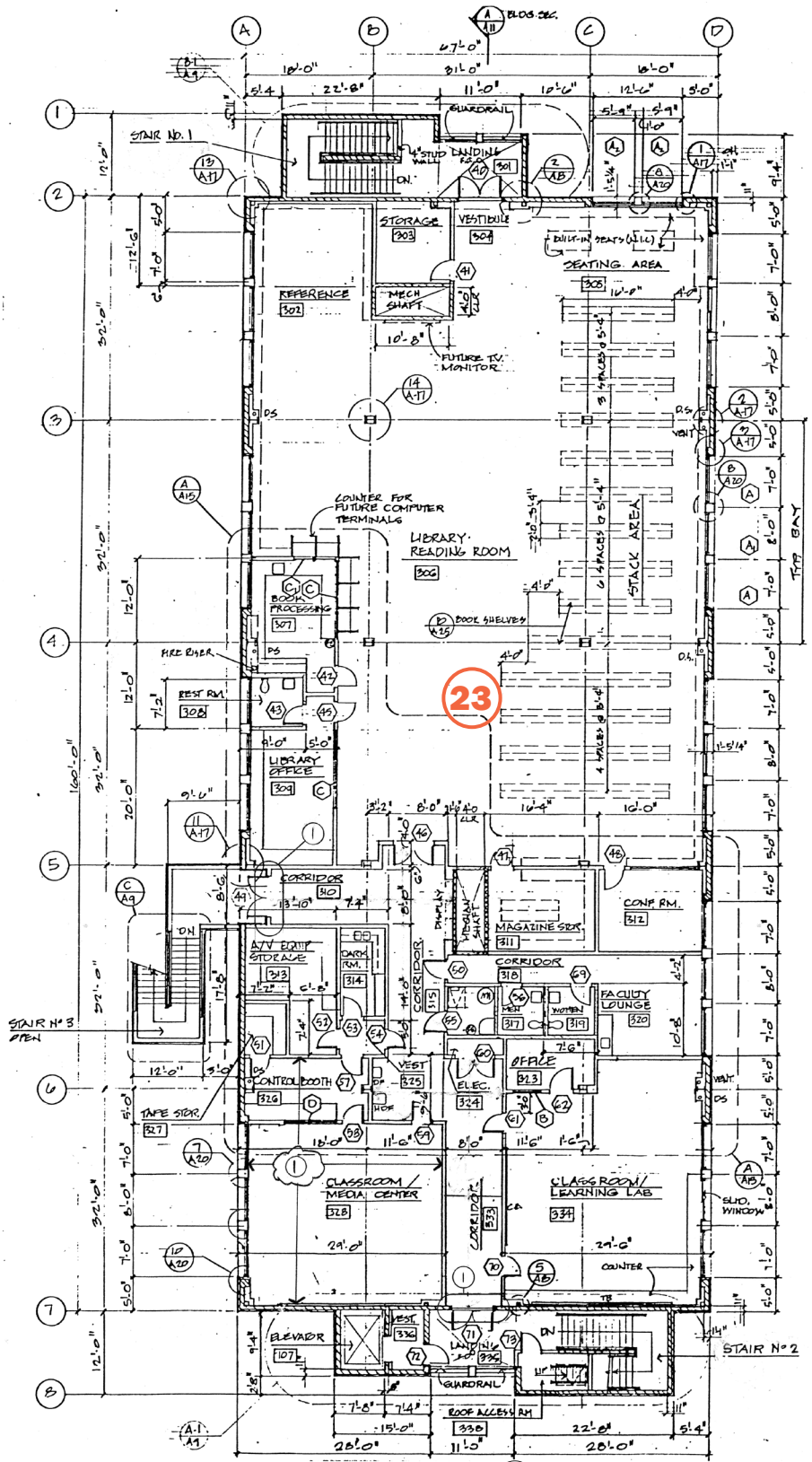
FCI %	FCI SYSTEM		STATUS	COST	COMMENTS
N/A	Elevator (existing)		MODERNIZE	$60,000	Refresh existing elevator.
-	# New Elevators →	1	ADD	$120,000	Locate new elevator near center of building or north west end.
0.0%	Stairs (existing)	× 3	MODERNIZE	$39,000	Upgrade handrails, guards and stepping surfaces.
-	# New Stairs →	0	NONE	#N/A	Not required.

INFRASTRUCTURE FCI SYSTEMS / *DESIGN RECOMMENDATION*

FCI %	FCI SYSTEM	STATUS	COST	COMMENTS
100.0%	Site Improvements & Utilities	MODERNIZE	$421,440	Video existing utilities, pothole fixes.



1ST FLOOR PLAN



2ND FLOOR PLAN

2.8 STRUCTURAL - PRELIMINARY TIER 1

EXECUTIVE SUMMARY

The purpose of this report is to determine if the buildings on the State AB300 list at Roosevelt High School comply with recognized seismic performance standards. The structures on the AB300 list are the Auditorium (Building 1), Gymnasium (Building 19) and Industrial Arts (Building 6) buildings (see Figure 2 for building locations and building numbers). We also completed a cursory overall review of the other structures on the campus to identify any other potential seismic hazards.

The existing buildings' structural systems were evaluated employing the standard methodology outlined in the American Society of Civil Engineers/Structural Engineering Institute (ASCE/SEI) publication, *Seismic Evaluation and Retrofit of Existing Buildings* (ASCE 41-13). This guideline is widely accepted as the standard by which existing buildings are evaluated for determination of potential seismic vulnerabilities. For the purpose of this evaluation, the Tier 1 Initial Screening Phase was used in order to determine potential structural seismic vulnerabilities and if further evaluations (i.e. Tier 2 or 3) are warranted. The *Life Safety Performance Level* is defined as a building performance that includes damage to both structural and non-structural components during a design earthquake, such that 1) partial or total structural collapse does not occur, and 2) damage to non-structural components is non-life threatening.

This report identifies complying and potentially non-complying structures as summarized in the table below. Potentially non-complying structures that were discovered in the Tier 1 phase are recommended for further evaluation. However, recommendations for conceptual seismic upgrade work have been included in the report for establishing preliminary budget to mitigate the perceived seismic deficiencies. The proposed mitigation measures, if implemented, will make the upgraded buildings meet the life-safety building stability criteria of the new code.

Building (See Figure 3)	Meets Tier 1 for Life Safety Criteria of		Further Study / Recommendations
	Structural Items	Non-Structural	
Auditorium / Classrooms (Bldg. 1)	NO	NO	• Perform Tier 2 Evaluation on wall-to- diaphragm anchorage connections for in-plane shear transfer and out-of-plane wall anchorage • Perform Tier 2 Evaluation of weak diaphragm materials. • Perform Tier 2 Evaluation of in-plane shear resistance of walls • Perform Tier 2 Evaluation on bond between existing brick wall and gunite strengthened walls, non-
Gymnasium (Bldg. 19)	NO	NO	• Perform Tier 2 Evaluation on wall-to- diaphragm anchorage connections for in-plane shear transfer and out-of-plane wall anchorage • Perform Tier 2 Evaluation of weak diaphragm materials. • Perform Tier 2 Evaluation of non-
Industrial Arts (Bldg. 6)	NO	NO	• Perform Tier 2 Evaluation on wall-to- diaphragm anchorage connections for in-plane shear transfer and out-of-plane wall anchorage • Perform Tier 2 Evaluation of weak diaphragm materials. • Perform Tier 2 Evaluation of in-plane shear resistance of brick walls

The Auditorium building was originally constructed in 1922, with latest rehabilitations efforts in 1986. The Gymnasium and Industrial Arts Building was originally constructed in 1968. These structures hence do **not** satisfy all the minimum structural life safety performance level criteria contained in ASCE 41-13 and, in our opinion, are significantly vulnerable to strong ground shaking caused by a major regional seismic event.

In its current condition, buildings at Roosevelt High School do not pose an "imminent" safety concern. However, like many buildings built in the same era as these buildings, they have performed adequately during prior earthquakes. However, the ground shaking experienced at the site during those earthquakes were less (approximately one-half to one-third) of what is predicted at the site should a major fault rupture occur on one of the active faults closer to the site. In the event of a major earthquake, there is potential for damage leading to potential life-safety hazards.

1.1 INTRODUCTION

1.2 Scope of Work

The purpose of this report is to present the findings of the ASCE 41-13 Tier I Evaluation performed for the buildings on the AB300 List at Roosevelt High School in the Los Angeles, California. The intent of the study is to perform a cursory review (Tier 1 initial screening) of the existing buildings' structural systems employing the standard methodology outlined in the American Society of Civil Engineers/Structural Engineering Institute (ASCE/SEI) publication, *Seismic Evaluation and Retrofit of Existing Buildings* (ASCE 41-13).

The subject buildings are located on the Roosevelt High School campus (see the vicinity map and property site plan on Figures 1 and 2, respectively). These particular buildings are mostly of original construction except for significant structural rehabilitation efforts, most notably on the Auditorium building. Though the Auditorium received structural strengthening (most recent in 1954), the design methodology of the era poses structural concerns upon the Tier 1 Evaluation.

Our review was limited to the subject buildings listed in Table 2 and did not include a detailed comprehensive structural review of the existing structures subject to gravity and/or seismic loadings. Limited conceptual structural calculations were performed as needed to complete the checklists, except where noted herein.

The following tasks outline the scope of work for the survey and evaluation for each of the buildings on the campus:

- Review of available original structural construction documents to identify building construction and structural systems. Specific drawings reviewed are noted in Section 1.2 for each building;
- Cursory site visits performed by an SBI engineer to assess existing building conditions. Destructive, non-destructive testing and/or uncovering of concealed structural elements were not conducted;
- Identify visible signs of major structural distress, if any, observed during our cursory walk through.
- Asses seismic performance of similar buildings in prior earthquakes including the 1994 Northridge Earthquake and the 1989 Loma Prieta Earthquake;
- Identify code mandated seismic upgrade requirement, if any, that may apply to the buildings.
- Note if each building has, if any, potential structural seismic vulnerabilities based on construction and performance of similar buildings.

- Based on the information gathered, perform structural seismic evaluation in accordance with criteria set-forth in *ASCE 41-13*. Complete structural evaluation checklists as appropriate for each building.
- From findings of *ASCE 41-13* evaluation, develop option as to each building's ability to resist seismic forces based on life safety criteria of *ASCE 41-13*.
- Where applicable, determine if any other potential structural seismic vulnerabilities exist based on information gathered.
- Provide conceptual recommendations for mitigation of non-compliant items.

1.3 Documentation Reviewed

The following is list of the original building documentation that was made available for review. Refer to Figure 3 for building key plan and to Section 2 for building descriptions:

Table 1 – R.H.S Documentation Summary

Building	Structural Engineer of Record	Drawing Date(s)	Certified by State of California Department of Public Works Division of Architecture (i.e. DSA)
Auditorium / Classrooms (Bldg. 1)	Original: Hunt & Burns Architects	1922	Pre-Oversight
	Original: Hunt & Burns Architects	1924	Pre-Oversight
	Strengthening: Oliver G. Bowen	1936	Unknown
	Repair: Unknown	1949	Yes (Application #7020)
	Strengthening: Oliver G. Bowen	1954	Unknown
	Strengthening: Millard Archuleta Associates AIA	1986	Unknown
Gymnasium (Bldg. 19)	Original: S.B. Barnes and Associates	1966	Yes (Application #27577)
Industrial Arts (Bldg. 6)	Original: S.B. Barnes and Associates	1966	Yes (Application #27577)

1.1 Limitations

Saiful/Bouquet, Inc. (SBI) has prepared this report for the sole and exclusive use of DLR Group and LAUSD.

Exhaustive structural calculations were not performed as part of this work, nor was computer modeling of the structures. The findings in this report have been based on cursory review of the available construction documents, previous reports and brief observation of each building.

Services were performed by SBI in a manner consistent with the level of care and skill ordinarily exercised by members of the profession currently practicing under similar conditions. No other warranty, expressed or implied, is made.

This report, and the analyses, models, and predictions contained in this report are based on the scientific data, mathematical and empirical models, and experience of engineers, geologists and geotechnical specialists. It is understood that SBI is not liable for the accuracy and/or adequacy of the structural design performed by others.

2.1 PROPERTY DESCRIPTION

2.2 General

The subject buildings are located on the Roosevelt High School (R.H.S) campus (see the vicinity map and property site plan on Figures 1 and 2, respectively). The buildings on the campus are mostly of original construction except for significant rehabilitation efforts to the Auditorium Building.

Table 2 below summarizes each building of the site and Figure 2 shows the property site plan. Refer to Figure 3 for reference photographs.

Table 2 – Building Summary

Building ID	Building Name	Construction Type	Year Built	No. of Stories	Approx. Area (sf)	Original Design Code (Assumed)
1	Auditorium	Concrete, Wood, Steel,	1922	3	105,000	Unknown
19	Gymnasium	Concrete, Wood, Steel,	1968	2	37,000	UBC 1964
6	Industrial	Concrete, Wood,	1968	2	30,000	UBC 1964

2.3 Building Structural System Descriptions

2.3.1 Auditorium/Classrooms (Building 1)

The Auditorium and North wing of Building 1 were originally constructed in 1922 with the South wing being built 2 years later in 1924. The original use of the building has for the most part been unchanged over the years and has served as lecture classrooms, art rooms, science labs, and auditorium. The single building was seismically separated with expansion joints in a strengthening and modification effort done in 1936. Said joints are continuous from the top of foundation to the top of the respective parapets of each building.

Vertical Carrying System:

The vertical load carrying system of the Auditorium consists of a combination of wood framing, concrete construction, and steel beams.

1) Main building portion (original – 1922): the roof framing consists of straight 1x planks over wood roof joists at the classrooms. At the auditorium, the roof diaphragm remains as 1x planks but they are over existing reinforced steel trusses. At the auditorium stage, the roof framing consists of a 4" concrete slab over steel beams. The balcony in the auditorium is constructed of steel beams, steel girders, and steel columns. Excluding the balcony framing, the above roof framing is supported by either reinforced concrete walls, gunite walls, or gunite strengthened brick walls. Both 2nd and 3rd floor framing in classrooms is made up of straight 1x planks over wood joists or reinforced concrete slab supported by either reinforced concrete walls, gunite walls, or gunite strengthened brick walls.

2) Classroom Addition at South wing (original – 1924): the roof framing consists of straight 1x planks over wood trusses supported by either reinforced concrete walls or gunite strengthened brick walls. Both 2nd and 3rd floor framing consists of 1x diagonal planks over wood joists supported by reinforced concrete walls and gunite strengthened brick walls.

Lateral Resisting System:

1) Main building portion (original – 1922): The lateral load resisting system for the building consists of flexible and rigid roof diaphragm regions at all story levels, excluding the ground level. The flexible diaphragms consist of wood planks – straight at the roof level and diagonal configuration at the floor levels. Rigid diaphragms (4 ½" – 8" concrete slab) occur at all floor and roof levels. There is also the presence of steel horizontal bracing at Building 1 which are located at the roof level in both wings of the building and were part of the 1936 strengthening measures. Horizontal braces also occur at the balcony in the auditorium as part of the original construction. The diaphragms and steel horizontal braces transfer lateral seismic and wind loads to reinforced concrete or gunite strengthened brick shear walls.

2) Classroom Addition at South wing (original – 1924): the lateral load resisting system for the building at the roof level consists of flexible diaphragms in the classrooms and horizontal steel bracing at the corridor roof. These diaphragms transfer lateral seismic and wind loads to gunite strengthened brick and hollow clay shear walls. Both 2nd and 3rd floor lateral load resisting system consists of diaphragms constructed from 1x diagonal wood planks at the classrooms and a concrete slab at the corridor. These diaphragms transfer lateral seismic and wind loads to solid gunite, gunite strengthened brick, and gunite strengthened hollow clay shear walls.

Foundation System:

The foundation for both portions of the building consist of a concrete slab on grade with isolated pad footings at columns and continuous wall footings at load bearing and shear walls. Piles were added at the expansion joint at the South wing as part of the 1936 strengthening and modification effort.

2.3.2 Gymnasium (Building 19)

Vertical Carrying System:

The vertical load carrying system of the Gymnasium's high roof consists of a combination of wood sheathing and composite roof deck on top of wood roof joists, steel beams and tapered steel girders. The tapered steel girders are supported by concrete columns, and load bearing concrete walls.

The vertical load carrying system of the Gymnasium's low roof consists of plywood sheathing over wood roof joists, which are supported by steel beams. The steel beams transfer vertical loads to load bearing concrete and masonry walls/pilasters.

At the West side of the building, the 2nd level floor framing consists of an elevated floor slab supported by concrete beams and girders, which in turn span to cast-in-place concrete columns and cast-in-place load bearing concrete and masonry walls.

Lateral Resisting System:

The lateral load resisting system for the building consists of flexible roof diaphragms that deliver lateral wind/seismic forces to reinforced concrete and masonry shear walls. At the 2nd floor level, rigid concrete floor diaphragms deliver lateral wind/seismic forces to reinforced concrete and masonry shear walls.

Foundation System:

The building walls are founded with continuous wall footings and columns are founded with isolated spread footings.

2.3.3 Industrial Arts (Building 6)

The Industrial Arts building was originally constructed in 1968 on the northeast side of the campus, and has since been used for technical skills such as drafting, woodworking, metalworking and auto repair. The building appears to be in its original configuration and has not undergone any significant repair/retrofit work. In 1975, an auto shed was added adjacent to the low roof of the Industrial Arts building.

Vertical Carrying System:

The vertical load carrying system of the low roof consists of composite roof deck on top of wood roof joists and steel beams, which transfer vertical loads to tapered steel girders. The steel girders are supported by steel columns, concrete pilasters and load bearing masonry walls.

The vertical load carrying system of the high roof consists of plywood sheathing supported by wood roof joists and steel beams, which span to tapered steel girders. The steel girders are supported by steel columns, concrete pilasters and load bearing masonry walls.

The vertical load carrying system of the 2nd floor consist of an elevated concrete slab supported with castellated steel beams, which transfer vertical loads to steel columns, concrete pilasters and load bearing masonry walls.

Lateral Resisting System:

The lateral load resisting system for the building consists of the flexible roof diaphragms that deliver lateral wind/seismic forces to reinforced masonry walls. The rigid diaphragm at the second level delivers lateral wind/seismic forces to reinforced masonry walls.

Foundation System:

The building walls are founded with continuous wall footings and columns are founded with isolated spread footings.

APPENDIX C
SUMMARY DATA SHEET

BUILDING DATA

Building Name: Roosevelt High School - Auditorium/Classroom Building (Bldg. 1) Date: 6/2015
Building Address: 456 South Mathews Street, Los Angeles, CA 90033
Latitude: 34.0401 °N Longitude: 118.2106 °W By: TM / JC
Year Built: 1922 Year(s) Remodeled: 1936, 1954 Original Design Code: unknown
Area (sf): ------ Length (ft): 501 Width (ft): 140
No. of Stories: 3 Story Height: 10.5, 14.1, 14.1 Total Height: 41

USE ☐ Industrial ☐ Office ☐ Warehouse ☐ Hospital ☐ Residential ☑ Educational ☐ Other: _____

CONSTRUCTION DATA

Gravity Load Structural System: Reinforced concrete walls and columns
Exterior Transverse Walls: Reinforced concrete walls Openings? Yes
Exterior Longitudinal Walls: Reinforced concrete walls Openings? Yes
Roof Materials/Framing: RC slab w/rebar @ 45° BW over RC beams, 1x planks over 2x wood rafter and steel trusses- Varies over each bldg. port
Intermediate Floors/Framing: RC slab w/rebar @ 45° BW over RC beams, 1x planks over wood joists w/ RC beams- Varies over each bldg. portion.
Ground Floor: reinforced concrete slab on grade
Columns: reinforced concrete w/ties and steel wide flange- Varies Foundation: spread and continuous
General Condition of Structure: good
Levels Below Grade? no
Special Features and Comments: Seismic gap at 2 locations

LATERAL-FORCE-RESISTING SYSTEM

	Longitudinal	Transverse
System:	C2 & C2A	C2 & C2A
Vertical Elements:	RC shear walls	RC shear walls
Diaphragms:	wood and RC slab	wood and RC slab
Connections:	rebar dowels, steel	rebar dowels, steel

EVALUATION DATA

BSE-1N Spectral Response Accelerations: S_{DS} = 1.595g S_{D1} = 0.834g
Soil Factors: Class = D- Stiff Soil F_a = 1.0 F_v = 1.5
BSE-1E Spectral Response Accelerations: S_{XS} = 0.973g S_{X1} = 0.536g
Level of Seismicity: SDC=D- High Performance Level: Life Safety- Enhanced (Table 2-1 in ASCE 41-13
Building Period: T = 0.347
Spectral Acceleration: S_a = 0.973g
Modification Factor: $C_mC_1C_2$ = 1.0 Building Weight: W = 3427 kip
Pseudo Lateral Force: V= 3334.5 kip
$C_mC_1C_2S_aW$= 3334.5 kip

BUILDING CLASSIFICATION: _____

REQUIRED TIER 1 CHECKLISTS	Yes	No
Basic Configuration Checklist	☑	☐
Building Type C2 & C2A **Structural Checklist**	☑	☐
Nonstructural Component Checklist	☑	☐

FURTHER EVALUATION REQUIREMENT: ASCE 41-13 Tier 2 Evaluation Is Required

Project: Roosevelt High School Location: Auditorium and Classroom Building (Bldg 1)

Completed by: TM Date: 7/2015

16.1.2LS LIFE SAFETY BASIC CONFIGURATION CHECKLIST

Low Seismicity

Building System

General

(C) NC N/A U LOAD PATH: The structure shall contain a complete, well defined load path, including structural elements and connections, that serves to transfer the inertial forces associated with the mass of all elements of the building to the foundation. (Commentary: Sec. A.2.1.1. Tier 2: Sec. 5.4.1.1)

C (NC) N/A U ADJACENT BUILDINGS: The clear distance between the building being evaluated and any adjacent building is greater than 4% of the height of the shorter building. This statement shall not apply for the following building types: W1, W1a, and W2. (Commentary: Sec. A.2.1.2. Tier 2: Sec. 5.4.1.2)

(C) NC N/A U MEZZANINES: Interior mezzanine levels are braced independently from the main structure or are anchored to the seismic-force-resisting elements of the main structure. (Commentary: Sec. A.2.1.3. Tier 2: Sec. 5.4.1.3)

Building Configuration

(C) NC N/A U WEAK STORY: The sum of the shear strengths of the seismic-force-resisting system in any story in each direction is not less than 80% of the strength in the adjacent story above. (Commentary: Sec. A2.2.2. Tier 2: Sec. 5.4.2.1)

(C) NC N/A U SOFT STORY: The stiffness of the seismic-force-resisting system in any story is not less than 70% of the seismic-force-resisting system stiffness in an adjacent story above or less than 80% of the average seismic-force-resisting system stiffness of the three stories above. (Commentary: Sec. A.2.2.3. Tier 2: Sec. 5.4.2.2)

(C) NC N/A U VERTICAL IRREGULARITIES: All vertical elements in the seismic-force-resisting system are continuous to the foundation. (Commentary: Sec. A.2.2.4. Tier 2: Sec. 5.4.2.3)

C (NC) N/A U GEOMETRY: There are no changes in the net horizontal dimension of the seismic-force-resisting system of more than 30% in a story relative to adjacent stories, excluding one-story penthouses and mezzanines. (Commentary: Sec. A.2.2.5. Tier 2: Sec. 5.4.2.4)

(C) NC N/A U MASS: There is no change in effective mass more than 50% from one story to the next. Light roofs, penthouses, and mezzanines need not be considered. (Commentary: Sec. A.2.2.6. Tier 2: Sec. 5.4.2.5)

C (NC) N/A U TORSION: The estimated distance between the story center of mass and the story center of rigidity is less than 20% of the building width in either plan dimension. (Commentary: Sec. A.2.2.7. Tier 2: Sec. 5.4.2.6)

Moderate Seismicity: Complete the Following Items in Addition to the Items for Low Seismicity.

Geologic Site Hazards

(C) NC N/A U LIQUEFACTION: Liquefaction-susceptible, saturated, loose granular soils that could jeopardize the building's seismic performance shall not exist in the foundation soils at depths within 50 ft under the building. (Commentary: Sec. A.6.1.1. Tier 2: 5.4.3.1)

(C) NC N/A U SLOPE FAILURE: The building site is sufficiently remote from potential earthquake-induced slope failures or rockfalls to be unaffected by such failures or is capable of accommodating any predicted movements without failure. (Commentary: Sec. A.6.1.2. Tier 2: 5.4.3.1)

(C) NC N/A U SURFACE FAULT RUPTURE: Surface fault rupture and surface displacement at the building site are not anticipated. (Commentary: Sec. A.6.1.3. Tier 2: 5.4.3.1)

High Seismicity: Complete the Following Items in Addition to the Items for Low and Moderate Seismicity.

Foundation Configuration

C (NC) N/A U OVERTURNING: The ratio of the least horizontal dimension of the seismic-force-resisting system at the foundation level to the building height (base/height) is greater than $0.6S_a$. (Commentary: Sec. A.6.2.1. Tier 2: Sec. 5.4.3.3)

C (NC) N/A U TIES BETWEEN FOUNDATION ELEMENTS: The foundation has ties adequate to resist seismic forces where footings, piles, and piers are not restrained by beams, slabs, or soils classified as Site Class A, B, or C. (Commentary: Sec. A.6.2.2. Tier 2: Sec. 5.4.3.4)

Project: Roosevelt High School Location: Auditorium and Classroom Building (Bldg 1)

Completed by: TM Date: 7/2015

16.10LS LIFE SAFETY STRUCTURAL CHECKLIST FOR BUILDING TYPES C2: CONCRETE SHEAR WALLS WITH STIFF DIAPHRAGMS AND C2A: CONCRETE SHEAR WALLS WITH FLEXIBLE DIAPHRAGMS

Low and Moderate Seismicity

Seismic-Force-Resisting System

C NC (N/A) U COMPLETE FRAMES: Steel or concrete frames classified as secondary components form a complete vertical-load-carrying system. (Commentary: Sec. A.3.1.6.1. Tier 2: Sec. 5.5.2.5.1)

(C) NC N/A U REDUNDANCY: The number of lines of shear walls in each principal direction is greater than or equal to 2. (Commentary: Sec. A.3.2.1.1. Tier 2: Sec. 5.5.1.1)

C (NC) N/A U SHEAR STRESS CHECK: The shear stress in the concrete shear walls, calculated using the Quick Check procedure of Section 4.5.3.3, is less than the greater of 100 lb/in.^{2} or $2\sqrt{f'_c}$. (Commentary: Sec. A.3.2.2.1. Tier 2: Sec. 5.5.3.1.1)

(C) NC N/A U REINFORCING STEEL: The ratio of reinforcing steel area to gross concrete area is not less than 0.0012 in the vertical direction and 0.0020 in the horizontal direction. (Commentary: Sec. A.3.2.2.2. Tier 2: Sec. 5.5.3.1.3)

Connections

C (NC) N/A U WALL ANCHORAGE AT FLEXIBLE DIAPHRAGMS: Exterior concrete or masonry walls that are dependent on flexible diaphragms for lateral support are anchored for out-of-plane forces at each diaphragm level with steel anchors, reinforcing dowels, or straps that are developed into the diaphragm. Connections have adequate strength to resist the connection force calculated in the Quick Check procedure of Section 4.5.3.7. (Commentary: Sec. A.5.1.1. Tier 2: Sec. 5.7.1.1)

C (NC) N/A U TRANSFER TO SHEAR WALLS: Diaphragms are connected for transfer of seismic forces to the shear walls. (Commentary: Sec. A.5.2.1. Tier 2: Sec. 5.7.2)

C (NC) N/A U FOUNDATION DOWELS: Wall reinforcement is doweled into the foundation with vertical bars equal in size and spacing to the vertical wall reinforcing immediately above the foundation. (Commentary: Sec. A.5.3.5. Tier 2: Sec. 5.7.3.4)

High Seismicity: Complete the Following Items in Addition to the Items for Low and Moderate Seismicity.

Seismic-Force-Resisting System

C NC (N/A) U DEFLECTION COMPATIBILITY: Secondary components have the shear capacity to develop the flexural strength of the components. (Commentary: Sec. A.3.1.6.2. Tier 2: Sec. 5.5.2.5.2)

C NC (N/A) U FLAT SLABS: Flat slabs or plates not part of the seismic-force-resisting system have continuous bottom steel through the column joints. (Commentary: Sec. A.3.1.6.3. Tier 2: Sec. 5.5.2.5.3)

C NC (N/A) U COUPLING BEAMS: The stirrups in coupling beams over means of egress are spaced at or less than $d/2$ and are anchored into the confined core of the beam with hooks of 135 degrees or more. The ends of both walls to which the coupling beam is attached are supported at each end to resist vertical loads caused by overturning. (Commentary: Sec. A.3.2.2.3. Tier 2: Sec. 5.5.3.2.1)

Connections

C NC (N/A) U UPLIFT AT PILE CAPS: Pile caps have top reinforcement, and piles are anchored to the pile caps. (Commentary: Sec. A.5.3.8. Tier 2: Sec. 5.7.3.5)

Diaphragms (Flexible or Stiff)

(C) NC N/A U DIAPHRAGM CONTINUITY: The diaphragms are not composed of split-level floors and do not have expansion joints. (Commentary: Sec. A.4.1.1. Tier 2: Sec. 5.6.1.1)

(C) NC N/A U OPENINGS AT SHEAR WALLS: Diaphragm openings immediately adjacent to the shear walls are less than 25% of the wall length. (Commentary: Sec. A.4.1.4. Tier 2: Sec. 5.6.1.3)

Flexible Diaphragms

C NC N/A U CROSS TIES: There are continuous cross ties between diaphragm chords. (Commentary: Sec. A.4.1.2. Tier 2: Sec. 5.6.1.2)

C NC N/A U STRAIGHT SHEATHING: All straight sheathed diaphragms have aspect ratios less than 2-to-1 in the direction being considered. (Commentary: Sec. A.4.2.1. Tier 2: Sec. 5.6.2)

C NC N/A U SPANS: All wood diaphragms with spans greater than 24 ft consist of wood structural panels or diagonal sheathing. (Commentary: Sec. A.4.2.2. Tier 2: Sec. 5.6.2)

C NC N/A U DIAGONALLY SHEATHED AND UNBLOCKED DIAPHRAGMS: All diagonally sheathed or unblocked wood structural panel diaphragms have horizontal spans less than 40 ft and aspect ratios less than or equal to 4-to-1. (Commentary: Sec. A.4.2.3. Tier 2: Sec. 5.6.2)

C NC N/A U OTHER DIAPHRAGMS: The diaphragm does not consist of a system other than wood, metal deck, concrete, or horizontal bracing. (Commentary: Sec. A.4.7.1. Tier 2: Sec. 5.6.5)

Project: Roosevelt High School Location: Auditorium and Classroom Building (Bldg 1)

Completed by: TM Date: 7/2015

16.17 NONSTRUCTURAL CHECKLIST

Life Safety Systems

C NC N/A (U) LS-LMH; PR-LMH. FIRE SUPPRESSION PIPING: Fire suppression piping is anchored and braced in accordance with NFPA-13. (Commentary: Sec. A.7.13.1. Tier 2: Sec. 13.7.4)

C NC N/A (U) LS-LMH; PR-LMH. FLEXIBLE COUPLINGS: Fire suppression piping has flexible couplings in accordance with NFPA-13. (Commentary: Sec. A.7.13.2. Tier 2: Sec. 13.7.4)

C NC N/A (U) LS-LMH; PR-LMH. EMERGENCY POWER: Equipment used to power or control life safety systems is anchored or braced. (Commentary: Sec. A.7.12.1. Tier 2: Sec. 13.7.7)

C NC N/A (U) LS-LMH; PR-LMH. STAIR AND SMOKE DUCTS: Stair pressurization and smoke control ducts are braced and have flexible connections at seismic joints. (Commentary: Sec. A.7.14.1. Tier 2: Sec. 13.7.6)

C NC N/A (U) LS-MH; PR-MH. SPRINKLER CEILING CLEARANCE: Penetrations through panelized ceilings for fire suppression devices provide clearances in accordance with NFPA-13. (Commentary: Sec. A.7.13.3. Tier 2: Sec. 13.7.4)

C NC N/A (U) LS-not required; PR-LMH. EMERGENCY LIGHTING: Emergency and egress lighting equipment is anchored or braced. (Commentary: Sec. A.7.3.1. Tier 2: Sec. 13.7.9)

Hazardous Materials

C NC N/A (U) LS-LMH; PR-LMH. HAZARDOUS MATERIAL EQUIPMENT: Equipment mounted on vibration isolators and containing hazardous material is equipped with restraints or snubbers. (Commentary: Sec. A.7.12.2. Tier 2: 13.7.1)

C NC N/A (U) LS-LMH; PR-LMH. HAZARDOUS MATERIAL STORAGE: Breakable containers that hold hazardous material, including gas cylinders, are restrained by latched doors, shelf lips, wires, or other methods. (Commentary: Sec. A.7.15.1. Tier 2: Sec. 13.8.4)

C NC N/A (U) LS-MH; PR-MH. HAZARDOUS MATERIAL DISTRIBUTION: Piping or ductwork conveying hazardous materials is braced or otherwise protected from damage that would allow hazardous material release. (Commentary: Sec. A.7.13.4. Tier 2: Sec. 13.7.3 and 13.7.5)

C NC N/A (U) LS-MH; PR-MH. SHUT-OFF VALVES: Piping containing hazardous material, including natural gas, has shut-off valves or other devices to limit spills or leaks. (Commentary: Sec. A.7.13.3. Tier 2: Sec. 13.7.3 and 13.7.5)

C NC N/A (U) LS-LMH; PR-LMH. FLEXIBLE COUPLINGS: Hazardous material ductwork and piping, including natural gas piping, has flexible couplings. (Commentary: Sec. A.7.15.4, Tier 2: Sec.13.7.3 and 13.7.5)

C NC N/A (U) LS-MH; PR-MH. PIPING OR DUCTS CROSSING SEISMIC JOINTS: Piping or ductwork carrying hazardous material that either crosses seismic joints or isolation planes or is connected to independent structures has couplings or other details to accommodate the relative seismic displacements. (Commentary: Sec. A.7.13.6. Tier 2: Sec.13.7.3, 13.7.5, and 13.7.6)

Partitions

C NC (N/A) U LS-LMH; PR-LMH. UNREINFORCED MASONRY: Unreinforced masonry or hollow-clay tile partitions are braced at a spacing of at most 10 ft in Low or Moderate Seismicity, or at most 6 ft in High Seismicity. (Commentary: Sec. A.7.1.1. Tier 2: Sec. 13.6.2)

C NC (N/A) U LS-LMH; PR-LMH. HEAVY PARTITIONS SUPPORTED BY CEILINGS: The tops of masonry or hollow-clay tile partitions are not laterally supported by an integrated ceiling system. (Commentary: Sec. A.7.2.1. Tier 2: Sec. 13.6.2)

C NC (N/A) U LS-MH; PR-MH. DRIFT: Rigid cementitious partitions are detailed to accommodate the following drift ratios: in steel moment frame, concrete moment frame, and wood frame buildings, 0.02; in other buildings, 0.005. (Commentary A.7.1.2 Tier 2: Sec. 13.6.2)

C NC (N/A) U LS-not required; PR-MH. LIGHT PARTITIONS SUPPORTED BY CEILINGS: The tops of gypsum board partitions are not laterally supported by an integrated ceiling system. (Commentary: Sec. A.7.2.1. Tier 2: Sec. 13.6.2)

C NC (N/A) U LS-not required; PR-MH. STRUCTURAL SEPARATIONS: Partitions that cross structural separations have seismic or control joints. (Commentary: Sec. A.7.1.3. Tier 2. Sec. 13.6.2)

C NC (N/A) U LS-not required; PR-MH. TOPS: The tops of ceiling-high framed or panelized partitions have lateral bracing to the structure at a spacing equal to or less than 6 ft. (Commentary: Sec. A.7.1.4. Tier 2. Sec. 13.6.2)

Ceilings

C (NC) N/A U LS-MH; PR-LMH. SUSPENDED LATH AND PLASTER: Suspended lath and plaster ceilings have attachments that resist seismic forces for every 12 ft^2 of area. (Commentary: Sec. A.7.2.3. Tier 2: Sec. 13.6.4)

C (NC) N/A U LS-MH; PR-LMH. SUSPENDED GYPSUM BOARD: Suspended gypsum board ceilings have attachments that resist seismic forces for every 12 ft^2 of area. (Commentary: Sec. A.7.2.3. Tier 2: Sec. 13.6.4)

C NC (N/A) U LS-not required; PR-MH. INTEGRATED CEILINGS: Integrated suspended ceilings with continuous areas greater than 144 ft^2, and ceilings of smaller areas that are not surrounded by restraining partitions, are laterally restrained at a spacing no greater than 12 ft with members attached to the structure above. Each restraint location has a minimum of four diagonal wires and compression struts, or diagonal members capable of resisting compression. (Commentary: Sec. A.7.2.2. Tier 2: Sec. 13.6.4)

C NC (N/A) U LS-not required; PR-MH. EDGE CLEARANCE: The free edges of integrated suspended ceilings with continuous areas greater than 144 ft^2 have clearances from the enclosing wall or partition of at least the following: in Moderate Seismicity, 1/2 in.; in High Seismicity, 3/4 in. (Commentary: Sec. A.7.2.4. Tier 2: Sec. 13.6.4)

C NC (N/A) U LS-not required; PR-MH. CONTINUITY ACROSS STRUCTURE JOINTS: The ceiling system does not cross any seismic joint and is not attached to multiple independent structures. (Commentary: Sec. A.7.2.5. Tier 2: Sec. 13.6.4)

C NC (N/A) U LS-not required; PR-H. EDGE SUPPORT: The free edges of integrated suspended ceilings with continuous areas greater than 144 ft^2 are supported by closure angles or channels not less than 2 in. wide. (Commentary: Sec. A.7.2.6. Tier 2: Sec. 13.6.4)

C NC (N/A) U LS-not required; PR-H. SEISMIC JOINTS: Acoustical tile or lay-in panel ceilings have seismic separation joints such that each continuous portion of the ceiling is no more than 2500 ft^2 and has a ratio of long-to-short dimension no more than 4-to-1. (Commentary: Sec. A.7.2.7. Tier 2: 13.6.4)

Light Fixtures

C NC N/A (U) LS-MH; PR-MH. INDEPENDENT SUPPORT: Light fixtures that weigh more per square foot than the ceiling they penetrate are supported independent of the grid ceiling suspension system by a minimum of two wires at diagonally opposite corners of each fixture. (Commentary: Sec. A.7.3.2. Tier 2: Sec. 13.6.4 and 13.7.9)

C NC (N/A) U LS-not required; PR-H. PENDANT SUPPORTS: Light fixtures on pendant supports are attached at a spacing equal to or less than 6 ft and, if rigidly supported, are free to move with the structure to which they are attached without damaging adjoining components. (Commentary: A.7.3.3. Tier 2: Sec. 13.7.9)

C NC (N/A) U LS-not required; PR-H. LENS COVERS: Lens covers on light fixtures are attached with safety devices. (Commentary: Sec. A.7.3.4. Tier 2: Sec. 13.7.9)

Cladding and Glazing

C NC N/A (U) LS-MH; PR-MH. CLADDING ANCHORS: Cladding components weighing more than 10 lb/ft^2 are mechanically anchored to the structure at a spacing equal to or less than the following: for Life Safety in Moderate Seismicity, 6 ft; for Life Safety in High Seismicity and for Position Retention in any seismicity, 4 ft. (Commentary: Sec. A.7.4.1. Tier 2: Sec. 13.6.1)

C NC (N/A) U LS-MH; PR-MH. CLADDING ISOLATION: For steel or concrete moment frame buildings, panel connections are detailed to accommodate a story drift ratio of at least the following: for Life Safety in Moderate Seismicity, 0.01; for Life Safety in High Seismicity and for Position Retention in any seismicity, 0.02. (Commentary: Sec. A.7.4.3. Tier 2: Section 13.6.1)

C NC (N/A) U LS-MH; PR-MH. MULTI-STORY PANELS: For multi-story panels attached at more than one floor level, panel connections are detailed to accommodate a story drift ratio of at least the following: for Life Safety in Moderate Seismicity, 0.01; for Life Safety in High Seismicity and for Position Retention in any seismicty, 0.02. (Commentary: Sec. A.7.4.4. Tier 2: Sec. 13.6.1)

C NC (N/A) U LS-MH; PR-MH. PANEL CONNECTIONS: Cladding panels are anchored out-of-plane with a minimum number of connections for each wall panel, as follows: for Life Safety in Moderate Seismicity, 2 connections; for Life Safety in High Seismicity and for Position Retention in any seismicity, 4 connections. (Commentary: Sec. A.7.4.5. Tier 2: Sec. 13.6.1.4)

C NC N/A (U) LS-MH; PR-MH. BEARING CONNECTIONS: Where bearing connections are used, there is a minimum of two bearing connections for each cladding panel. (Commentary: Sec. A.7.4.6. Tier 2: Sec. 13.6.1.4)

C NC (N/A) U LS-MH; PR-MH. INSERTS: Where concrete cladding components use inserts, the inserts have positive anchorage or are anchored to reinforcing steel. (Commentary: Sec. A.7.4.7. Tier 2: Sec. 13.6.1.4)

C NC N/A (U) LS-MH; PR-MH. OVERHEAD GLAZING: Glazing panes of any size in curtain walls and individual interior or exterior panes over 16 ft^2 in area are laminated annealed or laminated heat-strengthened glass and are detailed to remain in the frame when cracked. (Commentary: Sec. A.7.4.8: Tier 2: Sec. 13.6.1.5)

Masonry Veneer

C NC (N/A) U LS-LMH; PR-LMH. TIES: Masonry veneer is connected to the backup with corrosion-resistant ties. There is a minimum of one tie for every 2-2/3 ft^2, and the ties have spacing no greater than the following: for Life Safety in Low or Moderate Seismicity, 36 in.; for Life Safety in High Seismicity and for Position Retention in any seismicity, 24 in. (Commentary: Sec. A.7.5.1. Tier 2: Sec. 13.6.1.2)

C NC (N/A) U LS-LMH; PR-LMH. SHELF ANGLES: Masonry veneer is supported by shelf angles or other elements at each floor above the ground floor. (Commentary: Sec. A.7.5.2. Tier 2: Sec. 13.6.1.2)

C NC (N/A) U LS-LMH; PR-LMH. WEAKENED PLANES: Masonry veneer is anchored to the backup adjacent to weakened planes, such as at the locations of flashing. (Commentary: Sec. A.7.5.3. Tier 2: Sec. 13.6.1.2)

C NC (N/A) U LS-LMH; PR-LMH. UNREINFORCED MASONRY BACKUP: There is no unreinforced masonry backup. (Commentary: Sec. A.7.7.2. Tier 2: Section 13.6.1.1 and 13.6.1.2)

C NC (N/A) U LS-MH; PR-MH. STUD TRACKS: For veneer with metal stud backup, stud tracks are fastened to the structure at a spacing equal to or less than 24 in. on center. (Commentary: Sec. A.7.6.1. Tier 2: Section 13.6.1.1 and 13.6.1.2)

C (NC) N/A U LS-MH; PR-MH. ANCHORAGE: For veneer with concrete block or masonry backup, the backup is positively anchored to the structure at a horizontal spacing equal to or less than 4 ft along the floors and roof. (Commentary: Sec. A.7.7.1. Tier 2: Section 13.6.1.1 and 13.6.1.2)

C NC (N/A) U LS-not required; PR-MH. WEEP HOLES: In veneer anchored to stud walls, the veneer has functioning weep holes and base flashing. (Commentary: Sec. A.7.5.6. Tier 2: Section 13.6.1.2)

C NC (N/A) U LS-not required; PR-MH. OPENINGS: For veneer with metal stud backup, steel studs frame window and door openings. (Commentary: Sec. A.7.6.2. Tier 2: Sec. 13.6.1.1 and 13.6.1.2)

Parapets, Cornices, Ornamentation, and Appendages

C (NC) N/A U LS-LMH; PR-LMH. URM PARAPETS OR CORNICES: Laterally unsupported unreinforced masonry parapets or cornices have height-to-thickness ratios no greater than the following: for Life Safety in Low or Moderate Seismicity, 2.5; for Life Safety in High Seismicity and for Position Retention in any seismicity, 1.5. (Commentary: Sec. A.7.8.1. Tier 2: Sec. 13.6.5)

C (NC) N/A U LS-LMH; PR-LMH. CANOPIES: Canopies at building exits are anchored to the structure at a spacing no greater than the following: for Life Safety in Low or Moderate Seismicity, 10 ft; for Life Safety in High Seismicity and for Position Retention in any seismicity, 6 ft. (Commentary: Sec. A.7.8.2. Tier 2: Sec. 13.6.6)

(C) NC N/A U LS-MH; PR-LMH. CONCRETE PARAPETS: Concrete parapets with height-to-thickness ratios greater than 2.5 have vertical reinforcement. (Commentary: Sec. A.7.8.3. Tier 2: Sec. 13.6.5)

C (NC) N/A U LS-MH; PR-LMH. APPENDAGES: Cornices, parapets, signs, and other ornamentation or appendages that extend above the highest point of anchorage to the structure or cantilever from components are reinforced and anchored to the structural system at a spacing equal to or less than 6 ft. This checklist item does not apply to parapets or cornices covered by other checklist items. (Commentary: Sec. A.7.8.4. Tier 2: Sec. 13.6.6)

Masonry Chimneys

C NC (N/A) U LS-LMH; PR-LMH. URM CHIMNEYS: Unreinforced masonry chimneys extend above the roof surface no more than the following: for Life Safety in Low or Moderate Seismicity, 3 times the least dimension of the chimney; for Life Safety in High Seismicity and for Position Retention in any seismicity, 2 times the least dimension of the chimney. (Commentary: Sec. A.7.9.1. Tier 2: 13.6.7)

C NC (N/A) U LS-LMH; PR-LMH. ANCHORAGE: Masonry chimneys are anchored at each floor level, at the topmost ceiling level, and at the roof. (Commentary: Sec. A.7.9.2. Tier 2: 13.6.7)

Stairs

C NC (N/A) U LS-LMH; PR-LMH. STAIR ENCLOSURES: Hollow-clay tile or unreinforced masonry walls around stair enclosures are restrained out-of-plane and have height-to-thickness ratios not greater than the following: for Life Safety in Low or Moderate Seismicity, 15-to-1; for Life Safety in High Seismicity and for Position Retention in any seismicity, 12-to-1. (Commentary: Sec. A.7.10.1. Tier 2: Sec. 13.6.2 and 13.6.8)

C NC (N/A) U LS-LMH; PR-LMH. STAIR DETAILS: In moment frame structures, the connection between the stairs and the structure does not rely on shallow anchors in concrete. Alternatively, the stair details are capable of accommodating the drift calculated using the Quick Check procedure of Section 4.5.3.1 without including any lateral stiffness contribution from the stairs. (Commentary: Sec. A.7.10.2. Tier 2: 13.6.8)

Contents and Furnishings

C NC N/A (U) LS-MH; PR-MH. INDUSTRIAL STORAGE RACKS: Industrial storage racks or pallet racks more than 12 ft high meet the requirements of ANSI/MH 16.1 as modified by ASCE 7 Chapter 15. (Commentary: Sec. A.7.11.1. Tier 2: Sec. 13.8.1)

C NC N/A (U) LS-H; PR-MH. TALL NARROW CONTENTS: Contents more than 6 ft high with a height-to-depth or height-to-width ratio greater than 3-to-1 are anchored to the structure or to each other. (Commentary: Sec. A.7.11.2. Tier 2: Sec. 13.8.2)

C NC N/A (U) LS-H; PR-H. FALL-PRONE CONTENTS: Equipment, stored items, or other contents weighing more than 20 lb whose center of mass is more than 4 ft above the adjacent floor level are braced or otherwise restrained. (Commentary: Sec. A.7.11.3. Tier 2: Sec. 13.8.2)

C NC (N/A) U LS-not required; PR-MH. ACCESS FLOORS: Access floors more than 9 in. high are braced. (Commentary: Sec. A.7.11.4. Tier 2: Sec. 13.8.3)

C NC (N/A) U LS-not required; PR-MH. EQUIPMENT ON ACCESS FLOORS: Equipment and other contents supported by access floor systems are anchored or braced to the structure independent of the access floor. (Commentary: Sec. A.7.11.5. Tier 2: Sec. 13.7.7 and 13.8.3)

C NC (N/A) U LS-not required; PR-H. SUSPENDED CONTENTS: Items suspended without lateral bracing are free to swing from or move with the structure from which they are suspended without damaging themselves or adjoining components. (Commentary. A.7.11.6. Tier 2: Sec. 13.8.2)

Mechanical and Electrical Equipment

C NC N/A (U) LS-H; PR-H. FALL-PRONE EQUIPMENT: Equipment weighing more than 20 lb whose center of mass is more than 4 ft above the adjacent floor level, and which is not in-line equipment, is braced. (Commentary: A.7.12.4. Tier 2: 13.7.1 and 13.7.7)

C NC N/A (U) LS-H; PR-H. IN-LINE EQUIPMENT: Equipment installed in-line with a duct or piping system, with an operating weight more than 75 lb, is supported and laterally braced independent of the duct or piping system. (Commentary: Sec. A.7.12.5. Tier 2: Sec. 13.7.1)

C NC N/A (U) LS-H; PR-MH. TALL NARROW EQUIPMENT: Equipment more than 6 ft high with a height-to-depth or height-to-width ratio greater than 3-to-1 is anchored to the floor slab or adjacent structural walls. (Commentary: Sec. A.7.12.6. Tier 2: Sec. 13.7.1 and 13.7.7)

C NC (N/A) U LS-not required; PR-MH. MECHANICAL DOORS: Mechanically operated doors are detailed to operate at a story drift ratio of 0.01. (Commentary: Sec. A.7.12.7. Tier 2: Sec. 13.6.9)

C NC (N/A) U LS-not required; PR-H. SUSPENDED EQUIPMENT: Equipment suspended without lateral bracing is free to swing from or move with the structure from which it is suspended without damaging itself or adjoining components. (Commentary: Sec. A.7.12.8. Tier 2: Sec. 13.7.1 and 13.7.7)

C NC (N/A) U LS-not required; PR-H. VIBRATION ISOLATORS: Equipment mounted on vibration isolators is equipped with horizontal restraints or snubbers and with vertical restraints to resist overturning. (Commentary: Sec. A.7.12.9. Tier 2: Sec. 13.7.1)

C NC (N/A) U LS-not required; PR-H. HEAVY EQUIPMENT: Floor-supported or platform-supported equipment weighing more than 400 lb is anchored to the structure. (Commentary: Sec. A.7.12.10. Tier 2: 13.7.1 and 13.7.7)

C NC (N/A) U LS-not required; PR-H. ELECTRICAL EQUIPMENT: Electrical equipment is laterally braced to the structure. (Commentary: Sec. A.7.12.11. Tier 2: 13.7.7)

C NC (N/A) U LS-not required; PR-H. CONDUIT COUPLINGS: Conduit greater than 2.5 in. trade size that is attached to panels, cabinets, or other equipment and is subject to relative seismic displacement has flexible couplings or connections. (Commentary: Sec. A.7.12.12. Tier 2: 13.7.8)

Piping

C NC (N/A) U LS-not required; PR-H. FLEXIBLE COUPLINGS: Fluid and gas piping has flexible couplings. (Commentary: Sec. A.7.13.2. Tier 2: Sec. 13.7.3 and 13.7.5)

C NC (N/A) U LS-not required; PR-H. FLUID AND GAS PIPING: Fluid and gas piping is anchored and braced to the structure to limit spills or leaks. (Commentary: Sec. A.7.13.4. Tier 2: Sec. 13.7.3 and 13.7.5)

C NC (N/A) U LS-not required; PR-H. C-CLAMPS: One-sided C-clamps that support piping larger than 2.5 in. in diameter are restrained. (Commentary: Sec. A.7.13.5. Tier 2: Sec. 13.7.3 and 13.7.5)

C NC (N/A) U LS-not required; PR-H. PIPING CROSSING SEISMIC JOINTS: Piping that crosses seismic joints or isolation planes or is connected to independent structures has couplings or other details to accommodate the relative seismic displacements. (Commentary: Sec. A7.13.6. Tier 2: Sec.13.7.3 and Sec. 13.7.5)

Ducts

C NC (N/A) U LS-not required; PR-H. DUCT BRACING: Rectangular ductwork larger than 6 ft^2 in cross-sectional area and round ducts larger than 28 in. in diameter are braced. The maximum spacing of transverse bracing does not exceed 30 ft. The maximum spacing of longitudinal bracing does not exceed 60 ft. (Commentary: Sec. A.7.14.2. Tier 2: Sec. 13.7.6)

C NC (N/A) U LS-not required; PR-H. DUCT SUPPORT: Ducts are not supported by piping or electrical conduit. (Commentary: Sec. A.7.14.3. Tier 2: Sec. 13.7.6)

C NC (N/A) U LS-not required; PR-H. DUCTS CROSSING SEISMIC JOINTS: Ducts that cross seismic joints or isolation planes or are connected to independent structures have couplings or other details to accommodate the relative seismic displacements. (Commentary: Sec. A.7.14.5. Tier 2: Sec. 13.7.6)

Elevators

C NC (N/A) U LS-H; PR-H. RETAINER GUARDS: Sheaves and drums have cable retainer guards. (Commentary: Sec. A.7.16.1. Tier 2: 13.8.6)

C NC (N/A) U LS-H; PR-H. RETAINER PLATE: A retainer plate is present at the top and bottom of both car and counterweight. (Commentary: Sec. A.7.16.2. Tier 2: 13.8.6)

C NC (N/A) U LS-not required; PR-H. ELEVATOR EQUIPMENT: Equipment, piping, and other components that are part of the elevator system are anchored. (Commentary: Sec. A.7.16.3. Tier 2: 13.8.6)

C NC (N/A) U LS-not required; PR-H. SEISMIC SWITCH: Elevators capable of operating at speeds of 150 ft/min or faster are equipped with seismic switches that meet the requirements of ASME A17.1 or have trigger levels set to 20% of the acceleration of gravity at the base of the structure and 50% of the acceleration of gravity in other locations. (Commentary: Sec. A.7.16.4. Tier 2: 13.8.6)

C NC (N/A) U LS-not required; PR-H. SHAFT WALLS: Elevator shaft walls are anchored and reinforced to prevent toppling into the shaft during strong shaking. (Commentary: Sec. A.7.16.5. Tier 2: 13.8.6)

C NC (N/A) U LS-not required; PR-H. COUNTERWEIGHT RAILS: All counterweight rails and divider beams are sized in accordance with ASME A17.1. (Commentary: Sec. A.7.16.6. Tier 2: 13.8.6)

C NC (N/A) U LS-not required; PR-H. BRACKETS: The brackets that tie the car rails and the counterweight rail to the structure are sized in accordance with ASME A17.1. (Commentary: Sec. A.7.16.7. Tier 2: 13.8.6)

C NC (N/A) U LS-not required; PR-H. SPREADER BRACKET: Spreader brackets are not used to resist seismic forces. (Commentary: Sec. A.7.16.8. Tier 2: 13.8.6)

C NC (N/A) U LS-not required; PR-H. GO-SLOW ELEVATORS: The building has a go-slow elevator system. (Commentary: Sec. A.7.16.9. Tier 2: 13.8.6)

APPENDIX C
SUMMARY DATA SHEET

BUILDING DATA

Building Name: Roosevelt High School - Industrial Arts Building (Bldg 6) Date: 6/2015
Building Address: 456 South Mathews Street, Los Angeles, CA 90033
Latitude: 34.0401 °N Longitude: 118.2106 °W By: JC
Year Built: 1968 Year(s) Remodeled: N.A Original Design Code:
Area (sf): 35,000 Length (ft): 168' Width (ft): 100'
No. of Stories: 2 Story Height: 1st-14.5', 2nd-12' Total Height: 26.5'

USE ☐ Industrial ☐ Office ☐ Warehouse ☐ Hospital ☐ Residential ☑ Educational ☐ Other:

CONSTRUCTION DATA

Gravity Load Structural System: Reinf. masonry bearing walls, concrete pilasters, sawn lumber joists/structural steel framing
Exterior Transverse Walls: Reinf. masonry bearing walls Openings? Yes
Exterior Longitudinal Walls: Reinf. masonry bearing walls Openings? Yes
Roof Materials/Framing: Composite roofing over rigid insulation over 1/2" ply or 2.5" Tectum deck/ WF steel BM or Tapered Girder
Intermediate Floors/Framing: Composite roofing over rigid insulation over 1/2" ply or 2.5" Tectum deck/ WF steel BM or Tapered Girder
Ground Floor: 5" concrete slab w/ #3 @18" O.C. E.W.
Columns: Reinf. concrete pilaster, steel columns Foundation: Spread & continuous
General Condition of Structure: Good
Levels Below Grade? No
Special Features and Comments:

LATERAL-FORCE-RESISTING SYSTEM

	Longitudinal	Transverse
System:	RM1 &RM2	RM1 &RM2
Vertical Elements:		
Diaphragms:	Ply sheathing & Tectum Deck	Ply sheathing & Tectum Deck
Connections:	Metal straps, rebar dowels, embedded anchors	Metal straps, rebar dowels, embedded anchors

EVALUATION DATA

BSE-1N Spectral Response Accelerations: S_{DS} = 1.595g S_{D1} = 0.834g
Soil Factors: Class = D- Stiff Soil F_a = 1.0 F_v = 1.5
BSE-1E Spectral Response Accelerations: S_{XS} = 0.973g S_{X1} = 0.536g
Level of Seismicity: SDC=D- High Performance Level: Life Safety- Enhanced (Table 2-1 in ASCE 41-13)
Building Period: T = 0.232s
Spectral Acceleration: S_a = 0.973g
Modification Factor: $C_mC_1C_2$ = 1.0 Building Weight: W = 2540 kip
Pseudo Lateral Force: V= 2044 kip
$C_mC_1C_2S_aW$= 2044 kip

BUILDING CLASSIFICATION:

REQUIRED TIER 1 CHECKLISTS	Yes	No
Basic Configuration Checklist	☑	☐
Building Type RM1 &RM2 Structural Checklist	☑	☐
Nonstructural Component Checklist	☑	☐

FURTHER EVALUATION REQUIREMENT: ASCE 41-13 Tier 2 Evaluation Is Required

Project: Roosevelt High School Location: Industrial Arts Building (Bldg. 6)

Completed by: JC Date: 6/2015

16.1.2LS LIFE SAFETY BASIC CONFIGURATION CHECKLIST

Low Seismicity

Building System

General

(C) NC N/A U LOAD PATH: The structure shall contain a complete, well defined load path, including structural elements and connections, that serves to transfer the inertial forces associated with the mass of all elements of the building to the foundation. (Commentary: Sec. A.2.1.1. Tier 2: Sec. 5.4.1.1)

(C) NC N/A U ADJACENT BUILDINGS: The clear distance between the building being evaluated and any adjacent building is greater than 4% of the height of the shorter building. This statement shall not apply for the following building types: W1, W1a, and W2. (Commentary: Sec. A.2.1.2. Tier 2: Sec. 5.4.1.2)

C NC (N/A) U MEZZANINES: Interior mezzanine levels are braced independently from the main structure or are anchored to the seismic-force-resisting elements of the main structure. (Commentary: Sec. A.2.1.3. Tier 2: Sec. 5.4.1.3)

Building Configuration

(C) NC N/A U WEAK STORY: The sum of the shear strengths of the seismic-force-resisting system in any story in each direction is not less than 80% of the strength in the adjacent story above. (Commentary: Sec. A2.2.2. Tier 2: Sec. 5.4.2.1)

(C) NC N/A U SOFT STORY: The stiffness of the seismic-force-resisting system in any story is not less than 70% of the seismic-force-resisting system stiffness in an adjacent story above or less than 80% of the average seismic-force-resisting system stiffness of the three stories above. (Commentary: Sec. A.2.2.3. Tier 2: Sec. 5.4.2.2)

(C) NC N/A U VERTICAL IRREGULARITIES: All vertical elements in the seismic-force-resisting system are continuous to the foundation. (Commentary: Sec. A.2.2.4. Tier 2: Sec. 5.4.2.3)

C (NC) N/A U GEOMETRY: There are no changes in the net horizontal dimension of the seismic-force-resisting system of more than 30% in a story relative to adjacent stories, excluding one-story penthouses and mezzanines. (Commentary: Sec. A.2.2.5. Tier 2: Sec. 5.4.2.4)

(C) NC N/A U MASS: There is no change in effective mass more than 50% from one story to the next. Light roofs, penthouses, and mezzanines need not be considered. (Commentary: Sec. A.2.2.6. Tier 2: Sec. 5.4.2.5)

(C) NC N/A U TORSION: The estimated distance between the story center of mass and the story center of rigidity is less than 20% of the building width in either plan dimension. (Commentary: Sec. A.2.2.7. Tier 2: Sec. 5.4.2.6)

Moderate Seismicity: Complete the Following Items in Addition to the Items for Low Seismicity.

Geologic Site Hazards

(C) NC N/A U LIQUEFACTION: Liquefaction-susceptible, saturated, loose granular soils that could jeopardize the building's seismic performance shall not exist in the foundation soils at depths within 50 ft under the building. (Commentary: Sec. A.6.1.1. Tier 2: 5.4.3.1)

(C) NC N/A U SLOPE FAILURE: The building site is sufficiently remote from potential earthquake-induced slope failures or rockfalls to be unaffected by such failures or is capable of accommodating any predicted movements without failure. (Commentary: Sec. A.6.1.2. Tier 2: 5.4.3.1)

(C) NC N/A U SURFACE FAULT RUPTURE: Surface fault rupture and surface displacement at the building site are not anticipated. (Commentary: Sec. A.6.1.3. Tier 2: 5.4.3.1)

High Seismicity: Complete the Following Items in Addition to the Items for Low and Moderate Seismicity.

Foundation Configuration

C (NC) N/A U OVERTURNING: The ratio of the least horizontal dimension of the seismic-force-resisting system at the foundation level to the building height (base/height) is greater than $0.6S_a$. (Commentary: Sec. A.6.2.1. Tier 2: Sec. 5.4.3.3)

(C) NC N/A U TIES BETWEEN FOUNDATION ELEMENTS: The foundation has ties adequate to resist seismic forces where footings, piles, and piers are not restrained by beams, slabs, or soils classified as Site Class A, B, or C. (Commentary: Sec. A.6.2.2. Tier 2: Sec. 5.4.3.4)

Project: Roosevelt High School Location: Industrial Arts Building (Bldg 6)

Completed by: JC Date: 6/2015

16.15LS LIFE SAFETY STRUCTURAL CHECKLIST FOR BUILDING TYPES RM1: REINFORCED MASONRY BEARING WALLS WITH FLEXIBLE DIAPHRAGMS AND RM2: REINFORCED MASONRY BEARING WALLS WITH STIFF DIAPHRAGMS

Low and Moderate Seismicity

Seismic-Force-Resisting System

(C) NC N/A U REDUNDANCY: The number of lines of shear walls in each principal direction is greater than or equal to 2. (Commentary: Sec. A.3.2.1.1. Tier 2: Sec. 5.5.1.1)

C (NC) N/A U SHEAR STRESS CHECK: The shear stress in the reinforced masonry shear walls, calculated using the Quick Check procedure of Section 4.5.3.3, is less than 70 lb/in.^{2}. (Commentary: Sec. A.3.2.4.1. Tier 2: Sec. 5.5.3.1.1)

(C) NC N/A U REINFORCING STEEL: The total vertical and horizontal reinforcing steel ratio in reinforced masonry walls is greater than 0.002 of the wall with the minimum of 0.0007 in either of the two directions; the spacing of reinforcing steel is less than 48 in., and all vertical bars extend to the top of the walls. (Commentary: Sec. A.3.2.4.2. Tier 2: Sec. 5.5.3.1.3)

Stiff Diaphragms

C NC (N/A) U TOPPING SLAB: Precast concrete diaphragm elements are interconnected by a continuous reinforced concrete topping slab. (Commentary: Sec. A.4.5.1. Tier 2: Sec. 5.6.4)

Connections

C (NC) N/A U WALL ANCHORAGE: Exterior concrete or masonry walls that are dependent on the diaphragm for lateral support are anchored for out-of-plane forces at each diaphragm level with steel anchors, reinforcing dowels, or straps that are developed into the diaphragm. Connections shall have adequate strength to resist the connection force calculated in the Quick Check procedure of Section 4.5.3.7. (Commentary: Sec. A.5.1.1. Tier 2: Sec. 5.7.1.1)

C (NC) N/A U WOOD LEDGERS: The connection between the wall panels and the diaphragm does not induce cross-grain bending or tension in the wood ledgers. (Commentary: Sec. A.5.1.2. Tier 2: Sec. 5.7.1.3)

(C) NC N/A U TRANSFER TO SHEAR WALLS: Diaphragms are connected for transfer of seismic forces to the shear walls. (Commentary: Sec. A.5.2.1. Tier 2: Sec. 5.7.2)

C NC (N/A) U TOPPING SLAB TO WALLS OR FRAMES: Reinforced concrete topping slabs that interconnect the precast concrete diaphragm elements are doweled for transfer of forces into the shear wall or frame elements. (Commentary: Sec. A.5.2.3. Tier 2: Sec. 5.7.2)

(C) NC N/A U FOUNDATION DOWELS: Wall reinforcement is doweled into the foundation. (Commentary: Sec. A.5.3.5. Tier 2: Sec. 5.7.3.4)

(C) NC N/A U GIRDER–COLUMN CONNECTION: There is a positive connection using plates, connection hardware, or straps between the girder and the column support. (Commentary: Sec. A.5.4.1. Tier 2: Sec. 5.7.4.1)

High Seismicity: Complete the Following Items in Addition to the Items for Low and Moderate Seismicity.

Stiff Diaphragms

C (NC) N/A U OPENINGS AT SHEAR WALLS: Diaphragm openings immediately adjacent to the shear walls are less than 25% of the wall length. (Commentary: Sec. A.4.1.4. Tier 2: Sec. 5.6.1.3)

C (NC) N/A U OPENINGS AT EXTERIOR MASONRY SHEAR WALLS: Diaphragm openings immediately adjacent to exterior masonry shear walls are not greater than 8 ft long. (Commentary: Sec. A.4.1.6. Tier 2: Sec. 5.6.1.3)

Flexible Diaphragms

(C) NC N/A U CROSS TIES: There are continuous cross ties between diaphragm chords. (Commentary: Sec. A.4.1.2. Tier 2: Sec. 5.6.1.2)

(C) NC N/A U OPENINGS AT SHEAR WALLS: Diaphragm openings immediately adjacent to the shear walls are less than 25% of the wall length. (Commentary: Sec. A.4.1.4. Tier 2: Sec. 5.6.1.3)

(C) NC N/A U OPENINGS AT EXTERIOR MASONRY SHEAR WALLS: Diaphragm openings immediately adjacent to exterior masonry shear walls are not greater than 8 ft long. (Commentary: Sec. A.4.1.6. Tier 2: Sec. 5.6.1.3)

C NC (N/A) U STRAIGHT SHEATHING: All straight sheathed diaphragms have aspect ratios less than 2-to-1 in the direction being considered. (Commentary: Sec. A.4.2.1. Tier 2: Sec. 5.6.2)

(C) NC N/A U SPANS: All wood diaphragms with spans greater than 24 ft consist of wood structural panels or diagonal sheathing. (Commentary: Sec. A.4.2.2. Tier 2: Sec. 5.6.2)

C NC (N/A) U DIAGONALLY SHEATHED AND UNBLOCKED DIAPHRAGMS: All diagonally sheathed or unblocked wood structural panel diaphragms have horizontal spans less than 40 ft and aspect ratios less than or equal to 4-to-1. (Commentary: Sec. A.4.2.3. Tier 2: Sec. 5.6.2)

C (NC) N/A U OTHER DIAPHRAGMS: The diaphragm shall not consist of a system other than wood, metal deck, concrete, or horizontal bracing. (Commentary: Sec. A.4.7.1. Tier 2: Sec. 5.6.5)

Connections

(C) NC N/A U STIFFNESS OF WALL ANCHORS: Anchors of concrete or masonry walls to wood structural elements are installed taut and are stiff enough to limit the relative movement between the wall and the diaphragm to no greater than 1/8 in. before engagement of the anchors. (Commentary: Sec. A.5.1.4. Tier 2: Sec. 5.7.1.2)

Project: Roosevelt High School Location: Industrial Arts Building (Bldg 6)

Completed by: JC Date: 6/2015

16.17 NONSTRUCTURAL CHECKLIST

Life Safety Systems

C (NC) N/A U LS-LMH; PR-LMH. FIRE SUPPRESSION PIPING: Fire suppression piping is anchored and braced in accordance with NFPA-13. (Commentary: Sec. A.7.13.1. Tier 2: Sec. 13.7.4)

C (NC) N/A U LS-LMH; PR-LMH. FLEXIBLE COUPLINGS: Fire suppression piping has flexible couplings in accordance with NFPA-13. (Commentary: Sec. A.7.13.2. Tier 2: Sec. 13.7.4)

C NC (N/A) U LS-LMH; PR-LMH. EMERGENCY POWER: Equipment used to power or control life safety systems is anchored or braced. (Commentary: Sec. A.7.12.1. Tier 2: Sec. 13.7.7)

C NC (N/A) U LS-LMH; PR-LMH. STAIR AND SMOKE DUCTS: Stair pressurization and smoke control ducts are braced and have flexible connections at seismic joints. (Commentary: Sec. A.7.14.1. Tier 2: Sec. 13.7.6)

C (NC) N/A U LS-MH; PR-MH. SPRINKLER CEILING CLEARANCE: Penetrations through panelized ceilings for fire suppression devices provide clearances in accordance with NFPA-13. (Commentary: Sec. A.7.13.3. Tier 2: Sec. 13.7.4)

C NC (N/A) U LS-not required; PR-LMH. EMERGENCY LIGHTING: Emergency and egress lighting equipment is anchored or braced. (Commentary: Sec. A.7.3.1. Tier 2: Sec. 13.7.9)

Hazardous Materials

C NC (N/A) U LS-LMH; PR-LMH. HAZARDOUS MATERIAL EQUIPMENT: Equipment mounted on vibration isolators and containing hazardous material is equipped with restraints or snubbers. (Commentary: Sec. A.7.12.2. Tier 2: 13.7.1)

C NC N/A (U) LS-LMH; PR-LMH. HAZARDOUS MATERIAL STORAGE: Breakable containers that hold hazardous material, including gas cylinders, are restrained by latched doors, shelf lips, wires, or other methods. (Commentary: Sec. A.7.15.1. Tier 2: Sec. 13.8.4)

C NC N/A (U) LS-MH; PR-MH. HAZARDOUS MATERIAL DISTRIBUTION: Piping or ductwork conveying hazardous materials is braced or otherwise protected from damage that would allow hazardous material release. (Commentary: Sec. A.7.13.4. Tier 2: Sec. 13.7.3 and 13.7.5)

(C) NC N/A U LS-MH; PR-MH. SHUT-OFF VALVES: Piping containing hazardous material, including natural gas, has shut-off valves or other devices to limit spills or leaks. (Commentary: Sec. A.7.13.3. Tier 2: Sec. 13.7.3 and 13.7.5)

C NC N/A (U) LS-LMH; PR-LMH. FLEXIBLE COUPLINGS: Hazardous material ductwork and piping, including natural gas piping, has flexible couplings. (Commentary: Sec. A.7.15.4, Tier 2: Sec.13.7.3 and 13.7.5)

C NC N/A (U) LS-MH; PR-MH. PIPING OR DUCTS CROSSING SEISMIC JOINTS: Piping or ductwork carrying hazardous material that either crosses seismic joints or isolation planes or is connected to independent structures has couplings or other details to accommodate the relative seismic displacements. (Commentary: Sec. A.7.13.6. Tier 2: Sec.13.7.3, 13.7.5, and 13.7.6)

Partitions

C NC (N/A) U LS-LMH; PR-LMH. UNREINFORCED MASONRY: Unreinforced masonry or hollow-clay tile partitions are braced at a spacing of at most 10 ft in Low or Moderate Seismicity, or at most 6 ft in High Seismicity. (Commentary: Sec. A.7.1.1. Tier 2: Sec. 13.6.2)

C NC (N/A) U LS-LMH; PR-LMH. HEAVY PARTITIONS SUPPORTED BY CEILINGS: The tops of masonry or hollow-clay tile partitions are not laterally supported by an integrated ceiling system. (Commentary: Sec. A.7.2.1. Tier 2: Sec. 13.6.2)

C NC (N/A) U LS-MH; PR-MH. DRIFT: Rigid cementitious partitions are detailed to accommodate the following drift ratios: in steel moment frame, concrete moment frame, and wood frame buildings, 0.02; in other buildings, 0.005. (Commentary A.7.1.2 Tier 2: Sec. 13.6.2)

C NC (N/A) U LS-not required; PR-MH. LIGHT PARTITIONS SUPPORTED BY CEILINGS: The tops of gypsum board partitions are not laterally supported by an integrated ceiling system. (Commentary: Sec. A.7.2.1. Tier 2: Sec. 13.6.2)

C NC (N/A) U LS-not required; PR-MH. STRUCTURAL SEPARATIONS: Partitions that cross structural separations have seismic or control joints. (Commentary: Sec. A.7.1.3. Tier 2. Sec. 13.6.2)

C NC (N/A) U LS-not required; PR-MH. TOPS: The tops of ceiling-high framed or panelized partitions have lateral bracing to the structure at a spacing equal to or less than 6 ft. (Commentary: Sec. A.7.1.4. Tier 2. Sec. 13.6.2)

Ceilings

C (NC) N/A U LS-MH; PR-LMH. SUSPENDED LATH AND PLASTER: Suspended lath and plaster ceilings have attachments that resist seismic forces for every 12 ft^2 of area. (Commentary: Sec. A.7.2.3. Tier 2: Sec. 13.6.4)

C (NC) N/A U LS-MH; PR-LMH. SUSPENDED GYPSUM BOARD: Suspended gypsum board ceilings have attachments that resist seismic forces for every 12 ft^2 of area. (Commentary: Sec. A.7.2.3. Tier 2: Sec. 13.6.4)

C NC (N/A) U LS-not required; PR-MH. INTEGRATED CEILINGS: Integrated suspended ceilings with continuous areas greater than 144 ft^2, and ceilings of smaller areas that are not surrounded by restraining partitions, are laterally restrained at a spacing no greater than 12 ft with members attached to the structure above. Each restraint location has a minimum of four diagonal wires and compression struts, or diagonal members capable of resisting compression. (Commentary: Sec. A.7.2.2. Tier 2: Sec. 13.6.4)

C NC (N/A) U LS-not required; PR-MH. EDGE CLEARANCE: The free edges of integrated suspended ceilings with continuous areas greater than 144 ft^2 have clearances from the enclosing wall or partition of at least the following: in Moderate Seismicity, 1/2 in.; in High Seismicity, 3/4 in. (Commentary: Sec. A.7.2.4. Tier 2: Sec. 13.6.4)

C NC (N/A) U LS-not required; PR-MH. CONTINUITY ACROSS STRUCTURE JOINTS: The ceiling system does not cross any seismic joint and is not attached to multiple independent structures. (Commentary: Sec. A.7.2.5. Tier 2: Sec. 13.6.4)

C NC (N/A) U LS-not required; PR-H. EDGE SUPPORT: The free edges of integrated suspended ceilings with continuous areas greater than 144 ft^2 are supported by closure angles or channels not less than 2 in. wide. (Commentary: Sec. A.7.2.6. Tier 2: Sec. 13.6.4)

C NC (N/A) U LS-not required; PR-H. SEISMIC JOINTS: Acoustical tile or lay-in panel ceilings have seismic separation joints such that each continuous portion of the ceiling is no more than 2500 ft^2 and has a ratio of long-to-short dimension no more than 4-to-1. (Commentary: Sec. A.7.2.7. Tier 2: 13.6.4)

Light Fixtures

C (NC) N/A U LS-MH; PR-MH. INDEPENDENT SUPPORT: Light fixtures that weigh more per square foot than the ceiling they penetrate are supported independent of the grid ceiling suspension system by a minimum of two wires at diagonally opposite corners of each fixture. (Commentary: Sec. A.7.3.2. Tier 2: Sec. 13.6.4 and 13.7.9)

C NC (N/A) U LS-not required; PR-H. PENDANT SUPPORTS: Light fixtures on pendant supports are attached at a spacing equal to or less than 6 ft and, if rigidly supported, are free to move with the structure to which they are attached without damaging adjoining components. (Commentary: A.7.3.3. Tier 2: Sec. 13.7.9)

C NC (N/A) U LS-not required; PR-H. LENS COVERS: Lens covers on light fixtures are attached with safety devices. (Commentary: Sec. A.7.3.4. Tier 2: Sec. 13.7.9)

Cladding and Glazing

C NC (N/A) U LS-MH; PR-MH. CLADDING ANCHORS: Cladding components weighing more than 10 lb/ft^2 are mechanically anchored to the structure at a spacing equal to or less than the following: for Life Safety in Moderate Seismicity, 6 ft; for Life Safety in High Seismicity and for Position Retention in any seismicity, 4 ft. (Commentary: Sec. A.7.4.1. Tier 2: Sec. 13.6.1)

C NC (N/A) U LS-MH; PR-MH. CLADDING ISOLATION: For steel or concrete moment frame buildings, panel connections are detailed to accommodate a story drift ratio of at least the following: for Life Safety in Moderate Seismicity, 0.01; for Life Safety in High Seismicity and for Position Retention in any seismicity, 0.02. (Commentary: Sec. A.7.4.3. Tier 2: Section 13.6.1)

C NC (N/A) U LS-MH; PR-MH. MULTI-STORY PANELS: For multi-story panels attached at more than one floor level, panel connections are detailed to accommodate a story drift ratio of at least the following: for Life Safety in Moderate Seismicity, 0.01; for Life Safety in High Seismicity and for Position Retention in any seismicty, 0.02. (Commentary: Sec. A.7.4.4. Tier 2: Sec. 13.6.1)

C NC (N/A) U LS-MH; PR-MH. PANEL CONNECTIONS: Cladding panels are anchored out-of-plane with a minimum number of connections for each wall panel, as follows: for Life Safety in Moderate Seismicity, 2 connections; for Life Safety in High Seismicity and for Position Retention in any seismicity, 4 connections. (Commentary: Sec. A.7.4.5. Tier 2: Sec. 13.6.1.4)

C NC (N/A) U LS-MH; PR-MH. BEARING CONNECTIONS: Where bearing connections are used, there is a minimum of two bearing connections for each cladding panel. (Commentary: Sec. A.7.4.6. Tier 2: Sec. 13.6.1.4)

C NC (N/A) U LS-MH; PR-MH. INSERTS: Where concrete cladding components use inserts, the inserts have positive anchorage or are anchored to reinforcing steel. (Commentary: Sec. A.7.4.7. Tier 2: Sec. 13.6.1.4)

C NC (N/A) U LS-MH; PR-MH. OVERHEAD GLAZING: Glazing panes of any size in curtain walls and individual interior or exterior panes over 16 ft^2 in area are laminated annealed or laminated heat-strengthened glass and are detailed to remain in the frame when cracked. (Commentary: Sec. A.7.4.8: Tier 2: Sec. 13.6.1.5)

Masonry Veneer

C NC (N/A) U LS-LMH; PR-LMH. TIES: Masonry veneer is connected to the backup with corrosion-resistant ties. There is a minimum of one tie for every 2-2/3 ft^2, and the ties have spacing no greater than the following: for Life Safety in Low or Moderate Seismicity, 36 in.; for Life Safety in High Seismicity and for Position Retention in any seismicity, 24 in. (Commentary: Sec. A.7.5.1. Tier 2: Sec. 13.6.1.2)

C NC (N/A) U LS-LMH; PR-LMH. SHELF ANGLES: Masonry veneer is supported by shelf angles or other elements at each floor above the ground floor. (Commentary: Sec. A.7.5.2. Tier 2: Sec. 13.6.1.2)

C NC (N/A) U LS-LMH; PR-LMH. WEAKENED PLANES: Masonry veneer is anchored to the backup adjacent to weakened planes, such as at the locations of flashing. (Commentary: Sec. A.7.5.3. Tier 2: Sec. 13.6.1.2)

C NC (N/A) U LS-LMH; PR-LMH. UNREINFORCED MASONRY BACKUP: There is no unreinforced masonry backup. (Commentary: Sec. A.7.7.2. Tier 2: Section 13.6.1.1 and 13.6.1.2)

C NC (N/A) U LS-MH; PR-MH. STUD TRACKS: For veneer with metal stud backup, stud tracks are fastened to the structure at a spacing equal to or less than 24 in. on center. (Commentary: Sec. A.7.6.1. Tier 2: Section 13.6.1.1 and 13.6.1.2)

C NC (N/A) U LS-MH; PR-MH. ANCHORAGE: For veneer with concrete block or masonry backup, the backup is positively anchored to the structure at a horizontal spacing equal to or less than 4 ft along the floors and roof. (Commentary: Sec. A.7.7.1. Tier 2: Section 13.6.1.1 and 13.6.1.2)

C NC (N/A) U LS-not required; PR-MH. WEEP HOLES: In veneer anchored to stud walls, the veneer has functioning weep holes and base flashing. (Commentary: Sec. A.7.5.6. Tier 2: Section 13.6.1.2)

C NC (N/A) U LS-not required; PR-MH. OPENINGS: For veneer with metal stud backup, steel studs frame window and door openings. (Commentary: Sec. A.7.6.2. Tier 2: Sec. 13.6.1.1 and 13.6.1.2)

Parapets, Cornices, Ornamentation, and Appendages

C NC (N/A) U LS-LMH; PR-LMH. URM PARAPETS OR CORNICES: Laterally unsupported unreinforced masonry parapets or cornices have height-to-thickness ratios no greater than the following: for Life Safety in Low or Moderate Seismicity, 2.5; for Life Safety in High Seismicity and for Position Retention in any seismicity, 1.5. (Commentary: Sec. A.7.8.1. Tier 2: Sec. 13.6.5)

(C) NC N/A U LS-LMH; PR-LMH. CANOPIES: Canopies at building exits are anchored to the structure at a spacing no greater than the following: for Life Safety in Low or Moderate Seismicity, 10 ft; for Life Safety in High Seismicity and for Position Retention in any seismicity, 6 ft. (Commentary: Sec. A.7.8.2. Tier 2: Sec. 13.6.6)

(C) NC N/A U LS-MH; PR-LMH. CONCRETE PARAPETS: Concrete parapets with height-to-thickness ratios greater than 2.5 have vertical reinforcement. (Commentary: Sec. A.7.8.3. Tier 2: Sec. 13.6.5)

(C) NC N/A U LS-MH; PR-LMH. APPENDAGES: Cornices, parapets, signs, and other ornamentation or appendages that extend above the highest point of anchorage to the structure or cantilever from components are reinforced and anchored to the structural system at a spacing equal to or less than 6 ft. This checklist item does not apply to parapets or cornices covered by other checklist items. (Commentary: Sec. A.7.8.4. Tier 2: Sec. 13.6.6)

Masonry Chimneys

C NC (N/A) U LS-LMH; PR-LMH. URM CHIMNEYS: Unreinforced masonry chimneys extend above the roof surface no more than the following: for Life Safety in Low or Moderate Seismicity, 3 times the least dimension of the chimney; for Life Safety in High Seismicity and for Position Retention in any seismicity, 2 times the least dimension of the chimney. (Commentary: Sec. A.7.9.1. Tier 2: 13.6.7)

C NC (N/A) U LS-LMH; PR-LMH. ANCHORAGE: Masonry chimneys are anchored at each floor level, at the topmost ceiling level, and at the roof. (Commentary: Sec. A.7.9.2. Tier 2: 13.6.7)

Stairs

C NC (N/A) U LS-LMH; PR-LMH. STAIR ENCLOSURES: Hollow-clay tile or unreinforced masonry walls around stair enclosures are restrained out-of-plane and have height-to-thickness ratios not greater than the following: for Life Safety in Low or Moderate Seismicity, 15-to-1; for Life Safety in High Seismicity and for Position Retention in any seismicity, 12-to-1. (Commentary: Sec. A.7.10.1. Tier 2: Sec. 13.6.2 and 13.6.8)

C NC (N/A) U LS-LMH; PR-LMH. STAIR DETAILS: In moment frame structures, the connection between the stairs and the structure does not rely on shallow anchors in concrete. Alternatively, the stair details are capable of accommodating the drift calculated using the Quick Check procedure of Section 4.5.3.1 without including any lateral stiffness contribution from the stairs. (Commentary: Sec. A.7.10.2. Tier 2: 13.6.8)

Contents and Furnishings

C NC N/A (U) LS-MH; PR-MH. INDUSTRIAL STORAGE RACKS: Industrial storage racks or pallet racks more than 12 ft high meet the requirements of ANSI/MH 16.1 as modified by ASCE 7 Chapter 15. (Commentary: Sec. A.7.11.1. Tier 2: Sec. 13.8.1)

C NC N/A (U) LS-H; PR-MH. TALL NARROW CONTENTS: Contents more than 6 ft high with a height-to-depth or height-to-width ratio greater than 3-to-1 are anchored to the structure or to each other. (Commentary: Sec. A.7.11.2. Tier 2: Sec. 13.8.2)

C (NC) N/A U LS-H; PR-H. FALL-PRONE CONTENTS: Equipment, stored items, or other contents weighing more than 20 lb whose center of mass is more than 4 ft above the adjacent floor level are braced or otherwise restrained. (Commentary: Sec. A.7.11.3. Tier 2: Sec. 13.8.2)

C NC (N/A) U LS-not required; PR-MH. ACCESS FLOORS: Access floors more than 9 in. high are braced. (Commentary: Sec. A.7.11.4. Tier 2: Sec. 13.8.3)

C NC (N/A) U LS-not required; PR-MH. EQUIPMENT ON ACCESS FLOORS: Equipment and other contents supported by access floor systems are anchored or braced to the structure independent of the access floor. (Commentary: Sec. A.7.11.5. Tier 2: Sec. 13.7.7 and 13.8.3)

C NC (N/A) U LS-not required; PR-H. SUSPENDED CONTENTS: Items suspended without lateral bracing are free to swing from or move with the structure from which they are suspended without damaging themselves or adjoining components. (Commentary. A.7.11.6. Tier 2: Sec. 13.8.2)

Mechanical and Electrical Equipment

C (NC) N/A U LS-H; PR-H. FALL-PRONE EQUIPMENT: Equipment weighing more than 20 lb whose center of mass is more than 4 ft above the adjacent floor level, and which is not in-line equipment, is braced. (Commentary: A.7.12.4. Tier 2: 13.7.1 and 13.7.7)

C NC N/A (U) LS-H; PR-H. IN-LINE EQUIPMENT: Equipment installed in-line with a duct or piping system, with an operating weight more than 75 lb, is supported and laterally braced independent of the duct or piping system. (Commentary: Sec. A.7.12.5. Tier 2: Sec. 13.7.1)

C NC N/A (U) LS-H; PR-MH. TALL NARROW EQUIPMENT: Equipment more than 6 ft high with a height-to-depth or height-to-width ratio greater than 3-to-1 is anchored to the floor slab or adjacent structural walls. (Commentary: Sec. A.7.12.6. Tier 2: Sec. 13.7.1 and 13.7.7)

C NC (N/A) U LS-not required; PR-MH. MECHANICAL DOORS: Mechanically operated doors are detailed to operate at a story drift ratio of 0.01. (Commentary: Sec. A.7.12.7. Tier 2: Sec. 13.6.9)

C NC (N/A) U LS-not required; PR-H. SUSPENDED EQUIPMENT: Equipment suspended without lateral bracing is free to swing from or move with the structure from which it is suspended without damaging itself or adjoining components. (Commentary: Sec. A.7.12.8. Tier 2: Sec. 13.7.1 and 13.7.7)

C NC (N/A) U LS-not required; PR-H. VIBRATION ISOLATORS: Equipment mounted on vibration isolators is equipped with horizontal restraints or snubbers and with vertical restraints to resist overturning. (Commentary: Sec. A.7.12.9. Tier 2: Sec. 13.7.1)

C NC (N/A) U LS-not required; PR-H. HEAVY EQUIPMENT: Floor-supported or platform-supported equipment weighing more than 400 lb is anchored to the structure. (Commentary: Sec. A.7.12.10. Tier 2: 13.7.1 and 13.7.7)

C NC (N/A) U LS-not required; PR-H. ELECTRICAL EQUIPMENT: Electrical equipment is laterally braced to the structure. (Commentary: Sec. A.7.12.11. Tier 2: 13.7.7)

C NC (N/A) U LS-not required; PR-H. CONDUIT COUPLINGS: Conduit greater than 2.5 in. trade size that is attached to panels, cabinets, or other equipment and is subject to relative seismic displacement has flexible couplings or connections. (Commentary: Sec. A.7.12.12. Tier 2: 13.7.8)

Piping

C NC (N/A) U LS-not required; PR-H. FLEXIBLE COUPLINGS: Fluid and gas piping has flexible couplings. (Commentary: Sec. A.7.13.2. Tier 2: Sec. 13.7.3 and 13.7.5)

C NC (N/A) U LS-not required; PR-H. FLUID AND GAS PIPING: Fluid and gas piping is anchored and braced to the structure to limit spills or leaks. (Commentary: Sec. A.7.13.4. Tier 2: Sec. 13.7.3 and 13.7.5)

C NC (N/A) U LS-not required; PR-H. C-CLAMPS: One-sided C-clamps that support piping larger than 2.5 in. in diameter are restrained. (Commentary: Sec. A.7.13.5. Tier 2: Sec. 13.7.3 and 13.7.5)

C NC (N/A) U LS-not required; PR-H. PIPING CROSSING SEISMIC JOINTS: Piping that crosses seismic joints or isolation planes or is connected to independent structures has couplings or other details to accommodate the relative seismic displacements. (Commentary: Sec. A7.13.6. Tier 2: Sec.13.7.3 and Sec. 13.7.5)

Ducts

C NC (N/A) U LS-not required; PR-H. DUCT BRACING: Rectangular ductwork larger than 6 ft^2 in cross-sectional area and round ducts larger than 28 in. in diameter are braced. The maximum spacing of transverse bracing does not exceed 30 ft. The maximum spacing of longitudinal bracing does not exceed 60 ft. (Commentary: Sec. A.7.14.2. Tier 2: Sec. 13.7.6)

C NC (N/A) U LS-not required; PR-H. DUCT SUPPORT: Ducts are not supported by piping or electrical conduit. (Commentary: Sec. A.7.14.3. Tier 2: Sec. 13.7.6)

C NC (N/A) U LS-not required; PR-H. DUCTS CROSSING SEISMIC JOINTS: Ducts that cross seismic joints or isolation planes or are connected to independent structures have couplings or other details to accommodate the relative seismic displacements. (Commentary: Sec. A.7.14.5. Tier 2: Sec. 13.7.6)

Elevators

C NC (N/A) U LS-H; PR-H. RETAINER GUARDS: Sheaves and drums have cable retainer guards. (Commentary: Sec. A.7.16.1. Tier 2: 13.8.6)

C NC (N/A) U LS-H; PR-H. RETAINER PLATE: A retainer plate is present at the top and bottom of both car and counterweight. (Commentary: Sec. A.7.16.2. Tier 2: 13.8.6)

C NC (N/A) U LS-not required; PR-H. ELEVATOR EQUIPMENT: Equipment, piping, and other components that are part of the elevator system are anchored. (Commentary: Sec. A.7.16.3. Tier 2: 13.8.6)

C NC (N/A) U LS-not required; PR-H. SEISMIC SWITCH: Elevators capable of operating at speeds of 150 ft/min or faster are equipped with seismic switches that meet the requirements of ASME A17.1 or have trigger levels set to 20% of the acceleration of gravity at the base of the structure and 50% of the acceleration of gravity in other locations. (Commentary: Sec. A.7.16.4. Tier 2: 13.8.6)

C NC (N/A) U LS-not required; PR-H. SHAFT WALLS: Elevator shaft walls are anchored and reinforced to prevent toppling into the shaft during strong shaking. (Commentary: Sec. A.7.16.5. Tier 2: 13.8.6)

C NC (N/A) U LS-not required; PR-H. COUNTERWEIGHT RAILS: All counterweight rails and divider beams are sized in accordance with ASME A17.1. (Commentary: Sec. A.7.16.6. Tier 2: 13.8.6)

C NC (N/A) U LS-not required; PR-H. BRACKETS: The brackets that tie the car rails and the counterweight rail to the structure are sized in accordance with ASME A17.1. (Commentary: Sec. A.7.16.7. Tier 2: 13.8.6)

C NC (N/A) U LS-not required; PR-H. SPREADER BRACKET: Spreader brackets are not used to resist seismic forces. (Commentary: Sec. A.7.16.8. Tier 2: 13.8.6)

C NC (N/A) U LS-not required; PR-H. GO-SLOW ELEVATORS: The building has a go-slow elevator system. (Commentary: Sec. A.7.16.9. Tier 2: 13.8.6)

APPENDIX C
SUMMARY DATA SHEET

BUILDING DATA

Building Name: Roosevelt High School - Gymnasium Building (Bldg. 19) Date: 6/2015
Building Address: 456 South Mathews Street, Los Angeles, CA 90033
Latitude: 34.0401 °N Longitude: 118.2106 °W By: TM
Year Built: 1968 Year(s) Remodeled: N.A Original Design Code:
Area (sf): 37,000 Length (ft): 62.67' (1st), 241.5' (2nd) Width (ft): 120'
No. of Stories: 2 Story Height: 1st-12', 2nd-18.5', 25', 31' Total Height: 43'

USE ☐ Industrial ☐ Office ☐ Warehouse ☐ Hospital ☐ Residential ☑ Educational ☐ Other:

CONSTRUCTION DATA

Gravity Load Structural System: Reinf. concrete/masonry bearing walls, concrete columns, structural steel framing
Exterior Transverse Walls: Reinf. concrete/masonry bearing walls Openings? Yes
Exterior Longitudinal Walls: Reinf. concrete/masonry bearing walls Openings? Yes
Roof Materials/Framing: Composite roofing over rigid insulation over 1/2" ply or 2.5" Tectum deck/ WF steel BM or Tapered Girder
Intermediate Floors/Framing: Composite roofing over rigid insulation over 1/2" ply or 2.5" Tectum deck/ WF steel BM or Tapered Girder
Ground Floor: 5" concrete slab w/ #3 @18" O.C. E.W.
Columns: Reinf. concrete columns, steel pipe columns Foundation: Spread & continuous
General Condition of Structure:
Levels Below Grade? No
Special Features and Comments:

LATERAL-FORCE-RESISTING SYSTEM

	Longitudinal	Transverse
System:	C2 &C2A, RM1 &RM2	C2 &C2A, RM1 &RM2
Vertical Elements:		
Diaphragms:	Ply sheathing & Tectum Deck	Ply sheathing & Tectum Deck
Connections:	Metal straps, rebar dowels	Metal straps, rebar dowels

EVALUATION DATA

BSE-1N Spectral Response Accelerations: S_{DN} = 1.595g S_{D1} = 0.834g
Soil Factors: Class = D- Stiff Soil F_a = 1.0 F_v = 1.5
BSE-1E Spectral Response Accelerations: S_{XS} = 0.973g S_{X1} = 0.536g
Level of Seismicity: SDC=D- High Performance Level: Life Safety- Enhanced (Table 2-1 in ASCE 41-13)
Building Period: T = 0.336s
Spectral Acceleration: S_a = 0.973g
Modification Factor: $C_mC_1C_2$ = 1.0 Building Weight: W = 3162 kip
Pseudo Lateral Force: V= 3077 kip
$C_mC_1C_2S_aW$= 3077 kip

BUILDING CLASSIFICATION:

REQUIRED TIER 1 CHECKLISTS	Yes	No
Basic Configuration Checklist	☑	☐
Building Type C2 &C2A, RM1 &RM2 Structural Checklist	☑	☐
Nonstructural Component Checklist	☑	☐

FURTHER EVALUATION REQUIREMENT: ASCE 41-13 Tier 2 Evaluation Is Required

Project: Roosevelt High School Location: Gymnasium Building (Bldg. 19)

Completed by: TM Date: 6/2015

16.1.2LS LIFE SAFETY BASIC CONFIGURATION CHECKLIST

Low Seismicity

Building System

General

(C) NC N/A U LOAD PATH: The structure shall contain a complete, well defined load path, including structural elements and connections, that serves to transfer the inertial forces associated with the mass of all elements of the building to the foundation. (Commentary: Sec. A.2.1.1. Tier 2: Sec. 5.4.1.1)

(C) NC N/A U ADJACENT BUILDINGS: The clear distance between the building being evaluated and any adjacent building is greater than 4% of the height of the shorter building. This statement shall not apply for the following building types: W1, W1a, and W2. (Commentary: Sec. A.2.1.2. Tier 2: Sec. 5.4.1.2)

(C) NC N/A U MEZZANINES: Interior mezzanine levels are braced independently from the main structure or are anchored to the seismic-force-resisting elements of the main structure. (Commentary: Sec. A.2.1.3. Tier 2: Sec. 5.4.1.3)

Building Configuration

(C) NC N/A U WEAK STORY: The sum of the shear strengths of the seismic-force-resisting system in any story in each direction is not less than 80% of the strength in the adjacent story above. (Commentary: Sec. A2.2.2. Tier 2: Sec. 5.4.2.1)

(C) NC N/A U SOFT STORY: The stiffness of the seismic-force-resisting system in any story is not less than 70% of the seismic-force-resisting system stiffness in an adjacent story above or less than 80% of the average seismic-force-resisting system stiffness of the three stories above. (Commentary: Sec. A.2.2.3. Tier 2: Sec. 5.4.2.2)

(C) NC N/A U VERTICAL IRREGULARITIES: All vertical elements in the seismic-force-resisting system are continuous to the foundation. (Commentary: Sec. A.2.2.4. Tier 2: Sec. 5.4.2.3)

(C) NC N/A U GEOMETRY: There are no changes in the net horizontal dimension of the seismic-force-resisting system of more than 30% in a story relative to adjacent stories, excluding one-story penthouses and mezzanines. (Commentary: Sec. A.2.2.5. Tier 2: Sec. 5.4.2.4)

(C) NC N/A U MASS: There is no change in effective mass more than 50% from one story to the next. Light roofs, penthouses, and mezzanines need not be considered. (Commentary: Sec. A.2.2.6. Tier 2: Sec. 5.4.2.5)

(C) NC N/A U TORSION: The estimated distance between the story center of mass and the story center of rigidity is less than 20% of the building width in either plan dimension. (Commentary: Sec. A.2.2.7. Tier 2: Sec. 5.4.2.6)

Moderate Seismicity: Complete the Following Items in Addition to the Items for Low Seismicity.

Geologic Site Hazards

(C) NC N/A U LIQUEFACTION: Liquefaction-susceptible, saturated, loose granular soils that could jeopardize the building's seismic performance shall not exist in the foundation soils at depths within 50 ft under the building. (Commentary: Sec. A.6.1.1. Tier 2: 5.4.3.1)

(C) NC N/A U SLOPE FAILURE: The building site is sufficiently remote from potential earthquake-induced slope failures or rockfalls to be unaffected by such failures or is capable of accommodating any predicted movements without failure. (Commentary: Sec. A.6.1.2. Tier 2: 5.4.3.1)

(C) NC N/A U SURFACE FAULT RUPTURE: Surface fault rupture and surface displacement at the building site are not anticipated. (Commentary: Sec. A.6.1.3. Tier 2: 5.4.3.1)

High Seismicity: Complete the Following Items in Addition to the Items for Low and Moderate Seismicity.

Foundation Configuration

C (NC) N/A U OVERTURNING: The ratio of the least horizontal dimension of the seismic-force-resisting system at the foundation level to the building height (base/height) is greater than $0.6S_a$. (Commentary: Sec. A.6.2.1. Tier 2: Sec. 5.4.3.3)

(C) NC N/A U TIES BETWEEN FOUNDATION ELEMENTS: The foundation has ties adequate to resist seismic forces where footings, piles, and piers are not restrained by beams, slabs, or soils classified as Site Class A, B, or C. (Commentary: Sec. A.6.2.2. Tier 2: Sec. 5.4.3.4)

Project: Roosevelt High School Location: Gymnasium Building (Bldg 19)

Completed by: TM Date: 6/2015

16.15LS LIFE SAFETY STRUCTURAL CHECKLIST FOR BUILDING TYPES RM1: REINFORCED MASONRY BEARING WALLS WITH FLEXIBLE DIAPHRAGMS AND RM2: REINFORCED MASONRY BEARING WALLS WITH STIFF DIAPHRAGMS

Low and Moderate Seismicity

Seismic-Force-Resisting System

(C) NC N/A U REDUNDANCY: The number of lines of shear walls in each principal direction is greater than or equal to 2. (Commentary: Sec. A.3.2.1.1. Tier 2: Sec. 5.5.1.1)

(C) NC N/A U SHEAR STRESS CHECK: The shear stress in the reinforced masonry shear walls, calculated using the Quick Check procedure of Section 4.5.3.3, is less than 70 lb/in.^{2}. (Commentary: Sec. A.3.2.4.1. Tier 2: Sec. 5.5.3.1.1)

(C) NC N/A U REINFORCING STEEL: The total vertical and horizontal reinforcing steel ratio in reinforced masonry walls is greater than 0.002 of the wall with the minimum of 0.0007 in either of the two directions; the spacing of reinforcing steel is less than 48 in., and all vertical bars extend to the top of the walls. (Commentary: Sec. A.3.2.4.2. Tier 2: Sec. 5.5.3.1.3)

Stiff Diaphragms

C NC (N/A) U TOPPING SLAB: Precast concrete diaphragm elements are interconnected by a continuous reinforced concrete topping slab. (Commentary: Sec. A.4.5.1. Tier 2: Sec. 5.6.4)

Connections

C (NC) N/A U WALL ANCHORAGE: Exterior concrete or masonry walls that are dependent on the diaphragm for lateral support are anchored for out-of-plane forces at each diaphragm level with steel anchors, reinforcing dowels, or straps that are developed into the diaphragm. Connections shall have adequate strength to resist the connection force calculated in the Quick Check procedure of Section 4.5.3.7. (Commentary: Sec. A.5.1.1. Tier 2: Sec. 5.7.1.1)

(C) NC N/A U WOOD LEDGERS: The connection between the wall panels and the diaphragm does not induce cross-grain bending or tension in the wood ledgers. (Commentary: Sec. A.5.1.2. Tier 2: Sec. 5.7.1.3)

(C) NC N/A U TRANSFER TO SHEAR WALLS: Diaphragms are connected for transfer of seismic forces to the shear walls. (Commentary: Sec. A.5.2.1. Tier 2: Sec. 5.7.2)

C NC (N/A) U TOPPING SLAB TO WALLS OR FRAMES: Reinforced concrete topping slabs that interconnect the precast concrete diaphragm elements are doweled for transfer of forces into the shear wall or frame elements. (Commentary: Sec. A.5.2.3. Tier 2: Sec. 5.7.2)

(C) NC N/A U FOUNDATION DOWELS: Wall reinforcement is doweled into the foundation. (Commentary: Sec. A.5.3.5. Tier 2: Sec. 5.7.3.4)

(C) NC N/A U GIRDER–COLUMN CONNECTION: There is a positive connection using plates, connection hardware, or straps between the girder and the column support. (Commentary: Sec. A.5.4.1. Tier 2: Sec. 5.7.4.1)

High Seismicity: Complete the Following Items in Addition to the Items for Low and Moderate Seismicity.

Stiff Diaphragms

C (NC) N/A U OPENINGS AT SHEAR WALLS: Diaphragm openings immediately adjacent to the shear walls are less than 25% of the wall length. (Commentary: Sec. A.4.1.4. Tier 2: Sec. 5.6.1.3)

C (NC) N/A U OPENINGS AT EXTERIOR MASONRY SHEAR WALLS: Diaphragm openings immediately adjacent to exterior masonry shear walls are not greater than 8 ft long. (Commentary: Sec. A.4.1.6. Tier 2: Sec. 5.6.1.3)

Flexible Diaphragms

(C) NC N/A U CROSS TIES: There are continuous cross ties between diaphragm chords. (Commentary: Sec. A.4.1.2. Tier 2: Sec. 5.6.1.2)

(C) NC N/A U OPENINGS AT SHEAR WALLS: Diaphragm openings immediately adjacent to the shear walls are less than 25% of the wall length. (Commentary: Sec. A.4.1.4. Tier 2: Sec. 5.6.1.3)

(C) NC N/A U OPENINGS AT EXTERIOR MASONRY SHEAR WALLS: Diaphragm openings immediately adjacent to exterior masonry shear walls are not greater than 8 ft long. (Commentary: Sec. A.4.1.6. Tier 2: Sec. 5.6.1.3)

C NC (N/A) U STRAIGHT SHEATHING: All straight sheathed diaphragms have aspect ratios less than 2-to-1 in the direction being considered. (Commentary: Sec. A.4.2.1. Tier 2: Sec. 5.6.2)

(C) NC N/A U SPANS: All wood diaphragms with spans greater than 24 ft consist of wood structural panels or diagonal sheathing. (Commentary: Sec. A.4.2.2. Tier 2: Sec. 5.6.2)

C NC (N/A) U DIAGONALLY SHEATHED AND UNBLOCKED DIAPHRAGMS: All diagonally sheathed or unblocked wood structural panel diaphragms have horizontal spans less than 40 ft and aspect ratios less than or equal to 4-to-1. (Commentary: Sec. A.4.2.3. Tier 2: Sec. 5.6.2)

C (NC) N/A U OTHER DIAPHRAGMS: The diaphragm shall not consist of a system other than wood, metal deck, concrete, or horizontal bracing. (Commentary: Sec. A.4.7.1. Tier 2: Sec. 5.6.5)

Connections

(C) NC N/A U STIFFNESS OF WALL ANCHORS: Anchors of concrete or masonry walls to wood structural elements are installed taut and are stiff enough to limit the relative movement between the wall and the diaphragm to no greater than 1/8 in. before engagement of the anchors. (Commentary: Sec. A.5.1.4. Tier 2: Sec. 5.7.1.2)

Project: Roosevelt High School Location: Gymnasium Building (Bldg. 19)

Completed by: TM Date: 6/2015

16.10LS LIFE SAFETY STRUCTURAL CHECKLIST FOR BUILDING TYPES C2: CONCRETE SHEAR WALLS WITH STIFF DIAPHRAGMS AND C2A: CONCRETE SHEAR WALLS WITH FLEXIBLE DIAPHRAGMS

Low and Moderate Seismicity

Seismic-Force-Resisting System

C NC (N/A) U COMPLETE FRAMES: Steel or concrete frames classified as secondary components form a complete vertical-load-carrying system. (Commentary: Sec. A.3.1.6.1. Tier 2: Sec. 5.5.2.5.1)

(C) NC N/A U REDUNDANCY: The number of lines of shear walls in each principal direction is greater than or equal to 2. (Commentary: Sec. A.3.2.1.1. Tier 2: Sec. 5.5.1.1)

(C) NC N/A U SHEAR STRESS CHECK: The shear stress in the concrete shear walls, calculated using the Quick Check procedure of Section 4.5.3.3, is less than the greater of 100 lb/in.^{2} or $2\sqrt{f'_c}$. (Commentary: Sec. A.3.2.2.1. Tier 2: Sec. 5.5.3.1.1)

(C) NC N/A U REINFORCING STEEL: The ratio of reinforcing steel area to gross concrete area is not less than 0.0012 in the vertical direction and 0.0020 in the horizontal direction. (Commentary: Sec. A.3.2.2.2. Tier 2: Sec. 5.5.3.1.3)

Connections

C (NC) N/A U WALL ANCHORAGE AT FLEXIBLE DIAPHRAGMS: Exterior concrete or masonry walls that are dependent on flexible diaphragms for lateral support are anchored for out-of-plane forces at each diaphragm level with steel anchors, reinforcing dowels, or straps that are developed into the diaphragm. Connections have adequate strength to resist the connection force calculated in the Quick Check procedure of Section 4.5.3.7. (Commentary: Sec. A.5.1.1. Tier 2: Sec. 5.7.1.1)

(C) NC N/A U TRANSFER TO SHEAR WALLS: Diaphragms are connected for transfer of seismic forces to the shear walls. (Commentary: Sec. A.5.2.1. Tier 2: Sec. 5.7.2)

(C) NC N/A U FOUNDATION DOWELS: Wall reinforcement is doweled into the foundation with vertical bars equal in size and spacing to the vertical wall reinforcing immediately above the foundation. (Commentary: Sec. A.5.3.5. Tier 2: Sec. 5.7.3.4)

High Seismicity: Complete the Following Items in Addition to the Items for Low and Moderate Seismicity.

Seismic-Force-Resisting System

(C) NC N/A U DEFLECTION COMPATIBILITY: Secondary components have the shear capacity to develop the flexural strength of the components. (Commentary: Sec. A.3.1.6.2. Tier 2: Sec. 5.5.2.5.2)

C (NC) N/A U FLAT SLABS: Flat slabs or plates not part of the seismic-force-resisting system have continuous bottom steel through the column joints. (Commentary: Sec. A.3.1.6.3. Tier 2: Sec. 5.5.2.5.3)

C NC (N/A) U COUPLING BEAMS: The stirrups in coupling beams over means of egress are spaced at or less than $d/2$ and are anchored into the confined core of the beam with hooks of 135 degrees or more. The ends of both walls to which the coupling beam is attached are supported at each end to resist vertical loads caused by overturning. (Commentary: Sec. A.3.2.2.3. Tier 2: Sec. 5.5.3.2.1)

Connections

C NC (N/A) U UPLIFT AT PILE CAPS: Pile caps have top reinforcement, and piles are anchored to the pile caps. (Commentary: Sec. A.5.3.8. Tier 2: Sec. 5.7.3.5)

Diaphragms (Flexible or Stiff)

(C) NC N/A U DIAPHRAGM CONTINUITY: The diaphragms are not composed of split-level floors and do not have expansion joints. (Commentary: Sec. A.4.1.1. Tier 2: Sec. 5.6.1.1)

(C) NC N/A U OPENINGS AT SHEAR WALLS: Diaphragm openings immediately adjacent to the shear walls are less than 25% of the wall length. (Commentary: Sec. A.4.1.4. Tier 2: Sec. 5.6.1.3)

Flexible Diaphragms

(C) NC N/A U CROSS TIES: There are continuous cross ties between diaphragm chords. (Commentary: Sec. A.4.1.2. Tier 2: Sec. 5.6.1.2)

C NC (N/A) U STRAIGHT SHEATHING: All straight sheathed diaphragms have aspect ratios less than 2-to-1 in the direction being considered. (Commentary: Sec. A.4.2.1. Tier 2: Sec. 5.6.2)

(C) NC N/A U SPANS: All wood diaphragms with spans greater than 24 ft consist of wood structural panels or diagonal sheathing. (Commentary: Sec. A.4.2.2. Tier 2: Sec. 5.6.2)

C NC (N/A) U DIAGONALLY SHEATHED AND UNBLOCKED DIAPHRAGMS: All diagonally sheathed or unblocked wood structural panel diaphragms have horizontal spans less than 40 ft and aspect ratios less than or equal to 4-to-1. (Commentary: Sec. A.4.2.3. Tier 2: Sec. 5.6.2)

C (NC) N/A U OTHER DIAPHRAGMS: The diaphragm does not consist of a system other than wood, metal deck, concrete, or horizontal bracing. (Commentary: Sec. A.4.7.1. Tier 2: Sec. 5.6.5)

Project: Roosevelt High School Location: Gymnasium Building (Bldg. 19)

Completed by: TM Date: 6/2015

16.17 NONSTRUCTURAL CHECKLIST

Life Safety Systems

C (NC) N/A U LS-LMH; PR-LMH. FIRE SUPPRESSION PIPING: Fire suppression piping is anchored and braced in accordance with NFPA-13. (Commentary: Sec. A.7.13.1. Tier 2: Sec. 13.7.4)

C (NC) N/A U LS-LMH; PR-LMH. FLEXIBLE COUPLINGS: Fire suppression piping has flexible couplings in accordance with NFPA-13. (Commentary: Sec. A.7.13.2. Tier 2: Sec. 13.7.4)

C NC (N/A) U LS-LMH; PR-LMH. EMERGENCY POWER: Equipment used to power or control life safety systems is anchored or braced. (Commentary: Sec. A.7.12.1. Tier 2: Sec. 13.7.7)

C NC (N/A) U LS-LMH; PR-LMH. STAIR AND SMOKE DUCTS: Stair pressurization and smoke control ducts are braced and have flexible connections at seismic joints. (Commentary: Sec. A.7.14.1. Tier 2: Sec. 13.7.6)

C (NC) N/A U LS-MH; PR-MH. SPRINKLER CEILING CLEARANCE: Penetrations through panelized ceilings for fire suppression devices provide clearances in accordance with NFPA-13. (Commentary: Sec. A.7.13.3. Tier 2: Sec. 13.7.4)

C NC N/A (U) LS-not required; PR-LMH. EMERGENCY LIGHTING: Emergency and egress lighting equipment is anchored or braced. (Commentary: Sec. A.7.3.1. Tier 2: Sec. 13.7.9)

Hazardous Materials

C NC (N/A) U LS-LMH; PR-LMH. HAZARDOUS MATERIAL EQUIPMENT: Equipment mounted on vibration isolators and containing hazardous material is equipped with restraints or snubbers. (Commentary: Sec. A.7.12.2. Tier 2: 13.7.1)

C NC (N/A) U LS-LMH; PR-LMH. HAZARDOUS MATERIAL STORAGE: Breakable containers that hold hazardous material, including gas cylinders, are restrained by latched doors, shelf lips, wires, or other methods. (Commentary: Sec. A.7.15.1. Tier 2: Sec. 13.8.4)

C NC (N/A) U LS-MH; PR-MH. HAZARDOUS MATERIAL DISTRIBUTION: Piping or ductwork conveying hazardous materials is braced or otherwise protected from damage that would allow hazardous material release. (Commentary: Sec. A.7.13.4. Tier 2: Sec. 13.7.3 and 13.7.5)

(C) NC N/A U LS-MH; PR-MH. SHUT-OFF VALVES: Piping containing hazardous material, including natural gas, has shut-off valves or other devices to limit spills or leaks. (Commentary: Sec. A.7.13.3. Tier 2: Sec. 13.7.3 and 13.7.5)

C NC N/A (U) LS-LMH; PR-LMH. FLEXIBLE COUPLINGS: Hazardous material ductwork and piping, including natural gas piping, has flexible couplings. (Commentary: Sec. A.7.15.4, Tier 2: Sec.13.7.3 and 13.7.5)

C NC N/A (U) LS-MH; PR-MH. PIPING OR DUCTS CROSSING SEISMIC JOINTS: Piping or ductwork carrying hazardous material that either crosses seismic joints or isolation planes or is connected to independent structures has couplings or other details to accommodate the relative seismic displacements. (Commentary: Sec. A.7.13.6. Tier 2: Sec.13.7.3, 13.7.5, and 13.7.6)

Partitions

C NC (N/A) U LS-LMH; PR-LMH. UNREINFORCED MASONRY: Unreinforced masonry or hollow-clay tile partitions are braced at a spacing of at most 10 ft in Low or Moderate Seismicity, or at most 6 ft in High Seismicity. (Commentary: Sec. A.7.1.1. Tier 2: Sec. 13.6.2)

C NC (N/A) U LS-LMH; PR-LMH. HEAVY PARTITIONS SUPPORTED BY CEILINGS: The tops of masonry or hollow-clay tile partitions are not laterally supported by an integrated ceiling system. (Commentary: Sec. A.7.2.1. Tier 2: Sec. 13.6.2)

C NC (N/A) U LS-MH; PR-MH. DRIFT: Rigid cementitious partitions are detailed to accommodate the following drift ratios: in steel moment frame, concrete moment frame, and wood frame buildings, 0.02; in other buildings, 0.005. (Commentary A.7.1.2 Tier 2: Sec. 13.6.2)

C NC (N/A) U LS-not required; PR-MH. LIGHT PARTITIONS SUPPORTED BY CEILINGS: The tops of gypsum board partitions are not laterally supported by an integrated ceiling system. (Commentary: Sec. A.7.2.1. Tier 2: Sec. 13.6.2)

C NC (N/A) U LS-not required; PR-MH. STRUCTURAL SEPARATIONS: Partitions that cross structural separations have seismic or control joints. (Commentary: Sec. A.7.1.3. Tier 2. Sec. 13.6.2)

C NC (N/A) U LS-not required; PR-MH. TOPS: The tops of ceiling-high framed or panelized partitions have lateral bracing to the structure at a spacing equal to or less than 6 ft. (Commentary: Sec. A.7.1.4. Tier 2. Sec. 13.6.2)

Ceilings

C NC (N/A) U LS-MH; PR-LMH. SUSPENDED LATH AND PLASTER: Suspended lath and plaster ceilings have attachments that resist seismic forces for every 12 ft^2 of area. (Commentary: Sec. A.7.2.3. Tier 2: Sec. 13.6.4)

C (NC) N/A U LS-MH; PR-LMH. SUSPENDED GYPSUM BOARD: Suspended gypsum board ceilings have attachments that resist seismic forces for every 12 ft^2 of area. (Commentary: Sec. A.7.2.3. Tier 2: Sec. 13.6.4)

C NC (N/A) U LS-not required; PR-MH. INTEGRATED CEILINGS: Integrated suspended ceilings with continuous areas greater than 144 ft^2, and ceilings of smaller areas that are not surrounded by restraining partitions, are laterally restrained at a spacing no greater than 12 ft with members attached to the structure above. Each restraint location has a minimum of four diagonal wires and compression struts, or diagonal members capable of resisting compression. (Commentary: Sec. A.7.2.2. Tier 2: Sec. 13.6.4)

C NC (N/A) U LS-not required; PR-MH. EDGE CLEARANCE: The free edges of integrated suspended ceilings with continuous areas greater than 144 ft^2 have clearances from the enclosing wall or partition of at least the following: in Moderate Seismicity, 1/2 in.; in High Seismicity, 3/4 in. (Commentary: Sec. A.7.2.4. Tier 2: Sec. 13.6.4)

C NC (N/A) U LS-not required; PR-MH. CONTINUITY ACROSS STRUCTURE JOINTS: The ceiling system does not cross any seismic joint and is not attached to multiple independent structures. (Commentary: Sec. A.7.2.5. Tier 2: Sec. 13.6.4)

C NC (N/A) U LS-not required; PR-H. EDGE SUPPORT: The free edges of integrated suspended ceilings with continuous areas greater than 144 ft^2 are supported by closure angles or channels not less than 2 in. wide. (Commentary: Sec. A.7.2.6. Tier 2: Sec. 13.6.4)

C NC (N/A) U LS-not required; PR-H. SEISMIC JOINTS: Acoustical tile or lay-in panel ceilings have seismic separation joints such that each continuous portion of the ceiling is no more than 2500 ft^2 and has a ratio of long-to-short dimension no more than 4-to-1. (Commentary: Sec. A.7.2.7. Tier 2: 13.6.4)

Light Fixtures

C (NC) N/A U LS-MH; PR-MH. INDEPENDENT SUPPORT: Light fixtures that weigh more per square foot than the ceiling they penetrate are supported independent of the grid ceiling suspension system by a minimum of two wires at diagonally opposite corners of each fixture. (Commentary: Sec. A.7.3.2. Tier 2: Sec. 13.6.4 and 13.7.9)

C NC (N/A) U LS-not required; PR-H. PENDANT SUPPORTS: Light fixtures on pendant supports are attached at a spacing equal to or less than 6 ft and, if rigidly supported, are free to move with the structure to which they are attached without damaging adjoining components. (Commentary: A.7.3.3. Tier 2: Sec. 13.7.9)

C NC (N/A) U LS-not required; PR-H. LENS COVERS: Lens covers on light fixtures are attached with safety devices. (Commentary: Sec. A.7.3.4. Tier 2: Sec. 13.7.9)

Cladding and Glazing

C NC (N/A) U LS-MH; PR-MH. CLADDING ANCHORS: Cladding components weighing more than 10 lb/ft^2 are mechanically anchored to the structure at a spacing equal to or less than the following: for Life Safety in Moderate Seismicity, 6 ft; for Life Safety in High Seismicity and for Position Retention in any seismicity, 4 ft. (Commentary: Sec. A.7.4.1. Tier 2: Sec. 13.6.1)

C NC (N/A) U LS-MH; PR-MH. CLADDING ISOLATION: For steel or concrete moment frame buildings, panel connections are detailed to accommodate a story drift ratio of at least the following: for Life Safety in Moderate Seismicity, 0.01; for Life Safety in High Seismicity and for Position Retention in any seismicity, 0.02. (Commentary: Sec. A.7.4.3. Tier 2: Section 13.6.1)

C NC (N/A) U LS-MH; PR-MH. MULTI-STORY PANELS: For multi-story panels attached at more than one floor level, panel connections are detailed to accommodate a story drift ratio of at least the following: for Life Safety in Moderate Seismicity, 0.01; for Life Safety in High Seismicity and for Position Retention in any seismicty, 0.02. (Commentary: Sec. A.7.4.4. Tier 2: Sec. 13.6.1)

C NC (N/A) U LS-MH; PR-MH. PANEL CONNECTIONS: Cladding panels are anchored out-of-plane with a minimum number of connections for each wall panel, as follows: for Life Safety in Moderate Seismicity, 2 connections; for Life Safety in High Seismicity and for Position Retention in any seismicity, 4 connections. (Commentary: Sec. A.7.4.5. Tier 2: Sec. 13.6.1.4)

C NC (N/A) U LS-MH; PR-MH. BEARING CONNECTIONS: Where bearing connections are used, there is a minimum of two bearing connections for each cladding panel. (Commentary: Sec. A.7.4.6. Tier 2: Sec. 13.6.1.4)

C NC (N/A) U LS-MH; PR-MH. INSERTS: Where concrete cladding components use inserts, the inserts have positive anchorage or are anchored to reinforcing steel. (Commentary: Sec. A.7.4.7. Tier 2: Sec. 13.6.1.4)

C NC (N/A) U LS-MH; PR-MH. OVERHEAD GLAZING: Glazing panes of any size in curtain walls and individual interior or exterior panes over 16 ft^2 in area are laminated annealed or laminated heat-strengthened glass and are detailed to remain in the frame when cracked. (Commentary: Sec. A.7.4.8: Tier 2: Sec. 13.6.1.5)

Masonry Veneer

C NC N/A (U) LS-LMH; PR-LMH. TIES: Masonry veneer is connected to the backup with corrosion-resistant ties. There is a minimum of one tie for every 2-2/3 ft^2, and the ties have spacing no greater than the following: for Life Safety in Low or Moderate Seismicity, 36 in.; for Life Safety in High Seismicity and for Position Retention in any seismicity, 24 in. (Commentary: Sec. A.7.5.1. Tier 2: Sec. 13.6.1.2)

(C) NC N/A U LS-LMH; PR-LMH. SHELF ANGLES: Masonry veneer is supported by shelf angles or other elements at each floor above the ground floor. (Commentary: Sec. A.7.5.2. Tier 2: Sec. 13.6.1.2)

C (NC) N/A U LS-LMH; PR-LMH. WEAKENED PLANES: Masonry veneer is anchored to the backup adjacent to weakened planes, such as at the locations of flashing. (Commentary: Sec. A.7.5.3. Tier 2: Sec. 13.6.1.2)

(C) NC N/A U LS-LMH; PR-LMH. UNREINFORCED MASONRY BACKUP: There is no unreinforced masonry backup. (Commentary: Sec. A.7.7.2. Tier 2: Section 13.6.1.1 and 13.6.1.2)

C NC (N/A) U LS-MH; PR-MH. STUD TRACKS: For veneer with metal stud backup, stud tracks are fastened to the structure at a spacing equal to or less than 24 in. on center. (Commentary: Sec. A.7.6.1. Tier 2: Section 13.6.1.1 and 13.6.1.2)

(C) NC N/A U LS-MH; PR-MH. ANCHORAGE: For veneer with concrete block or masonry backup, the backup is positively anchored to the structure at a horizontal spacing equal to or less than 4 ft along the floors and roof. (Commentary: Sec. A.7.7.1. Tier 2: Section 13.6.1.1 and 13.6.1.2)

C NC (N/A) U LS-not required; PR-MH. WEEP HOLES: In veneer anchored to stud walls, the veneer has functioning weep holes and base flashing. (Commentary: Sec. A.7.5.6. Tier 2: Section 13.6.1.2)

C NC (N/A) U LS-not required; PR-MH. OPENINGS: For veneer with metal stud backup, steel studs frame window and door openings. (Commentary: Sec. A.7.6.2. Tier 2: Sec. 13.6.1.1 and 13.6.1.2)

Parapets, Cornices, Ornamentation, and Appendages

C NC (N/A) U LS-LMH; PR-LMH. URM PARAPETS OR CORNICES: Laterally unsupported unreinforced masonry parapets or cornices have height-to-thickness ratios no greater than the following: for Life Safety in Low or Moderate Seismicity, 2.5; for Life Safety in High Seismicity and for Position Retention in any seismicity, 1.5. (Commentary: Sec. A.7.8.1. Tier 2: Sec. 13.6.5)

C (NC) N/A U LS-LMH; PR-LMH. CANOPIES: Canopies at building exits are anchored to the structure at a spacing no greater than the following: for Life Safety in Low or Moderate Seismicity, 10 ft; for Life Safety in High Seismicity and for Position Retention in any seismicity, 6 ft. (Commentary: Sec. A.7.8.2. Tier 2: Sec. 13.6.6)

(C) NC N/A U LS-MH; PR-LMH. CONCRETE PARAPETS: Concrete parapets with height-to-thickness ratios greater than 2.5 have vertical reinforcement. (Commentary: Sec. A.7.8.3. Tier 2: Sec. 13.6.5)

(C) NC N/A U LS-MH; PR-LMH. APPENDAGES: Cornices, parapets, signs, and other ornamentation or appendages that extend above the highest point of anchorage to the structure or cantilever from components are reinforced and anchored to the structural system at a spacing equal to or less than 6 ft. This checklist item does not apply to parapets or cornices covered by other checklist items. (Commentary: Sec. A.7.8.4. Tier 2: Sec. 13.6.6)

Masonry Chimneys

C NC (N/A) U LS-LMH; PR-LMH. URM CHIMNEYS: Unreinforced masonry chimneys extend above the roof surface no more than the following: for Life Safety in Low or Moderate Seismicity, 3 times the least dimension of the chimney; for Life Safety in High Seismicity and for Position Retention in any seismicity, 2 times the least dimension of the chimney. (Commentary: Sec. A.7.9.1. Tier 2: 13.6.7)

C NC (N/A) U LS-LMH; PR-LMH. ANCHORAGE: Masonry chimneys are anchored at each floor level, at the topmost ceiling level, and at the roof. (Commentary: Sec. A.7.9.2. Tier 2: 13.6.7)

Stairs

C NC (N/A) U LS-LMH; PR-LMH. STAIR ENCLOSURES: Hollow-clay tile or unreinforced masonry walls around stair enclosures are restrained out-of-plane and have height-to-thickness ratios not greater than the following: for Life Safety in Low or Moderate Seismicity, 15-to-1; for Life Safety in High Seismicity and for Position Retention in any seismicity, 12-to-1. (Commentary: Sec. A.7.10.1. Tier 2: Sec. 13.6.2 and 13.6.8)

C NC (N/A) U LS-LMH; PR-LMH. STAIR DETAILS: In moment frame structures, the connection between the stairs and the structure does not rely on shallow anchors in concrete. Alternatively, the stair details are capable of accommodating the drift calculated using the Quick Check procedure of Section 4.5.3.1 without including any lateral stiffness contribution from the stairs. (Commentary: Sec. A.7.10.2. Tier 2: 13.6.8)

Contents and Furnishings

C (NC) N/A U LS-MH; PR-MH. INDUSTRIAL STORAGE RACKS: Industrial storage racks or pallet racks more than 12 ft high meet the requirements of ANSI/MH 16.1 as modified by ASCE 7 Chapter 15. (Commentary: Sec. A.7.11.1. Tier 2: Sec. 13.8.1)

C NC N/A (U) LS-H; PR-MH. TALL NARROW CONTENTS: Contents more than 6 ft high with a height-to-depth or height-to-width ratio greater than 3-to-1 are anchored to the structure or to each other. (Commentary: Sec. A.7.11.2. Tier 2: Sec. 13.8.2)

C (NC) N/A U LS-H; PR-H. FALL-PRONE CONTENTS: Equipment, stored items, or other contents weighing more than 20 lb whose center of mass is more than 4 ft above the adjacent floor level are braced or otherwise restrained. (Commentary: Sec. A.7.11.3. Tier 2: Sec. 13.8.2)

C NC (N/A) U LS-not required; PR-MH. ACCESS FLOORS: Access floors more than 9 in. high are braced. (Commentary: Sec. A.7.11.4. Tier 2: Sec. 13.8.3)

C NC (N/A) U LS-not required; PR-MH. EQUIPMENT ON ACCESS FLOORS: Equipment and other contents supported by access floor systems are anchored or braced to the structure independent of the access floor. (Commentary: Sec. A.7.11.5. Tier 2: Sec. 13.7.7 and 13.8.3)

C NC (N/A) U LS-not required; PR-H. SUSPENDED CONTENTS: Items suspended without lateral bracing are free to swing from or move with the structure from which they are suspended without damaging themselves or adjoining components. (Commentary. A.7.11.6. Tier 2: Sec. 13.8.2)

Mechanical and Electrical Equipment

C (NC) N/A U LS-H; PR-H. FALL-PRONE EQUIPMENT: Equipment weighing more than 20 lb whose center of mass is more than 4 ft above the adjacent floor level, and which is not in-line equipment, is braced. (Commentary: A.7.12.4. Tier 2: 13.7.1 and 13.7.7)

C NC N/A (U) LS-H; PR-H. IN-LINE EQUIPMENT: Equipment installed in-line with a duct or piping system, with an operating weight more than 75 lb, is supported and laterally braced independent of the duct or piping system. (Commentary: Sec. A.7.12.5. Tier 2: Sec. 13.7.1)

C (NC) N/A U LS-H; PR-MH. TALL NARROW EQUIPMENT: Equipment more than 6 ft high with a height-to-depth or height-to-width ratio greater than 3-to-1 is anchored to the floor slab or adjacent structural walls. (Commentary: Sec. A.7.12.6. Tier 2: Sec. 13.7.1 and 13.7.7)

C NC (N/A) U LS-not required; PR-MH. MECHANICAL DOORS: Mechanically operated doors are detailed to operate at a story drift ratio of 0.01. (Commentary: Sec. A.7.12.7. Tier 2: Sec. 13.6.9)

C NC (N/A) U LS-not required; PR-H. SUSPENDED EQUIPMENT: Equipment suspended without lateral bracing is free to swing from or move with the structure from which it is suspended without damaging itself or adjoining components. (Commentary: Sec. A.7.12.8. Tier 2: Sec. 13.7.1 and 13.7.7)

C NC (N/A) U LS-not required; PR-H. VIBRATION ISOLATORS: Equipment mounted on vibration isolators is equipped with horizontal restraints or snubbers and with vertical restraints to resist overturning. (Commentary: Sec. A.7.12.9. Tier 2: Sec. 13.7.1)

C NC (N/A) U LS-not required; PR-H. HEAVY EQUIPMENT: Floor-supported or platform-supported equipment weighing more than 400 lb is anchored to the structure. (Commentary: Sec. A.7.12.10. Tier 2: 13.7.1 and 13.7.7)

C NC (N/A) U LS-not required; PR-H. ELECTRICAL EQUIPMENT: Electrical equipment is laterally braced to the structure. (Commentary: Sec. A.7.12.11. Tier 2: 13.7.7)

C NC (N/A) U LS-not required; PR-H. CONDUIT COUPLINGS: Conduit greater than 2.5 in. trade size that is attached to panels, cabinets, or other equipment and is subject to relative seismic displacement has flexible couplings or connections. (Commentary: Sec. A.7.12.12. Tier 2: 13.7.8)

Piping

C NC (N/A) U LS-not required; PR-H. FLEXIBLE COUPLINGS: Fluid and gas piping has flexible couplings. (Commentary: Sec. A.7.13.2. Tier 2: Sec. 13.7.3 and 13.7.5)

C NC (N/A) U LS-not required; PR-H. FLUID AND GAS PIPING: Fluid and gas piping is anchored and braced to the structure to limit spills or leaks. (Commentary: Sec. A.7.13.4. Tier 2: Sec. 13.7.3 and 13.7.5)

C NC (N/A) U LS-not required; PR-H. C-CLAMPS: One-sided C-clamps that support piping larger than 2.5 in. in diameter are restrained. (Commentary: Sec. A.7.13.5. Tier 2: Sec. 13.7.3 and 13.7.5)

C NC (N/A) U LS-not required; PR-H. PIPING CROSSING SEISMIC JOINTS: Piping that crosses seismic joints or isolation planes or is connected to independent structures has couplings or other details to accommodate the relative seismic displacements. (Commentary: Sec. A7.13.6. Tier 2: Sec.13.7.3 and Sec. 13.7.5)

Ducts

C NC (N/A) U LS-not required; PR-H. DUCT BRACING: Rectangular ductwork larger than 6 ft^2 in cross-sectional area and round ducts larger than 28 in. in diameter are braced. The maximum spacing of transverse bracing does not exceed 30 ft. The maximum spacing of longitudinal bracing does not exceed 60 ft. (Commentary: Sec. A.7.14.2. Tier 2: Sec. 13.7.6)

C NC (N/A) U LS-not required; PR-H. DUCT SUPPORT: Ducts are not supported by piping or electrical conduit. (Commentary: Sec. A.7.14.3. Tier 2: Sec. 13.7.6)

C NC (N/A) U LS-not required; PR-H. DUCTS CROSSING SEISMIC JOINTS: Ducts that cross seismic joints or isolation planes or are connected to independent structures have couplings or other details to accommodate the relative seismic displacements. (Commentary: Sec. A.7.14.5. Tier 2: Sec. 13.7.6)

Elevators

C NC (N/A) U LS-H; PR-H. RETAINER GUARDS: Sheaves and drums have cable retainer guards. (Commentary: Sec. A.7.16.1. Tier 2: 13.8.6)

C NC (N/A) U LS-H; PR-H. RETAINER PLATE: A retainer plate is present at the top and bottom of both car and counterweight. (Commentary: Sec. A.7.16.2. Tier 2: 13.8.6)

C NC (N/A) U LS-not required; PR-H. ELEVATOR EQUIPMENT: Equipment, piping, and other components that are part of the elevator system are anchored. (Commentary: Sec. A.7.16.3. Tier 2: 13.8.6)

C NC (N/A) U LS-not required; PR-H. SEISMIC SWITCH: Elevators capable of operating at speeds of 150 ft/min or faster are equipped with seismic switches that meet the requirements of ASME A17.1 or have trigger levels set to 20% of the acceleration of gravity at the base of the structure and 50% of the acceleration of gravity in other locations. (Commentary: Sec. A.7.16.4. Tier 2: 13.8.6)

C NC (N/A) U LS-not required; PR-H. SHAFT WALLS: Elevator shaft walls are anchored and reinforced to prevent toppling into the shaft during strong shaking. (Commentary: Sec. A.7.16.5. Tier 2: 13.8.6)

C NC (N/A) U LS-not required; PR-H. COUNTERWEIGHT RAILS: All counterweight rails and divider beams are sized in accordance with ASME A17.1. (Commentary: Sec. A.7.16.6. Tier 2: 13.8.6)

C NC (N/A) U LS-not required; PR-H. BRACKETS: The brackets that tie the car rails and the counterweight rail to the structure are sized in accordance with ASME A17.1. (Commentary: Sec. A.7.16.7. Tier 2: 13.8.6)

C NC (N/A) U LS-not required; PR-H. SPREADER BRACKET: Spreader brackets are not used to resist seismic forces. (Commentary: Sec. A.7.16.8. Tier 2: 13.8.6)

C NC (N/A) U LS-not required; PR-H. GO-SLOW ELEVATORS: The building has a go-slow elevator system. (Commentary: Sec. A.7.16.9. Tier 2: 13.8.6)

LAUSD Comprehensive Modernization Project for ***Roosevelt High School***

ASCE 41-13 Tier 2 Deficiency-Based Evaluation & Retrofit

Prepared By:

saiful · bouquet
structural engineers

155 North Lake Avenue, 6th Floor

Pasadena, California 91101

Tel: (626) 304-2616

SBI Job No. 15548

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1.0 Executive Summary

ASCE 41-13 Tier 2 Deficiency-Based Evaluation and Retrofit

As part of Los Angeles Unified School District's (LAUSD) Preliminary Site Analysis of the Comprehensive Modernization Project, Roosevelt High School, located at 456 South Mathews Street, Los Angeles, CA 90033, has been reviewed under ASCE 41-13. Both a Tier 1 Screening and a Tier 2 Evaluation have been performed. Saiful/Bouquet has performed the Tier 1 Screening and the Tier 2 deficiency-based evaluations for three (3) buildings on the campus as follows:

- Auditorium/Classroom (Building 1)
- Gymnasium (Building 19)
- Industrial Arts (Building 6)

An ASCE 41-13 Tier 2 deficiency-based evaluation of all the potential structural deficiencies identified during the Tier 1 Screening (denoted by either "Noncompliant" or "Unknown" responses in the Tier 1 checklists) will either confirm the deficiency or demonstrate the adequacy of the existing structure. A summary of the results from all structures reviewed as part of the Screening and Evaluation is provided in Table 1.

Table 1: Screening and Evaluation Summary

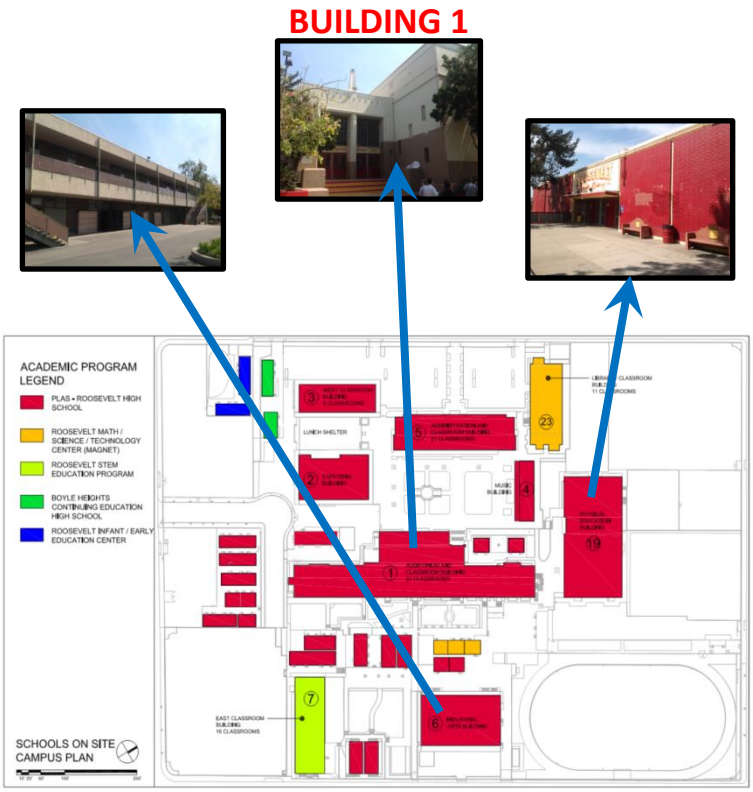
Building	Lateral System	Lateral System Type	Number of Tier 1 Deficiencies Identified	Number of Tier 2 Deficiencies Identified	Proposed Retrofit
Building 1 (Aud./Class)	Flexible Wood & Rigid Concrete Diaphragms with Concrete Walls	C2 & C2A	12	9	Retrofit is proposed. See Section 5.0
Building 19 (Gym)	Flexible Wood & Rigid Concrete Diaphragms with Concrete & Masonry Walls	C2 & C2A RM1 & RM2	4	4	Retrofit is proposed. See Section 10.0
Building 6 (Ind. Arts)	Flexible Wood & Rigid Concrete Diaphragms with Masonry Walls	RM1 & RM2	6	2	Retrofit is proposed. See Section 15.0

2.0 Introduction

A multiphase seismic vulnerability assessment of the Auditorium/Classroom (Building 1) was conducted, beginning with a site visit on 03/31/2015, an ASCE 41-13 Tier 1 Screening, and concluding with an ASCE 41-13 Tier 2 "Deficiency-Based" Evaluation. The Tier 1 screening identified potential deficiencies for the building, which have been further investigated in the Tier 2 Evaluation.

All of the evaluations and studies were based on existing documents provided by the District (see Section *3.4, 6.0, 8.4, 11.0, 13.4, and 16.0*), a site walk-through of the building, and structural calculations performed using the guidelines outlined in ASCE 41-13.

An overall campus map, indicating the buildings under evaluation, is provided below. The remainder of the report will address these buildings on an individual basis.



ROOSEVELT HIGH SCHOOL CAMPUS MAP

3.0 Auditorium/Classrooms (Building 1)

3.1 Site Seismicity

Site-specific geotechnical report information for the property was available for this evaluation, as prepared by *Geotechnical Professionals Inc.*, dated June 14, 2015. Site-specific geotechnical report information for the campus indicates that the site is underlain by surficial alluvium that masks the mapped alluvium and sedimentary rocks. From the borings, there is a significant amount of undocumented fill over the natural materials that consist of predominately dense to very dense silty sands and very stiff to hard sandy silts, clayey silts, sandy clays and silty clays. The campus Soil Type was identified as Site Class D with a Seismic Design Category identified as D. The reported site-specific spectral acceleration at 0.2 seconds and 1.0 second periods, S_{XS} and S_{X1}, are 0.859g and 0.491g, respectively. The data used to derive these spectral acceleration values are from 2014 hazard data (USGS) in accordance with ASCE 41-13.

The campus site is located in Southern California, a region of high seismic activity. There are several faults in the region that are capable of having major earthquakes on them that pose a potential damageability threat to the campus structures. Figure 2 shows the major faults affecting the Southern California area which are capable of producing moderate to large magnitude earthquakes. Table 2 lists the faults shown in Figure 2 and gives the Maximum Earthquake (ME) that each of the faults is capable of producing, mean recurrence interval for such an earthquake event, and approximate distance of the faults from the subject property. The Maximum Earthquake (ME) refers to the largest earthquake that can be expected to occur along a given fault or fault zone. The maximum size of an earthquake for a fault is based on the length of the fault, its width (i.e., depth into the earth's crust), and to some extent on the type of fault, whether thrust, normal, or strike slip. The frequency of occurrence of Maximum Earthquakes depends on the slip rate of the fault.

The earthquake effects that are most likely to cause damage to the structure include ground shaking intensity and duration, ground fault rupture, liquefaction, lateral spreading, compaction, and landsliding. The ground shaking representation and effects of other geologic hazards on the subject property are discussed further.

Ground Fault Rupture

Ground fault rupture is the direct manifestation of the movement along a fault, projected to the ground surface. It consists of a concentrated, permanent deformation of the ground surface, which, in major earthquakes, can extend many miles along the trace of the fault. This deformation can be in horizontal and/or vertical direction. A ground-surface rupture involving more than a few inches of movement within a concentrated area can result in major damage to structures that cross it.

The State Geologist is required under the Alquist-Priolo Special Studies Zones Act, Code of California Regulations, signed into law on December 22, 1972, to delineate special study zones along known active faults in California. The purpose of this act is to prohibit the location of most structures for human occupancy across the traces of active faults and to mitigate, thereby, the hazard of fault rupture.

The subject property is of a size and occupancy class that is included within the types regulated under the Alquist-Priolo Act. However, an examination of the maps and reports published by the Division of Mines and Geology, Department of Conservation indicates that there are no special study zones within the project area.

The property is not located at a site where surface rupture is likely to occur from active or potentially active earthquake faults as identified by any Federal, State or Local Governmental Agency. Furthermore, the closest identified fault to the building site is the Elysian Park Thrust Fault, which is approximately 2 miles from the site. See Figure for fault locations in relation to the property.

Landsliding

Landsliding is the downhill movement of masses of earth under the force of gravity. Earthquakes can trigger landslides in areas that are already landslide prone. Landslides are most common on slopes of more than 15 degrees.

The property is not located on land designated as having landslide hazard.

Liquefaction

Liquefaction is the sudden loss of bearing strength that can occur when saturated, cohesionless soils (sands and silts) are strongly and repetitively vibrated. Damage from liquefaction results primarily from horizontal and vertical displacement of the ground. These displacements occur because sand/water mixtures in a liquefied condition have virtually no strength and provide little or no resistance to compaction, lateral spreading, or down slope movement. This movement of the land surface can damage buildings, and buried utilities, such as gas mains, water lines and sewers, particularly at their connection to the building.

A structure that did not sustain damage from deformation caused by ground shaking may sustain substantial damage if there is differential settlement or tilt of the building as a result of liquefaction.

Based on the available geotechnical report and from general geological maps, the property is not located within an area designated as having liquefaction potential.

Table 2 – Major Earthquakes that can affect the site

Faults	Maximum Earthquake Magnitude	Approx. Slip Rate (mm/yr)	Approx. Recurrence Interval (years)	Approx. Distance Site (miles)
Malibu Coast-Santa Monica	6.90-7.00	1.0 – 1.5	1400	6.5
Newport-Inglewood	6.90	1.5	1006	9
Whittier-Elsinore	6.80	2.5	840-1005	10
Elysian Park Thrust	**6.70**	**1.5**	**550**	**2**
Palos Verdes	7.10	3.0	700+	17
Sierra Madre-Cucamonga	6.90-7.00	3.0 – 5.0	500-800	12
Hollywood-Raymond	6.60-6.90	1.0 – 1.5	1000+	6
San Andreas (Mojave segment)	7.50	24	550	34
San Jacinto (San Bernardino)	6.70	12	100	36
Verdugo	6.70	0.5	1608	7

The San Andreas Fault is the most discussed fault in the region and is capable of generating the strongest earthquake; however, it is too far from the subject property to pose a serious threat. There are other faults located much closer to the subject property and thus pose a greater threat to the property. The fault closest to the property is the Elysian Park Thrust Fault, which is located approximately 2 miles from the site.

The maximum intensity of shaking estimated at the site for the ground-motions from the faults located near the subject property, a Modified Mercalli Intensity (MMI) of VIII (225-year event) is expected. Table 3 provides an abridged version of the Modified Mercalli Intensity definition. Another measure of the level of earthquake ground shaking typically used for engineering analysis is the ground acceleration. This is normally expressed as fractions of gravitational acceleration, g's, for a simple linear scaling. Based on USGS (2008) data, the peak ground acceleration at the site associated with a 225-year recurrence interval is approximately 0.37g.

Table 3 – Modified Mercalli Intensity Scale

I.	Not felt. Marginal and long-period effects of large earthquakes.
II.	Felt by persons at rest, on upper floors, or favorably places.
III.	Felt indoors. Hanging objects swing. Vibration like passing of light trucks. Duration estimated. May not be recognized as an earthquake.
IV.	Hanging objects swing. Vibration like passing of heavy trucks; or sensation of a jolt like a ball striking the walls. Standing motor cars rock. Windows, dishes and doors rattle. Glasses clink. Crockery clashes. In the upper range of IV wooden walls and frames creak.
V.	Felt outdoors; direction estimated. Sleepers wakened. Liquids disturbed, some spilled. Small unstable objects displaced or upset. Doors swing, close, open. Shutters, pictures move. Pendulum clocks stop, start and change rate.
VI.	Felt by all. Many frightened and run outdoors. Persons walk unsteadily. Window, dishes and glassware broken, knickknacks, books, etc. knocked off shelves. Pictures off walls and furniture moved or overturned. Weak plaster and masonry D cracked. Small bells ring (Church, School). Trees, bushes shaken (visible, or heard to rustle).
VII.	Difficult to stand. Noticed by drivers of motor cars. Hanging objects quiver. Furniture broken. Damage to masonry D, including cracks. Weak chimneys broken at roof line. Fall of plaster, loose bricks, stones, tiles, cornices (also unbraced parapets and architectural ornaments). Some cracks in masonry C. Waves on ponds; water turbid with mud. Small slides and caving in along sand or gravel banks. Large bells ring. Concrete irrigation ditches damaged.
VIII.	Steering of motor cars affected. Damage to masonry C; partial collapse. Some damage to masonry B; none to masonry A. Fall of stucco and some masonry walls. Twisting, fall of chimneys, factory stacks, monuments, towers, elevated tanks. Frame houses moved on foundations if not bolted down; loose panel walls thrown out. Decayed piling broken off. Branches broken from trees. Changes in flow or temperature of springs and wells. Cracked in wet ground and on steep slopes.
IX.	General panic. Masonry D destroyed; masonry B seriously damages. (General damage to foundations.) Frame structures, if not bolted, shifted off foundations. Frames racked. Serious damage to reservoirs. Underground pipes broken. Conspicuous cracks in ground. In alleviated areas sand and mud ejected, earthquake foundations, sand craters.
X.	Most masonry and frame structures destroyed with their foundations. Some well-built wooden structures and bridges destroyed. Serious damage to dams, dikes and embankments. Large landslides. Water thrown on banks from canals, rivers, lakes, etc. Sand and mud shifted horizontally on beaches and flat land. Rails bent slightly.
XI.	Rails bent greatly, Underground pipelines completely out of service.
XII.	Damage nearly total. Large rock masses displaced. Lines of sight and level distorted. Objects thrown into the air.

Source: Richter, C.F. Elementary Seismology. San Francisco CA: W. H. Freeman Co., 1957.

Note: To avoid ambiguity, the quality of masonry, brick, or other material is specified by the following lettering system. (This has no connection with the conventional classes A, B, and C construction.)

Masonry A.	*Good workmanship, mortar, and design; reinforced, especially laterally, and bound together by using steel, concrete, etc.; designed to resist lateral forces.*
Masonry B.	*Good workmanship and mortar; reinforced, but not designed to resist lateral forces.*
Masonry C.	*Ordinary workmanship and mortar; no extreme weaknesses, like failing to tie in a corner, but neither reinforced nor designed to resist horizontal forces.*
Masonry D.	*Weak materials, such as adobe; poor mortar; low standards of workmanship; weak horizontally.*

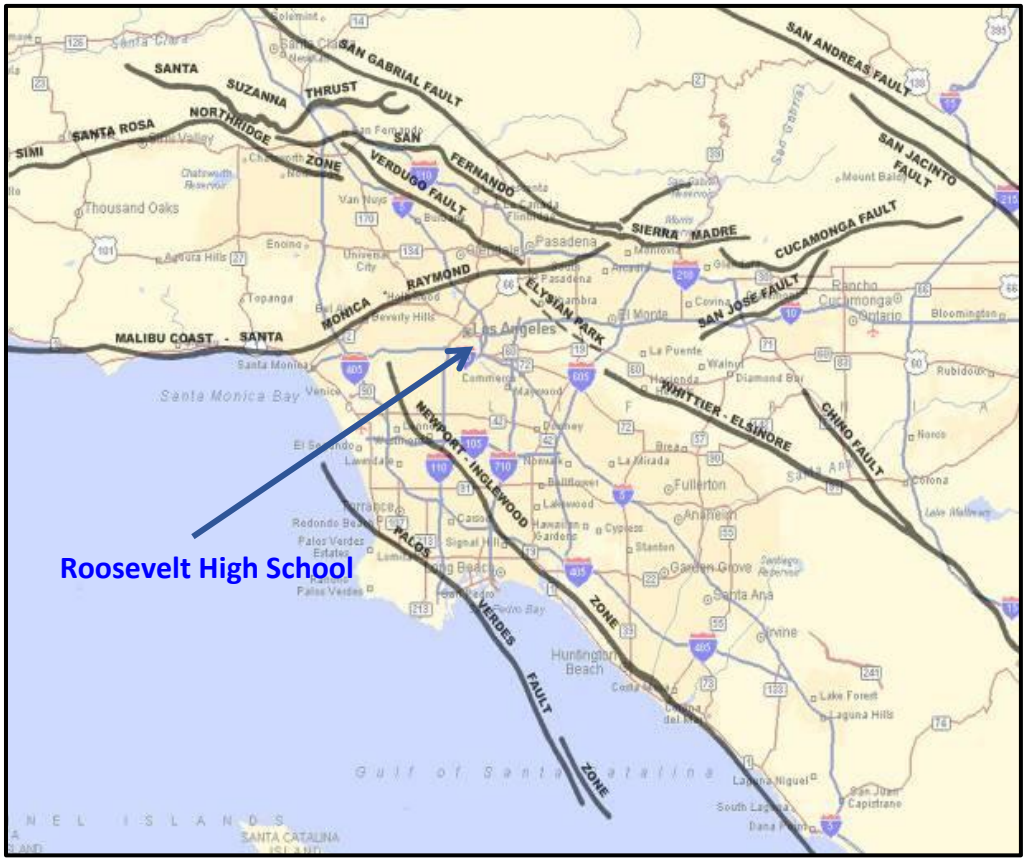


Figure 2: Major Faults in Southern California Area Near Site

3.2 Building Description

The existing Auditorium/Classroom building actually consists of three structurally separate structures that house the main auditorium and classrooms. The building was originally constructed in 1922 as the Auditorium and North end/wing (known herein as “Middle”). Two years later in 1924 the South end/wing was constructed adjacent to the Middle portion. In 1936, the original building and the North end/wing were retrofitted, mainly with the addition of reinforced gunite applied to the exterior faces of the original brick walls as well as the addition of separation (expansion) joints to create the current three sections. Gunite was also used to locally strengthen many interior Hollow Clay Tile (HCT) walls. The South end/wing received a retrofit in 1954, similar to that of the other buildings with the addition of gunite walls.

The original 1922 building was constructed as one building, but was later separated with a 4" expansion joint as part of the 1936 retrofit work, thus creating a the Middle and North portions. It appears that the South portion was hard connected to the Middle portion when originally built in 1924 and was later separated with a 6" expansion joint as part of the 1936 retrofit work. In circa 1986, an elevator tower and other miscellaneous renovation items were performed.

The original use of the entire building has for the most part been unchanged over the years and has served as lecture classrooms, art rooms, science labs, and auditorium.

Vertical Carrying System:

The vertical load carrying system of Building 1 consists of a combination of wood framing, concrete construction, and steel beams.

1) Main building portion (original – 1922): the roof framing consists of straight 1x planks over wood roof joists at the classrooms. At the auditorium, the roof diaphragm remains as 1x planks but they are over existing reinforced steel trusses. At the auditorium stage, the roof framing consists of a 4" concrete slab over steel beams. The balcony in the auditorium is constructed of steel beams, steel girders, and steel columns. Excluding the balcony framing, the above roof framing is supported by either reinforced concrete walls, gunite walls, or gunite strengthened brick walls. Both 2nd and 3rd floor framing in classrooms is made up of straight 1x planks over wood joists or reinforced concrete slab supported by either reinforced concrete walls, gunite walls, or gunite strengthened brick walls.

2) Classroom Addition at South wing (original – 1924): the roof framing consists of straight 1x planks over wood trusses supported by either reinforced concrete walls or gunite strengthened brick walls. Both 2nd and 3rd floor framing consists of 1x diagonal planks over wood joists supported by reinforced concrete walls and gunite strengthened brick walls.

Lateral Resisting System:

1) Main building portion (original – 1922): The lateral load resisting system for the building consists of roof diaphragm regions at all story levels, excluding the ground level. The flexible diaphragms consist of wood planks – straight at the roof level and diagonal configuration at the floor levels. Rigid diaphragms (4 ½" – 8" concrete slab) occur at all floor and roof levels. There is also the presence of steel horizontal bracing at Building 1 which are located at the roof level in both wings of the building and were part of the 1936 strengthening measures. Horizontal braces also occur at the balcony in the auditorium as part of the original construction. The diaphragms and steel horizontal braces transfer lateral seismic and wind loads to reinforced concrete or gunite strengthened brick shear walls.

2) Classroom Addition at South wing (original – 1924): the lateral load resisting system for the building at the roof level consists of flexible diaphragms in the classrooms and horizontal steel bracing at the corridor roof. These diaphragms transfer lateral seismic and wind loads to gunite strengthened brick and hollow clay shear walls. Both 2nd and 3rd floor lateral load resisting system consists of diaphragms constructed from 1x diagonal wood planks at the classrooms and a concrete slab at the corridor. These diaphragms transfer lateral seismic and wind loads to solid gunite, gunite strengthened brick, and gunite strengthened hollow clay shear walls.

Foundation System:

The foundation for both portions of the building consist of a concrete slab on grade with isolated pad footings at columns and continuous wall footings at load bearing and shear walls. Piles were added at the expansion joint at the South wing as part of the 1936 strengthening and modification effort.

3.3 Building Description Summary Table

Auditorium / Classrooms: Building 1 Summary Table	
Year Designed	Original:1922 (Auditorium, North Wing) Original: 1924 (South Wing) Retrofit: 1936 (Auditorium, North Wing) Retrofit: 1954 (South Wing) Renovation: c.1986
Drawings	Original drawings prepared by Hunt & Barnes (Architect)
Gravity System	Wood and concrete floor and roof slabs
Lateral System	Reinforced brick and concrete walls
No. of Stories & Height	3 Stories (Approx. 40')
Approximate Area	105,000 sf
Building Period "T"	0.15 sec (South Wing) 0.10 sec (Middle Wing) 0.10 sec (North Wing)
Base Shear "V"	2030 kips (South Wing / X-Direction / Dynamic) 2585 kips (South Wing / Y-Direction / Dynamic) 3875 kips (Middle Wing / X-Direction / Dynamic) 2848 kips (Middle Wing / Y-Direction / Dynamic) 1624 kips (North Wing / X-Direction / Dynamic) 1744 kips (North Wing / Y-Direction / Dynamic)
ASCE 41-13 Risk Category	III
Major Seismic Deficiencies	See Section 4.3
Retrofit Recommendations	See Section 5.1

3.4 Building plans

See Appendix 1-D for the original structural plans.

4.0 Evaluation Methodology and Findings

The evaluation methodology for the initial screening of the Auditorium / Classroom (Building 1) is based on ASCE 41-13 Tier 1 Screening. This screening consists of checklists, which allow for a rapid evaluation of the existing structure and non-structural conditions to the "Life Safety" performance level, per Section 4.1.1. It should be noted that in general the Tier 1 Screening is only performed to the "Life Safety" or "Immediate Occupancy" levels per Section 4.1.1. These checklists have been completed and can be found in Appendix 1-A**.**

After the Tier 1 Screening was performed, a Tier 2 Evaluation was implemented for the deficiencies that were found during the Tier 1 Screening. As a Risk Category III, the Basic Performance Objective for the building was Damage Control Performance Level (S-3, including Table 2-1 footnote b) per Table 2-1 of ASCE 41-13, shown below. Deficiencies that were identified in the Tier 1 Screening were then analyzed using a BSE-1E (20% probability of exceedence in 50 years, 225 year return period) seismic event; some were found to be "Compliant" and others were found to remain "Deficient."

Table 2-1. Basic Performance Objective for Existing Buildings (BPOE)

	Tier 1[a]	Tier 2[a]	Tier 3	
Risk Category	**BSE-1E**	**BSE-1E**	**BSE-1E**	**BSE-2E**
I & II	Life Safety Structural Performance Life Safety Nonstructural Performance (3-C)	Life Safety Structural Performance Life Safety Nonstructural Performance (3-C)	Life Safety Structural Performance Life Safety Nonstructural Performance (3-C)	Collapse Prevention Structural Performance Nonstructural Performance Not Considered (5-D)
III	See footnote *b* for Structural Performance Position Retention Nonstructural Performance (2-B)	Damage Control Structural Performance Position Retention Nonstructural Performance (2-B)	Damage Control Structural Performance Position Retention Nonstructural Performance (2-B)	Limited Safety Structural Performance Nonstructural Performance Not Considered (4-D)
IV	Immediate Occupancy Structural Performance Position Retention Nonstructural Performance (1-B)	Immediate Occupancy Structural Performance Position Retention Nonstructural Performance (1-B)	Immediate Occupancy Structural Performance Position Retention Nonstructural Performance (1-B)	Life Safety Structural Performance Nonstructural Performance Not Considered (3-D)

[a]For Tier 1 and 2 assessments, seismic performance for the BSE-2E is not explicitly evaluated.
[b]For Risk Category III, the Tier 1 screening checklists shall be based on the Life Safety Performance Level (S-3), except that checklist statements using the Quick Check procedures of Section 4.5.3 shall be based on MS-factors and other limits that are an average of the values for Life Safety and Immediate Occupancy.

4.1 ASCE 41-13 Tier 1 Evaluation Summary

The following deficiencies were identified in the Tier 1 analysis:

1. Inadequate expansion/separation joints at adjacent buildings
2. Building Geometry
3. Building Torsion
4. Overturning
5. Ties Between Foundation Elements
6. Large Shear Stress at Walls
7. Out-of-plane wall anchors
8. Shear Transfer at Walls
9. Foundation Dowels
10. Straight Sheathing
11. Wood Diaphragm Spans
12. Diagonally Sheathed and Unblocked Diaphragms

4.2 ASCE 41-13 Tier 2 Evaluation

All of the deficiencies listed above were reviewed using a Tier 2 Evaluation and some were found to remain deficient. Items not listed below have been verified to be compliant through calculation, which can be found in Appendix 1-B. The remaining Tier 2 deficiencies include:

1. Tier 2 Deficiency 3 per Section *5.4.3.3*

   Foundation is not detailed to adequately transfer overturning forces at wall piers.
2. Tier 2 Deficiency 4 per Section *5.4.3.4*

   Lack of shear dowels at wall to foundation interface. The majority of the shear walls and gunite partition walls are not doweled to the support elements (i.e. foundations, support beams/slabs/columns).

3. Tier 2 Deficiency 5 per Section *5.5.3.1.1*

   Shear walls lack shear and flexural strength to transfer loads to foundations. Spandrel beams lack adequate flexure and shear strength between wall piers.

4. Tier 2 Deficiency 6 per Section 5.7.1.1

   Out-of-plane wall-to-floor/roof anchors do not meet ASCE 41-13 Tier 2 acceptance criteria. Plus, base of walls are not doweled properly and walls not able to span vertically.

5. Tier 2 Deficiency 7 per Section 5.7.2

   Lack of in-plane shear transfer capacity of existing connections.

6. Tier 2 Deficiency 8 per Section 5.7.3.4

   Lack of shear capacity of existing dowels. The majority of the shear walls and gunite partition walls are not doweled to the support elements (i.e. foundations, support beams/slabs/columns).

7. Tier 2 Deficiency 9 per Section 5.6.2

   Roof Diaphragms consist of straight sheathing.

8. Tier 2 Deficiency 10 per Section 5.6.2

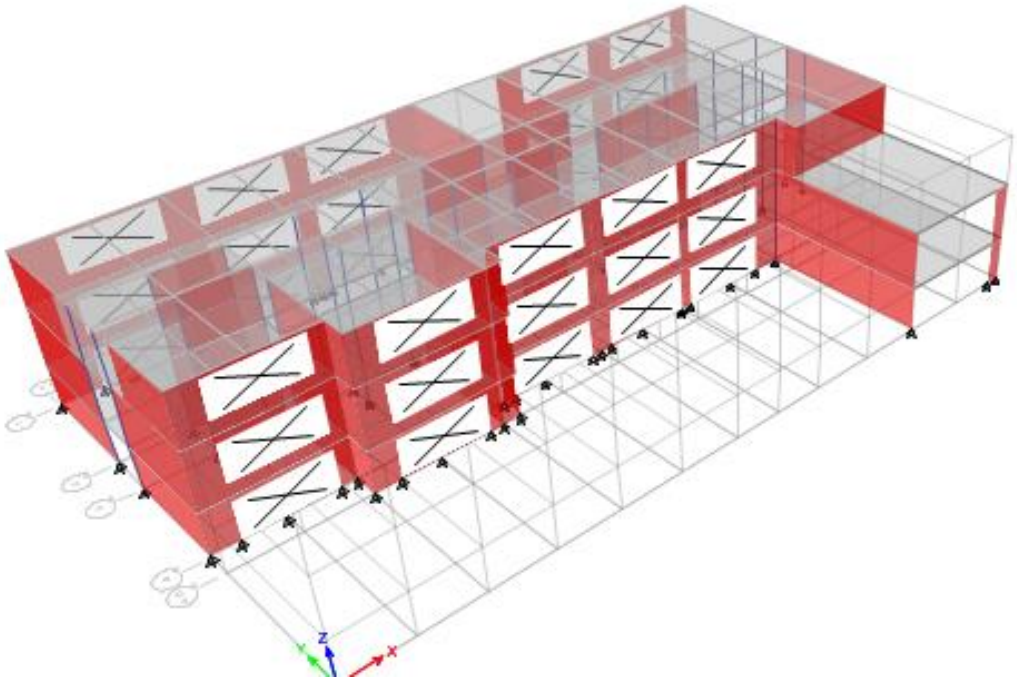
   Wood diaphragms have large demands due to spans.

9. Tier 2 Deficiency 11 per Section 5.6.2

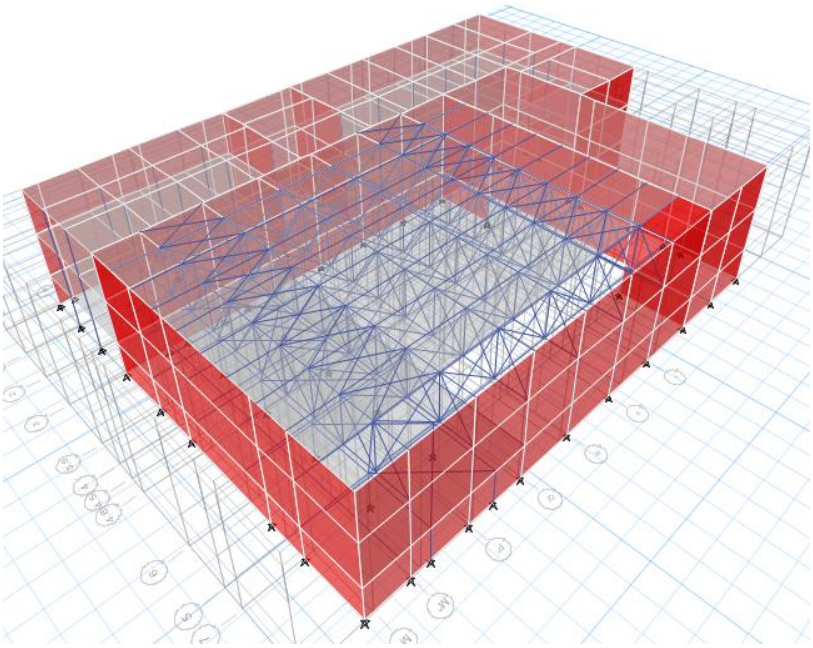
   Weak capacity of diagonal sheathing. At many locations there is a lack of connectivity of the diaphragms to the shear walls. Adequacy of horizontal steel bracing is deficient.

As noted earlier, the above deficiencies were determined with a linear dynamic computer model of the building, as well as engineering fundamentals. Capacities of structural materials were taken from ASCE 41-13, unless the strengths were indicated on the structural drawings. Refer to Appendix 1-B for detailed assumptions/design criteria.

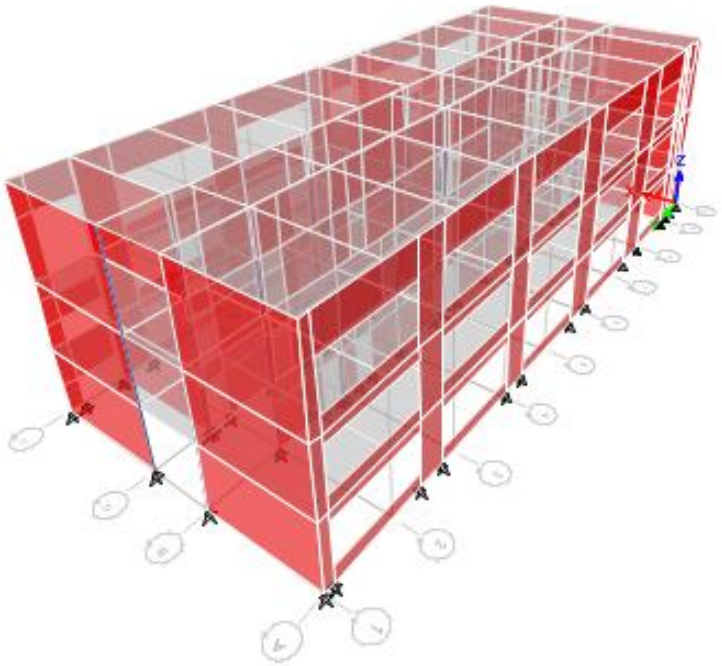
As part of the Tier 2 checks, elements of the lateral system related to the itemized deficiency were also checked for adequacy in order to provide a complete load path all though the item may not have been an identified concern in Tier 1. For example, the out-of-plane adequacy of a concrete wall is reasonable to validate the wall anchorage deficiency was discovered since the wall should not fail before delivery of forces to wall anchors. Likewise, adequacy of the horizontal diaphragm is checked due to the delivery of the wall anchorage forces. The intent of this is to ensure that a complete and viable load path exists of the deficient items.



3D-Dynamic Computer Model – North



3D-Dynamic Computer Model – Middle



3D-Dynamic Computer Model – South

4.3 Tier 2 Evaluation and Proposed Retrofit Summary Table

Building	Identified Tier 1 Deficiencies	Tier 2 section number	Tier 2 Evaluation Result	Proposed Retrofit
Auditorium / Classrooms Building 1 Target Structural Performance Level: Damage Control	16.1 Adjacent Buildings	5.4.1.2	Adequate	None – Dynamic analysis of Tier 2 proved item to be adequate.
	16.1 Building Geometry	5.4.2.4	Adequate	None – Dynamic analysis of Tier 2 proved item to be adequate.
	16.1 Building Torsion	5.4.2.6	Adequate	None – Dynamic analysis of Tier 2 proved item to be adequate.
	16.1 Overturning	5.4.3.3	Deficient	Retrofit is proposed. See structural retrofit sketches in Appendix 1-C.
	16.1 Ties Between Foundation Elements	5.4.3.4	Deficient	Retrofit is proposed. See structural retrofit sketches in Appendix 1-C.
	16.10 Shear Stress Check	5.5.3.1.1	Deficient	Retrofit is proposed. See structural retrofit sketches in Appendix 1-C.
	16.10 Wall Anchorage	5.7.1.1	Deficient	Retrofit is proposed. See structural retrofit sketches in Appendix 1-C.
	16.10 Transfer to Shear Walls	5.7.2	Deficient	Retrofit is proposed. See structural retrofit sketches in Appendix 1-C.
	16.10 Foundation Dowels	5.7.3.4	Deficient	Retrofit is proposed. See structural retrofit sketches in Appendix 1-C.
	16.10 Straight Sheathing	5.6.1.2	Deficient	Retrofit is proposed. See structural retrofit sketches in Appendix 1-C.
	16.10 Spans	5.6.2	Deficient	Retrofit is proposed. See structural retrofit sketches in Appendix 1-C.
	16.10 Diagonally Sheathed and Unblocked Diaphragms	5.6.2	Deficient	Retrofit is proposed. See structural retrofit sketches in Appendix 1-C.

5.0 Conclusions

Based on the Tier 2 evaluation performed, the following are the findings related to the anticipated seismic performance of the Auditorium / Classroom (Building 1). It should be noted that with any older structure such as this 60+ year old building, it would not be expected to conform to the current design code, as the design codes have evolved over the life of the building. The purpose of this report is to perform a Tier 2 evaluation of the deficiencies identified by a Tier 1 Evaluation of the building and not to upgrade the building to meet current code.

The primary seismic concerns with the building are the lack of adequate diaphragms, lack of an adequate vertical lateral bracing system, and lack of out-of-plane anchorage of the heavy walls to the existing diaphragms.

Each of the deficiencies increases the threat of damage to the building and/or the life safety of the occupants. For this reason we recommend that all of the recommended voluntary seismic upgrades be implemented, to improve the seismic performance of the building.

Given the reasons above, a voluntary seismic retrofit is recommended for this structure.

5.1 Proposed Retrofit Options

Summary of Retrofit options:

1. Tier 2 Deficiency 3 per Section 5.4.3.3
   Recommendation: Install new concrete shear walls with proper foundations and drag elements to bypass original lateral bracing system. Refer to retrofit sketches.
2. Tier 2 Deficiency 4 per Section 5.4.3.4
   Recommendation: Install new concrete shear walls with proper foundations and drag elements to bypass original lateral bracing system. Refer to retrofit sketches

3. Tier 2 Deficiency 5 per Section 5.5.3.1.1

   Recommendation: Install new concrete shear walls with proper foundations and drag elements to bypass original lateral bracing system. Refer to retrofit sketches

4. Tier 2 Deficiency 6 per Section 5.7.1.1

   Recommendation: Provide a direct load with a new out-of-plane wall anchorage system along with new diaphragms and cross/continuity ties for proper delivery and a complete load path. Refer to retrofit sketches

5. Tier 2 Deficiency 7 per Section 5.7.2

   Recommendation: As part of new lateral bracing system, provide new transfer connections and mechanisms for complete load path. Refer to retrofit sketches

6. Tier 2 Deficiency 8 per Section 5.7.3.4

   Recommendation: To be rectified with new lateral bracing system of shear walls. Remove HCT and interior gunite walls that are non-structural. Refer to retrofit sketches

7. Tier 2 Deficiency 9 per Section 5.6.2

   Recommendation: Remove and replace existing sheathing with new high capacity plywood diaphragms. Refer to retrofit sketches

8. Tier 2 Deficiency 10 per Section 5.6.2

   Recommendation: Remove and replace existing sheathing with new high capacity plywood diaphragms. Refer to retrofit sketches

9. Tier 2 Deficiency 11 per Section 5.6.2

   Recommendation: Remove and replace existing sheathing with new high capacity plywood diaphragms. Strengthen existing horizontal steel bracing, as required. Refer to retrofit sketches

5.2 Structural Retrofit Selection Recommendations and Conclusions

Based on our analysis of the Auditorium / Classroom (Building 1) we strongly recommend implementing the retrofit options discussed in Section 5.1 and presented in the accompanying sketches, which are summarized as:

1. Create a complete lateral path with new diaphragms and vertical lateral bracing in the form of concrete shear walls and foundations, bypassing/neglecting any contribution/value of the existing bracing system.
2. Provide a "direct load path" for the out-of-plane wall anchorage system by installing appropriate hardware at the walls-to-floor framing and within the roof framing. Anchor existing walls to remain at their bases.
3. Remove and replace the roof diaphragm to a high capacity plywood sheathed system to complete load path of wall anchorage system as well as structural diaphragm. Includes providing adequate shear transfer mechanisms at the shear walls to delivery lateral forces.

Note that these retrofit measures are inter-related and as such should be performed in their entirety to be fully effective.

6.0 Documents Reviewed

The following is a list of the building documentation that was made available for review.

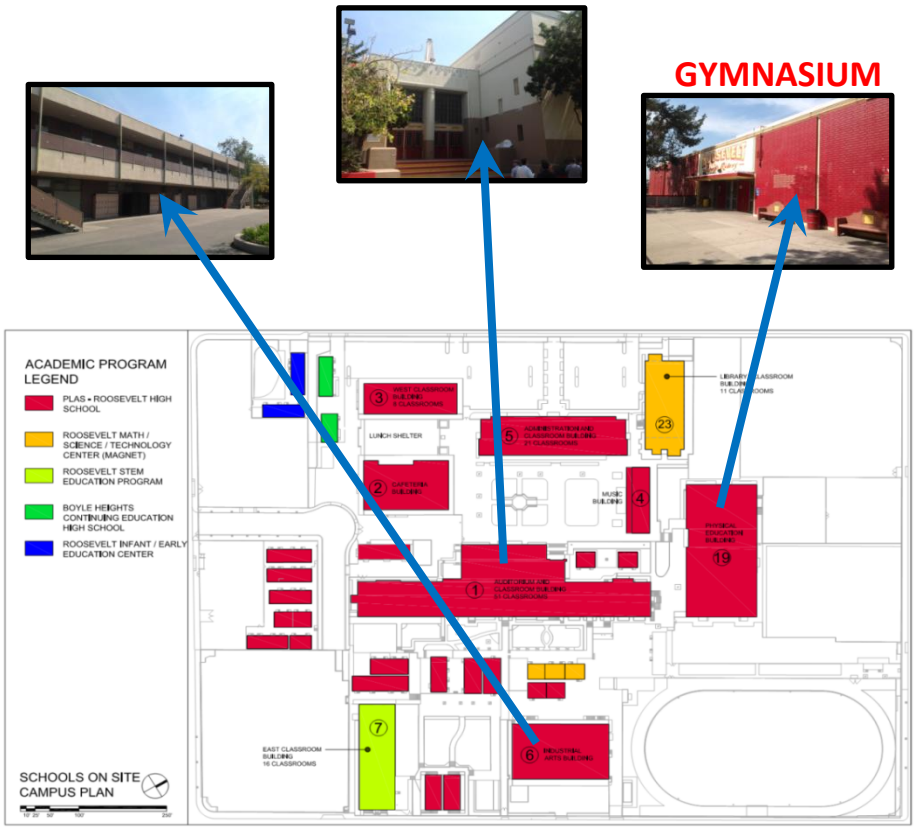
Building	Structural Engineer of Record	Drawing/ Report Date(s)	Certified by State of California Department of Public Works Division of Architecture (i.e. DSA)
Auditorium / Classrooms (Bldg. 1)	Original: Hunt & Burns Architects	1922	Pre-Oversight
	Original: Hunt & Burns Architects	1924	Pre-Oversight
	Strengthening: Oliver G. Bowen	1936	Unknown
	Repair: Unknown	1949	Yes (Application #7020)
	Strengthening: Oliver G. Bowen	1954	Unknown
	Renovation: Millard Archuleta Associates AIA	1986	Unknown
	Geotechnical Investigation Proposed Roosevelt High School Campus Modifications by Geotechnical Professionals Inc.	2015	N.A.

7.0 Introduction

A multiphase seismic vulnerability assessment of the Gymnasium building (Building 19) was conducted, beginning with a site visit on 03/31/2015, an ASCE 41-13 Tier 1 Screening, and concluding with an ASCE 41-13 Tier 2 "Deficiency-Based" Evaluation. The Tier 1 screening identified potential deficiencies for the building, which have been further investigated in the Tier 2 Evaluation.

All of the evaluations and studies were based on existing documents provided by the District (see Section *3.4, 6.0, 8.4, 11.0, 13.4, and 16.0*), a site walk-through of the building, and structural calculations performed using the guidelines outlined in ASCE 41-13.

An overall campus map, indicating the buildings under evaluation, is provided below. The remainder of the report will address these buildings on an individual basis.



ROOSEVELT HIGH SCHOOL CAMPUS MAP

8.0 Gymnasium: Building 19

8.1 Site Seismicity

Site-specific geotechnical report information for the property was available for this evaluation, as prepared by *Geotechnical Professionals Inc.*, dated June 14, 2015. Site-specific geotechnical report information for the campus indicates that the site is underlain by surficial alluvium that masks the mapped alluvium and sedimentary rocks. From the borings, there is a significant amount of undocumented fill over the natural materials that consist of predominately dense to very dense silty sands and very stiff to hard sandy silts, clayey silts, sandy clays and silty clays. The campus Soil Type was identified as Site Class D with a Seismic Design Category identified as D. The reported site-specific spectral acceleration at 0.2 seconds and 1.0 second periods, S_{XS} and S_{X1}, are 0.859g and 0.491g, respectively. The data used to derive these spectral acceleration values are from 2014 hazard data (USGS) in accordance with ASCE 41-13.

The campus site is located in Southern California, a region of high seismic activity. There are several faults in the region that are capable of having major earthquakes on them that pose a potential damageability threat to the campus structures. Figure 2 shows the major faults affecting the Southern California area which are capable of producing moderate to large magnitude earthquakes. Table 2 lists the faults shown in Figure 2 and gives the Maximum Earthquake (ME) that each of the faults is capable of producing, mean recurrence interval for such an earthquake event, and approximate distance of the faults from the subject property. The Maximum Earthquake (ME) refers to the largest earthquake that can be expected to occur along a given fault or fault zone. The maximum size of an earthquake for a fault is based on the length of the fault, its width (i.e., depth into the earth's crust), and to some extent on the type of fault, whether thrust, normal, or strike slip. The frequency of occurrence of Maximum Earthquakes depends on the slip rate of the fault.

The earthquake effects that are most likely to cause damage to the structure include ground shaking intensity and duration, ground fault rupture, liquefaction, lateral spreading, compaction, and landsliding. The ground shaking representation and effects of other geologic hazards on the subject property are discussed further.

Ground Fault Rupture

Ground fault rupture is the direct manifestation of the movement along a fault, projected to the ground surface. It consists of a concentrated, permanent deformation of the ground surface, which, in major earthquakes, can extend many miles along the trace of the fault. This deformation can be in horizontal and/or vertical direction. A ground-surface rupture involving more than a few inches of movement within a concentrated area can result in major damage to structures that cross it.

The State Geologist is required under the Alquist-Priolo Special Studies Zones Act, Code of California Regulations, signed into law on December 22, 1972, to delineate special study zones along known active faults in California. The purpose of this act is to prohibit the location of most structures for human occupancy across the traces of active faults and to mitigate, thereby, the hazard of fault rupture.

The subject property is of a size and occupancy class that is included within the types regulated under the Alquist-Priolo Act. However, an examination of the maps and reports published by the Division of Mines and Geology, Department of Conservation indicates that there are no special study zones within the project area.

The property is not located at a site where surface rupture is likely to occur from active or potentially active earthquake faults as identified by any Federal, State or Local Governmental Agency. Furthermore, the closest identified fault to the building site is the Elysian Park Thrust Fault, which is approximately 2 miles from the site. See Figure for fault locations in relation to the property.

Landsliding

Landsliding is the downhill movement of masses of earth under the force of gravity. Earthquakes can trigger landslides in areas that are already landslide prone. Landslides are most common on slopes of more than 15 degrees.

The property is not located on land designated as having landslide hazard.

Liquefaction

Liquefaction is the sudden loss of bearing strength that can occur when saturated, cohesionless soils (sands and silts) are strongly and repetitively vibrated. Damage from liquefaction results primarily from horizontal and vertical displacement of the ground. These displacements occur because sand/water mixtures in a liquefied condition have virtually no strength and provide little or no resistance to compaction, lateral spreading, or down slope movement. This movement of the land surface can damage buildings, and buried utilities, such as gas mains, water lines and sewers, particularly at their connection to the building.

A structure that did not sustain damage from deformation caused by ground shaking may sustain substantial damage if there is differential settlement or tilt of the building as a result of liquefaction.

Based on the available geotechnical report and from general geological maps, the property is not located within an area designated as having liquefaction potential.

Table 2 - Major Earthquakes that can affect the site

Faults	Maximum Earthquake Magnitude	Approx. Slip Rate (mm/yr)	Approx. Recurrence Interval (years)	Approx. Distance Site (miles)
Malibu Coast-Santa Monica	6.90-7.00	1.0 - 1.5	1400	6.5
Newport-Inglewood	6.90	1.5	1006	9
Whittier-Elsinore	6.80	2.5	840-1005	10
Elysian Park Thrust	**6.70**	**1.5**	**550**	**2**
Palos Verdes	7.10	3.0	700+	17
Sierra Madre-Cucamonga	6.90-7.00	3.0 - 5.0	500-800	12
Hollywood-Raymond	6.60-6.90	1.0 - 1.5	1000+	6
San Andreas (Mojave segment)	7.50	24	550	34
San Jacinto (San Bernardino)	6.70	12	100	36
Verdugo	6.70	0.5	1608	7

The San Andreas Fault is the most discussed fault in the region and is capable of generating the strongest earthquake; however, it is too far from the subject property to pose a serious threat. There are other faults located much closer to the subject property and thus pose a greater threat to the property. The fault closest to the property is the Elysian Park Thrust Fault, which is located approximately 2 miles from the site.

The maximum intensity of shaking estimated at the site for the ground-motions from the faults located near the subject property, a Modified Mercalli Intensity (MMI) of VIII (225-year event) is expected. Table 3 provides an abridged version of the Modified Mercalli Intensity definition. Another measure of the level of earthquake ground shaking typically used for engineering analysis is the ground acceleration. This is normally expressed as fractions of gravitational acceleration, g's, for a simple linear scaling. Based on USGS (2008) data, the peak ground acceleration at the site associated with a 225-year recurrence interval is approximately 0.37g.

Table 3 - Modified Mercalli Intensity Scale

I.	Not felt. Marginal and long-period effects of large earthquakes.
II.	Felt by persons at rest, on upper floors, or favorably places.
III.	Felt indoors. Hanging objects swing. Vibration like passing of light trucks. Duration estimated. May not be recognized as an earthquake.
IV.	Hanging objects swing. Vibration like passing of heavy trucks; or sensation of a jolt like a ball striking the walls. Standing motor cars rock. Windows, dishes and doors rattle. Glasses clink. Crockery clashes. In the upper range of IV wooden walls and frames creak.
V.	Felt outdoors; direction estimated. Sleepers wakened. Liquids disturbed, some spilled. Small unstable objects displaced or upset. Doors swing, close, open. Shutters, pictures move. Pendulum clocks stop, start and change rate.
VI.	Felt by all. Many frightened and run outdoors. Persons walk unsteadily. Window, dishes and glassware broken, knickknacks, books, etc. knocked off shelves. Pictures off walls and furniture moved or overturned. Weak plaster and masonry D cracked. Small bells ring (Church, School). Trees, bushes shaken (visible, or heard to rustle).
VII.	Difficult to stand. Noticed by drivers of motor cars. Hanging objects quiver. Furniture broken. Damage to masonry D, including cracks. Weak chimneys broken at roof line. Fall of plaster, loose bricks, stones, tiles, cornices (also unbraced parapets and architectural ornaments). Some cracks in masonry C. Waves on ponds; water turbid with mud. Small slides and caving in along sand or gravel banks. Large bells ring. Concrete irrigation ditches damaged.
VIII.	Steering of motor cars affected. Damage to masonry C; partial collapse. Some damage to masonry B; none to masonry A. Fall of stucco and some masonry walls. Twisting, fall of chimneys, factory stacks, monuments, towers, elevated tanks. Frame houses moved on foundations if not bolted down; loose panel walls thrown out. Decayed piling broken off. Branches broken from trees. Changes in flow or temperature of springs and wells. Cracked in wet ground and on steep slopes.
IX.	General panic. masonry D destroyed; masonry B seriously damages. (General damage to foundations.) Frame structures, if not bolted, shifted off foundations. Frames racked. Serious damage to reservoirs. Underground pipes broken. Conspicuous cracks in ground. In alleviated areas sand and mud ejected, earthquake foundations, sand craters.
X.	Most masonry and frame structures destroyed with their foundations. Some well-built wooden structures and bridges destroyed. Serious damage to dams, dikes and embankments. Large landslides. Water thrown on banks from canals, rivers, lakes, etc. Sand and mud shifted horizontally on beaches and flat land. Rails bent slightly.
XI.	Rails bent greatly, Underground pipelines completely out of service.
XII.	Damage nearly total. Large rock masses displaced. Lines of sight and level distorted. Objects thrown into the air.

Source: Richter, C.F. Elementary Seismology. San Francisco CA: W. H. Freeman Co., 1957.

Note: To avoid ambiguity, the quality of masonry, brick, or other material is specified by the following lettering system. (This has no connection with the conventional classes A, B, and C construction.)

Masonry A.	*Good workmanship, mortar, and design; reinforced, especially laterally, and bound together by using steel, concrete, etc.; designed to resist lateral forces.*
Masonry B.	*Good workmanship and mortar; reinforced, but not designed to resist lateral forces.*
Masonry C.	*Ordinary workmanship and mortar; no extreme weaknesses, like failing to tie in a corner, but neither reinforced nor designed to resist horizontal forces.*
Masonry D.	*Weak materials, such as adobe; poor mortar; low standards of workmanship; weak horizontally.*

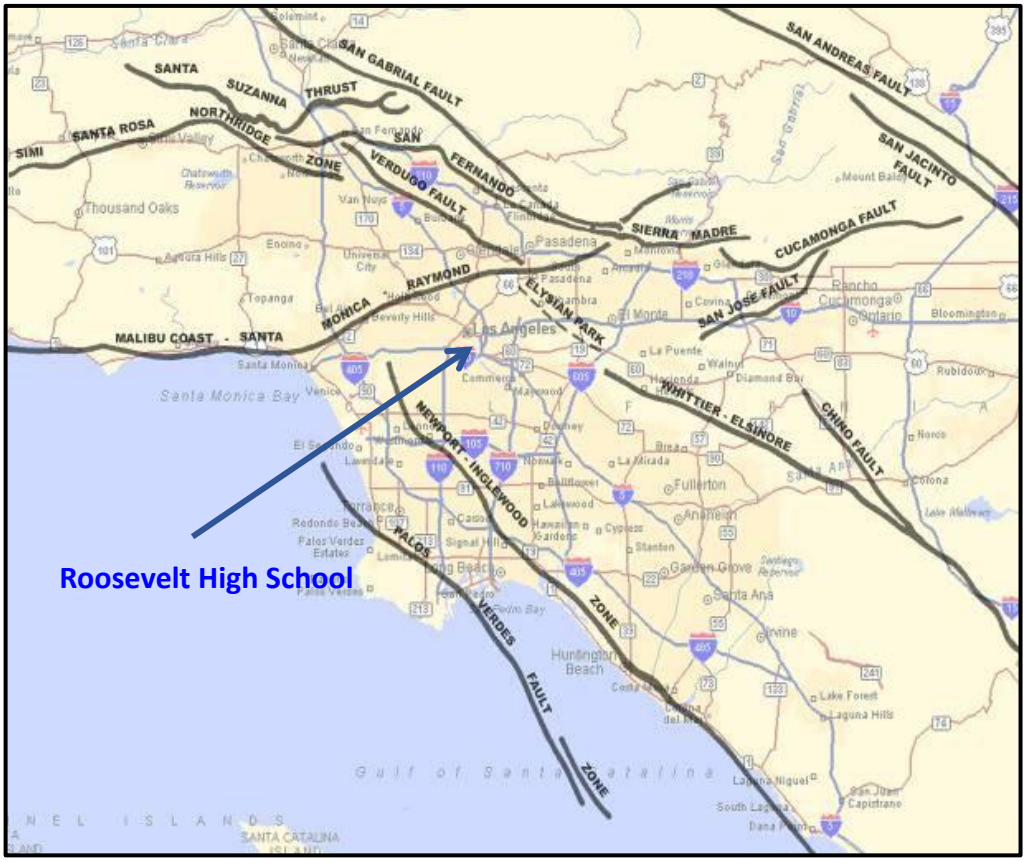


Figure 2: Major Faults in Southern California Area Near Site

8.2 Building Description

The Gymnasium building was originally constructed in 1968 on the north side of the campus. The two level building has varying roof elevations to accommodate the high volume gymnasium spaces and the locker room. The lower locker room is below grade as the grade slopes down at the west end. The building appears to be in its original configuration and has not undergone any significant repair/retrofit work.

Vertical Carrying System:

The vertical load carrying system of the Gymnasium's high roof consists of a combination of wood sheathing and "Tectum" insulated roof panels on top of wood roof joists, steel beams and tapered steel girders. The tapered steel girders are supported by concrete columns, and load bearing concrete walls.

The vertical load carrying system of the Gymnasium's low roof consists of plywood sheathing over wood roof joists, which are supported by steel beams. The steel beams transfer vertical loads to load bearing concrete and masonry walls/pilasters.

At the west side of the building, the elevated level floor framing over the locker room consists of elevated concrete floor slabs supported by concrete beams and girders, which in turn span to cast-in-place concrete columns and cast-in-place load bearing concrete and masonry walls.

Lateral Resisting System:

The lateral load resisting system for the building consists of roof and floor diaphragms that deliver lateral wind/seismic forces to reinforced concrete and masonry shear walls.

Foundation System:

The building walls are founded with continuous wall footings and columns are founded with isolated spread footings.

8.3 Building Description Summary Table

Gymnasium: Building 19 Summary Table	
Year Designed	1968
Drawings	Original drawings by S.B. Barnes and Associates
Gravity System	Wood/steel framed roofs – concrete floor framing
Lateral System	Reinforced brick and concrete walls
No. of Stories & Height	1
Approximate Area	37,000 sf
Building Period "T"	.062 sec
Base Shear "V"	1065 kips (X-Direction- Dynamic) 1492 kips (Y-Direction- Dynamic)
ASCE 41-13 Risk Category	III
Major Seismic Deficiencies	Inadequate roof diaphragms and wall anchorage system.
Retrofit Recommendations	Replace roof sheathing and install wall anchorage system.

8.4 Building plans

See Appendix 2-D for the original structural drawings.

9.0 Evaluation Methodology and Findings

The evaluation methodology for the initial screening of the Gymnasium Building (Building 19) is based on ASCE 41-13 Tier 1 Screening. This screening consists of checklists, which allow for a rapid evaluation of the existing structure and non-structural conditions to the "Life Safety" performance level, per Section 4.1.1. It should be noted that in general the Tier 1 Screening is only performed to the "Life Safety" or "Immediate Occupancy" levels per Section 4.1.1. These checklists have been completed and can be found in Appendix 2-A.

After the Tier 1 Screening was performed, a Tier 2 Evaluation was implemented for the deficiencies that were found during the Tier 1 Screening. As a Risk Category III, the Basic Performance Objective for the building was Damage Control Performance Level (S-2) per Table 2-1 of ASCE 41-13, shown below, and in accordance with Section 2.3.1.2.1 of ASCE 41-13. Deficiencies that were identified in the Tier 1 Screening were then analyzed using a BSE-1E (20% probability of exceedence in 50 years, 225-year return period) seismic event; some were found to be "Compliant" and others were found to remain "Deficient."

As part of the more detailed Tier 2 analysis, a three-dimensional computer model was created and subjected to a linear dynamic analysis using the anticipated seismic earthquake ground motions (225-year event response spectra). From this computer analysis, the anticipated demand forces were extracted and compared to their respective acceptable capacities contained in ASCE 41-13.

Table 2-1. Basic Performance Objective for Existing Buildings (BPOE)

	Tier 1[a]	Tier 2[a]	Tier 3	
Risk Category	BSE-1E	BSE-1E	BSE-1E	BSE-2E
I & II	Life Safety Structural Performance Life Safety Nonstructural Performance (3-C)	Life Safety Structural Performance Life Safety Nonstructural Performance (3-C)	Life Safety Structural Performance Life Safety Nonstructural Performance (3-C)	Collapse Prevention Structural Performance Nonstructural Performance Not Considered (5-D)
III	See footnote *b* for Structural Performance Position Retention Nonstructural Performance (2-B)	Damage Control Structural Performance Position Retention Nonstructural Performance (2-B)	Damage Control Structural Performance Position Retention Nonstructural Performance (2-B)	Limited Safety Structural Performance Nonstructural Performance Not Considered (4-D)
IV	Immediate Occupancy Structural Performance Position Retention Nonstructural Performance (1-B)	Immediate Occupancy Structural Performance Position Retention Nonstructural Performance (1-B)	Immediate Occupancy Structural Performance Position Retention Nonstructural Performance (1-B)	Life Safety Structural Performance Nonstructural Performance Not Considered (3-D)

[a]For Tier 1 and 2 assessments, seismic performance for the BSE-2E is not explicitly evaluated.
[b]For Risk Category III, the Tier 1 screening checklists shall be based on the Life Safety Performance Level (S-3), except that checklist statements using the Quick Check procedures of Section 4.5.3 shall be based on MS-factors and other limits that are an average of the values for Life Safety and Immediate Occupancy.

9.1 ASCE 41-13 Tier 1 Evaluation Summary

The following deficiencies were identified in the Tier 1 analysis:

1. Overturning
2. Out-of-plane wall anchors
3. Diaphragm Continuity
4. Other Diaphragms

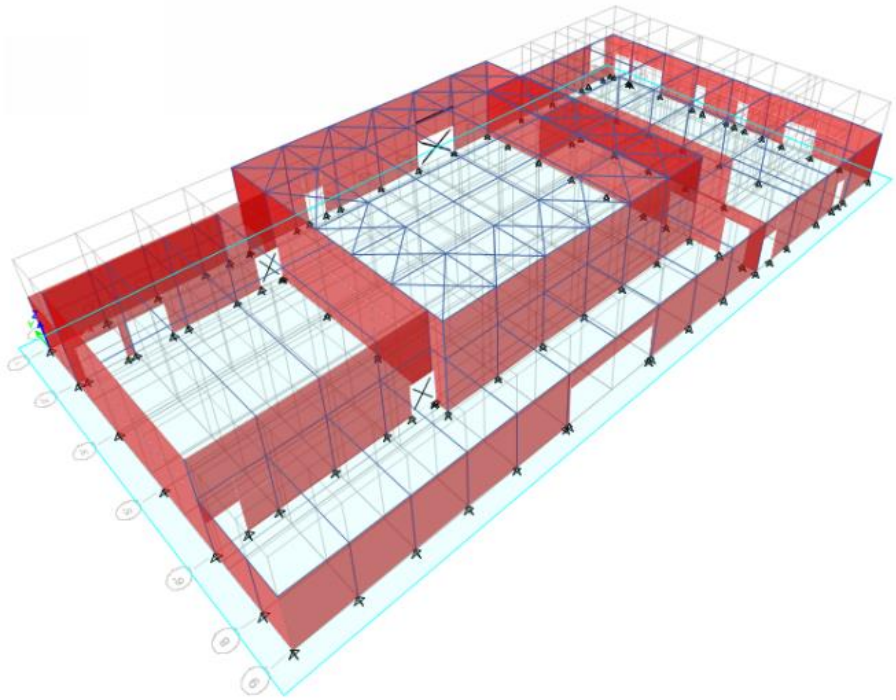
9.2 ASCE 41-13 Tier 2 Evaluation

All of the deficiencies listed above were reviewed using a Tier 2 Evaluation and some were found to remain deficient. Items not listed below have been verified to be compliant through calculation, which can be found in Appendix 2-B. The remaining Tier 2 deficiencies include:

1. Tier 2 Deficiency 2 per Section 5.7.1.1
   Out-of-plane wall-to-roof anchors do not meet ASCE 41-13 Tier 2 acceptance criteria.
2. Tier 2 Deficiency 3 per Section 5.6.1.1
   Walls at split level roof diaphragms do not meet ASCE 41-13 Tier 2 acceptance criteria.
3. Tier 2 Deficiency 4 per Section 5.6.5
   Roof diaphragms consist of non-structural diaphragm material.

As noted earlier, the above deficiencies were determined with a linear dynamic computer model of the building, as well as engineering fundamentals. Capacities of structural materials were taken from ASCE 41-13, unless the strengths were indicated on the structural drawings. Refer to Appendix 2-B for detailed assumptions/design criteria.

As part of the Tier 2 checks, elements of the lateral system related to the itemized deficiency were also checked for adequacy in order to provide a complete load path all though the item may not have been an identified concern in Tier 1. For example, the out-of-plane adequacy of a concrete wall is reasonable to validate the wall anchorage deficiency was discovered since the wall should not fail before delivery of forces to wall anchors. Likewise, adequacy of the horizontal diaphragm is checked due to the delivery of the wall anchorage forces. The intent of this is to ensure that a complete and viable load path exists of the deficient items.



3D-Dynamic Computer Model

9.3 Tier 2 Evaluation and Proposed Retrofit Summary Table

Building	Identified Tier 1 Deficiencies	Tier 2 section number	Tier 2 Evaluation Result	Proposed Retrofit
Gymnasium Building 19 Target Structural Performance Level: Damage Control	16.1.2 Overturning	5.4.3.3	Adequate	None – Wall coupling beams found adequate.
	16.10 Wall Anchorage	5.7.1.1	Deficient	Retrofit is proposed. See structural retrofit sketches in Appendix 2-C
	16.10 Diaphragm Continuity	5.6.1.1	Deficient	Retrofit is proposed. See structural retrofit sketches in Appendix 2-C
	16.10 Other Diaphragms	5.6.2	Deficient	Retrofit is proposed. See structural retrofit sketches in Appendix 2-C

10.0 Conclusions

Based on the Tier 2 evaluation performed, the following are the findings related to the anticipated seismic performance of the Gymnasium Building. It should be noted that with any older structure such as this 40+ year old building, it would not be expected to conform to the current design code, as the design codes have evolved over the life of the building. The purpose of this report is to perform a Tier 2 evaluation of the deficiencies identified by a Tier 1 Evaluation of the building and not to upgrade the building to meet current code.

The primary seismic concerns with the Gymnasium are the out-of-plane anchorage of the heavy walls to the existing diaphragms, as well as the lack of diaphragm capacity to transfer shear to the lateral load resisting system.

Each of the deficiencies increases the threat of damage to the building and/or the life safety of the occupants. For this reason we recommend that all of the recommended voluntary seismic upgrades be implemented, to improve the seismic performance of the building.

Given the reasons above, a voluntary seismic retrofit is recommended for this structure.

10.1 Proposed Retrofit Options

Summary of Retrofit options:

1. Tier 2 Deficiency 2 per Section 5.7.1.1

   Recommendation: Create a “direct load path”, install out-of-plane wall anchorage system including cross/continuity ties. Refer to retrofit sketches.
2. Tier 2 Deficiency 3 per Section 5.6.1.1

   Recommendation: Provide HSS ladder framing at split level elevations to brace walls. Refer to retrofit sketches
3. Tier 2 Deficiency 4 per Section 5.6.5

   Recommendation: Replace insufficient diaphragms with new viable diaphragms and strengthen roof framing elements, as needed. Refer to retrofit sketches.

10.2 Structural Retrofit Selection Recommendations and Conclusions

Based on our analysis of the Gymnasium (Building 19) we strongly recommend implementing the retrofit options discussed in Section 10.1 and presented in the accompanying sketches, which are summarized as:

1. Create a "direct load path" for the out-of-plane anchorage system by installing appropriate hardware at the walls-to-framing and within the roof framing.
2. Remove and replace the roof diaphragm to a high capacity plywood sheathed system to complete load path of wall anchorage system as well as structural diaphragm. Includes providing adequate shear transfer mechanisms at the shear walls to delivery lateral forces.
3. Provide wall bracing at the walls of the split level roof elevations.

Note that these retrofit measures are inter-related and as such should be performed in their entirety to be fully effective.

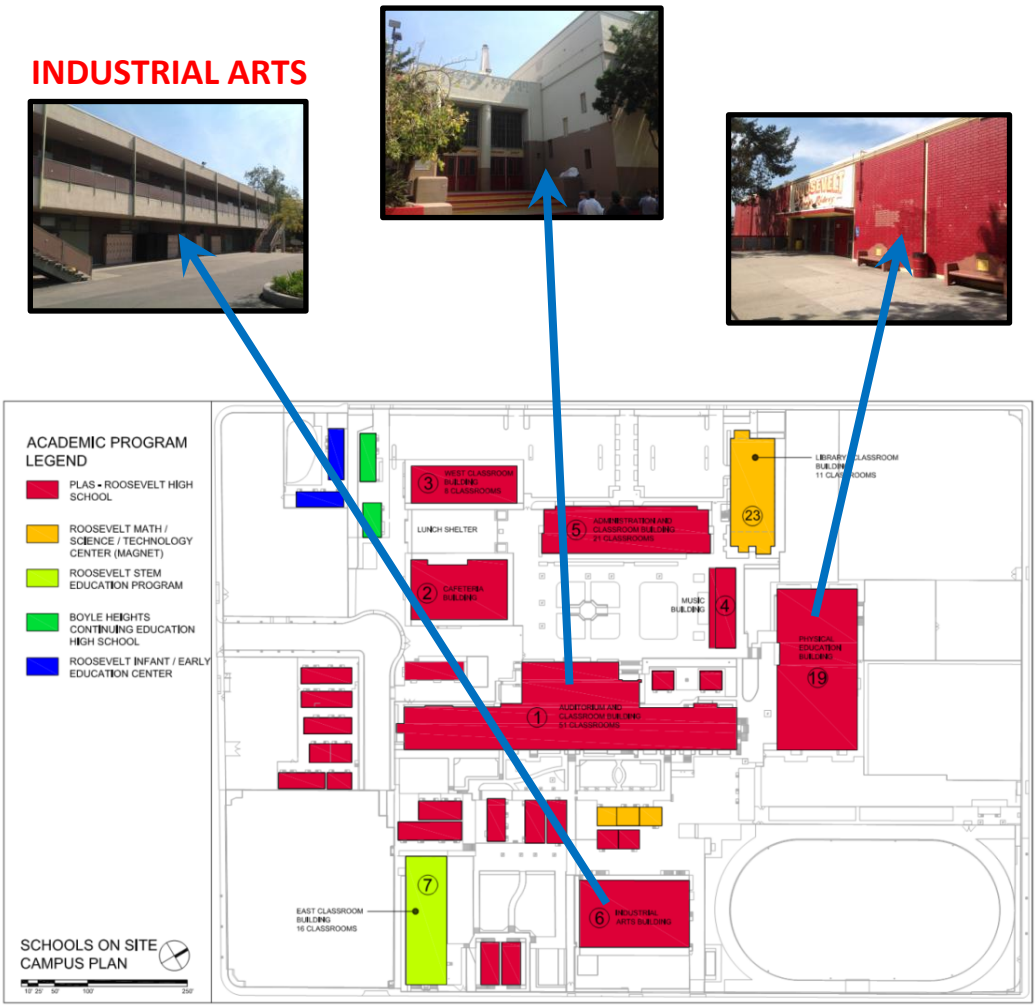
11.0 Documents Reviewed

The following is a list of the building documentation that was made available for review.

Building	Structural Engineer of Record	Drawing Date(s)	Certified by State of California Department of Public Works Division of Architecture (i.e. DSA)
Gymnasium (Bldg. 19)	Original: S.B. Barnes and Associates	1966	Yes (Application #27577)
	Geotechnical Investigation Proposed Roosevelt High School Campus Modifications by Geotechnical Professionals Inc.	2015	N.A.

12.0 Introduction

A multiphase seismic vulnerability assessment of the Industrial Arts building (Building 6) was conducted, beginning with a site visit on 03/31/2015, an ASCE 41-13 Tier 1 Screening, and concluding with an ASCE 41-13 Tier 2 Evaluation. The Tier 1 screening identified potential deficiencies for the building, which have been further investigated in the Tier 2 Evaluation. All of the evaluations and studies were based on existing documents provided by the District (see Section *3.4, 6.0, 8.4, 11.0, 13.4, and 16.0*), a site walk-through of the building, and structural calculations performed using the guidelines outlined in ASCE 41-13. An overall campus map, indicating the buildings under evaluation, is provided below. The remainder of the report will address these buildings on an individual basis.



ROOSEVELT HIGH SCHOOL CAMPUS MAP

13.0 Industrial Arts: Building 6

13.1 Site Seismicity

Site-specific geotechnical report information for the property was available for this evaluation, as prepared by *Geotechnical Professionals Inc.*, dated June 14, 2015. Site-specific geotechnical report information for the campus indicates that the site is underlain by surficial alluvium that masks the mapped alluvium and sedimentary rocks. From the borings, there is a significant amount of undocumented fill over the natural materials that consist of predominately dense to very dense silty sands and very stiff to hard sandy silts, clayey silts, sandy clays and silty clays. The campus Soil Type was identified as Site Class D with a Seismic Design Category identified as D. The reported site-specific spectral acceleration at 0.2 seconds and 1.0 second periods, S_{XS} and S_{X1}, are 0.859g and 0.491g, respectively. The data used to derive these spectral acceleration values are from 2014 hazard data (USGS) in accordance with ASCE 41-13.

The campus site is located in Southern California, a region of high seismic activity. There are several faults in the region that are capable of having major earthquakes on them that pose a potential damageability threat to the campus structures. Figure 2 shows the major faults affecting the Southern California area which are capable of producing moderate to large magnitude earthquakes. Table 2 lists the faults shown in Figure 2 and gives the Maximum Earthquake (ME) that each of the faults is capable of producing, mean recurrence interval for such an earthquake event, and approximate distance of the faults from the subject property. The Maximum Earthquake (ME) refers to the largest earthquake that can be expected to occur along a given fault or fault zone. The maximum size of an earthquake for a fault is based on the length of the fault, its width (i.e., depth into the earth's crust), and to some extent on the type of fault, whether thrust, normal, or strike slip. The frequency of occurrence of Maximum Earthquakes depends on the slip rate of the fault.

The earthquake effects that are most likely to cause damage to the structure include ground shaking intensity and duration, ground fault rupture, liquefaction, lateral spreading, compaction, and landsliding. The ground shaking representation and effects of other geologic hazards on the subject property are discussed further.

Ground Fault Rupture

Ground fault rupture is the direct manifestation of the movement along a fault, projected to the ground surface. It consists of a concentrated, permanent deformation of the ground surface, which, in major earthquakes, can extend many miles along the trace of the fault. This deformation can be in horizontal and/or vertical direction. A ground-surface rupture involving more than a few inches of movement within a concentrated area can result in major damage to structures that cross it.

The State Geologist is required under the Alquist-Priolo Special Studies Zones Act, Code of California Regulations, signed into law on December 22, 1972, to delineate special study zones along known active faults in California. The purpose of this act is to prohibit the location of most structures for human occupancy across the traces of active faults and to mitigate, thereby, the hazard of fault rupture.

The subject property is of a size and occupancy class that is included within the types regulated under the Alquist-Priolo Act. However, an examination of the maps and reports published by the Division of Mines and Geology, Department of Conservation indicates that there are no special study zones within the project area.

The property is not located at a site where surface rupture is likely to occur from active or potentially active earthquake faults as identified by any Federal, State or Local Governmental Agency. Furthermore, the closest identified fault to the building site is the Elysian Park Thrust Fault, which is approximately 2 miles from the site. See Figure for fault locations in relation to the property.

Landsliding

Landsliding is the downhill movement of masses of earth under the force of gravity. Earthquakes can trigger landslides in areas that are already landslide prone. Landslides are most common on slopes of more than 15 degrees.

The property is not located on land designated as having landslide hazard.

Liquefaction

Liquefaction is the sudden loss of bearing strength that can occur when saturated, cohesionless soils (sands and silts) are strongly and repetitively vibrated. Damage from liquefaction results primarily from horizontal and vertical displacement of the ground. These displacements occur because sand/water mixtures in a liquefied condition have virtually no strength and provide little or no resistance to compaction, lateral spreading, or down slope movement. This movement of the land surface can damage buildings, and buried utilities, such as gas mains, water lines and sewers, particularly at their connection to the building.

A structure that did not sustain damage from deformation caused by ground shaking may sustain substantial damage if there is differential settlement or tilt of the building as a result of liquefaction.

Based on the available geotechnical report and from general geological maps, the property is not located within an area designated as having liquefaction potential.

Table 2 - Major Earthquakes that can affect the site

Faults	Maximum Earthquake Magnitude	Approx. Slip Rate (mm/yr)	Approx. Recurrence Interval (years)	Approx. Distance Site (miles)
Malibu Coast-Santa Monica	6.90-7.00	1.0 - 1.5	1400	6.5
Newport-Inglewood	6.90	1.5	1006	9
Whittier-Elsinore	6.80	2.5	840-1005	10
Elysian Park Thrust	**6.70**	**1.5**	**550**	**2**
Palos Verdes	7.10	3.0	700+	17
Sierra Madre-Cucamonga	6.90-7.00	3.0 - 5.0	500-800	12
Hollywood-Raymond	6.60-6.90	1.0 - 1.5	1000+	6
San Andreas (Mojave segment)	7.50	24	550	34
San Jacinto (San Bernardino)	6.70	12	100	36
Verdugo	6.70	0.5	1608	7

The San Andreas Fault is the most discussed fault in the region and is capable of generating the strongest earthquake; however, it is too far from the subject property to pose a serious threat. There are other faults located much closer to the subject property and thus pose a greater threat to the property. The fault closest to the property is the Elysian Park Thrust Fault, which is located approximately 2 miles from the site.

The maximum intensity of shaking estimated at the site for the ground-motions from the faults located near the subject property, a Modified Mercalli Intensity (MMI) of VIII (225-year event) is expected. Table 3 provides an abridged version of the Modified Mercalli Intensity definition. Another measure of the level of earthquake ground shaking typically used for engineering analysis is the ground acceleration. This is normally expressed as fractions of gravitational acceleration, g's, for a simple linear scaling. Based on USGS (2008) data, the peak ground acceleration at the site associated with a 225-year recurrence interval is approximately 0.37g.

Table 3 - Modified Mercalli Intensity Scale

I. Not felt. Marginal and long-period effects of large earthquakes.

II. Felt by persons at rest, on upper floors, or favorably places.

III. Felt indoors. Hanging objects swing. Vibration like passing of light trucks. Duration estimated. May not be recognized as an earthquake.

IV. Hanging objects swing. Vibration like passing of heavy trucks; or sensation of a jolt like a ball striking the walls. Standing motor cars rock. Windows, dishes and doors rattle. Glasses clink. Crockery clashes. In the upper range of IV wooden walls and frames creak.

V. Felt outdoors; direction estimated. Sleepers wakened. Liquids disturbed, some spilled. Small unstable objects displaced or upset. Doors swing, close, open. Shutters, pictures move. Pendulum clocks stop, start and change rate.

VI. Felt by all. Many frightened and run outdoors. Persons walk unsteadily. Window, dishes and glassware broken, knickknacks, books, etc. knocked off shelves. Pictures off walls and furniture moved or overturned. Weak plaster and masonry D cracked. Small bells ring (Church, School). Trees, bushes shaken (visible, or heard to rustle).

VII. Difficult to stand. Noticed by drivers of motor cars. Hanging objects quiver. Furniture broken. Damage to masonry D, including cracks. Weak chimneys broken at roof line. Fall of plaster, loose bricks, stones, tiles, cornices (also unbraced parapets and architectural ornaments). Some cracks in masonry C. Waves on ponds; water turbid with mud. Small slides and caving in along sand or gravel banks. Large bells ring. Concrete irrigation ditches damaged.

VIII. Steering of motor cars affected. Damage to masonry C; partial collapse. Some damage to masonry B; none to masonry A. Fall of stucco and some masonry walls. Twisting, fall of chimneys, factory stacks, monuments, towers, elevated tanks. Frame houses moved on foundations if not bolted down; loose panel walls thrown out. Decayed piling broken off. Branches broken from trees. Changes in flow or temperature of springs and wells. Cracked in wet ground and on steep slopes.

IX. General panic. masonry D destroyed; masonry B seriously damages. (General damage to foundations.) Frame structures, if not bolted, shifted off foundations. Frames racked. Serious damage to reservoirs. Underground pipes broken. Conspicuous cracks in ground. In alleviated areas sand and mud ejected, earthquake foundations, sand craters.

X. Most masonry and frame structures destroyed with their foundations. Some well-built wooden structures and bridges destroyed. Serious damage to dams, dikes and embankments. Large landslides. Water thrown on banks from canals, rivers, lakes, etc. Sand and mud shifted horizontally on beaches and flat land. Rails bent slightly.

XI. Rails bent greatly, Underground pipelines completely out of service.

XII. Damage nearly total. Large rock masses displaced. Lines of sight and level distorted. Objects thrown into the air.

Source: Richter, C.F. Elementary Seismology. San Francisco CA: W. H. Freeman Co., 1957.

Note: To avoid ambiguity, the quality of masonry, brick, or other material is specified by the following lettering system. (This has no connection with the conventional classes A, B, and C construction.)

Masonry A. *Good workmanship, mortar, and design; reinforced, especially laterally, and bound together by using steel, concrete, etc.; designed to resist lateral forces.*

Masonry B. *Good workmanship and mortar; reinforced, but not designed to resist lateral forces.*

Masonry C. *Ordinary workmanship and mortar; no extreme weaknesses, like failing to tie in a corner, but neither reinforced nor designed to resist horizontal forces.*

Masonry D. *Weak materials, such as adobe; poor mortar; low standards of workmanship; weak horizontally.*

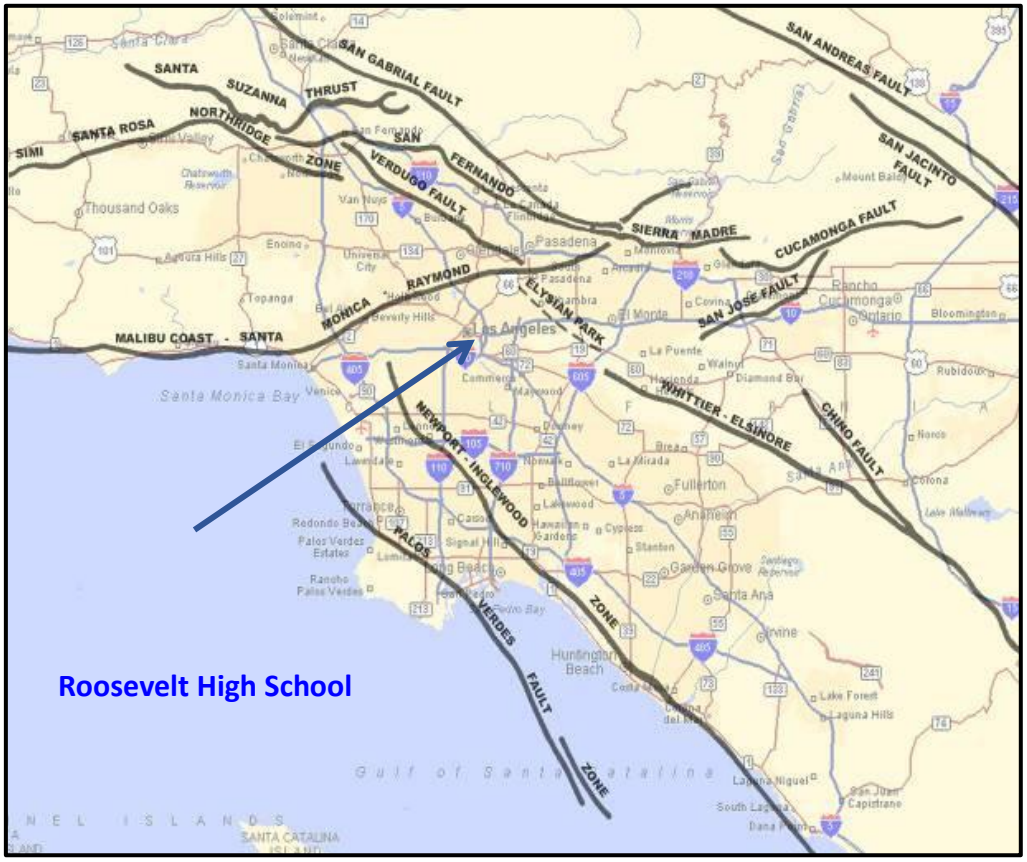


Figure 2: Major Faults in Southern California Area Near Site

13.2 Building Description

The Industrial Arts building was originally constructed in 1968 on the northeast side of the campus, and has since been used for vocational skills such as drafting, woodworking, metalworking and auto repair. The building has a rectangular shaped footprint and consists of two-stories with a single story portion along the east elevation. The building appears to be in its original configuration and has not undergone any significant repair/retrofit work. In 1975, a light metal storage shed was added adjacent to the low roof of the Industrial Arts Building (detached).

Vertical Carrying System:

The vertical load carrying system of the low roof consists of "Tectum" insulating roof panels on top of wood roof joists and steel beams, which transfer vertical loads to tapered steel girders. The steel girders are supported by steel columns, concrete pilasters and load bearing masonry walls. A continuation of the roof framing projects off the low roof to make a short span canopy that has metal decking over the steel framing extension.

The vertical load carrying system of the high roof consists of plywood sheathing spanning to wood roof joists and steel beams, which span to tapered steel girders. The steel girders are supported by steel columns, concrete pilasters and load bearing masonry walls.

The vertical load carrying system of the 2nd floor consists of elevated concrete slabs spanning between castellated steel beams, which transfer vertical loads to steel columns, concrete pilasters and load bearing masonry walls.

Lateral Resisting System:

The lateral load resisting system for the building consists of the roof and floor diaphragms that deliver lateral wind/seismic forces to reinforced masonry walls.

Foundation System:

The building walls are founded with continuous wall footings and columns are founded with isolated spread footings.

13.3 Building Description Summary Table

Industrial Arts: Building 6 Summary Table	
Year Designed	1968
Drawings	Original drawings by S.B. Barnes and Associates
Gravity System	Concrete slab over steel beams and wood/steel framed roofs
Lateral System	Reinforced brick walls
No. of Stories & Height	2 (Approx. 26')
Approximate Area	25,000 sf
Building Period "T"	0.088 sec
Base Shear "V"	1259 kips (X-Direction – Dynamic) 1316 kips (Y-Direction – Dynamic)
ASCE 41-13 Risk Category	III
Major Seismic Deficiencies	Inadequate roof diaphragms and wall anchorage system.
Retrofit Recommendations	Replace roof sheathing and install wall anchorage system.

13.4 Building plans

See Appendix 3-D for the original structural drawings.

14.0 Evaluation Methodology and Findings

The evaluation methodology for the initial screening of the Industrial Arts Building (Building 6) is based on ASCE 41-13 Tier 1 Screening. This screening consists of checklists, which allow for a rapid evaluation of the existing structure and non-structural conditions to the "Life Safety" performance level, per Section 4.1.1. It should be noted that in general the Tier 1 Screening is only performed to the "Life Safety" or "Immediate Occupancy" levels per Section 4.1.1. These checklists have been completed and can be found in Appendix 3-A.

After the Tier 1 Screening was performed, a Tier 2 Evaluation was implemented for the deficiencies that were found during the Tier 1 Screening. As a Risk Category III, the Basic Performance Objective for the building was Damage Control Performance Level (S-2) per Table 2-1 of ASCE 41-13, shown below, and in accordance with Section 2.3.1.2.1 of ASCE 41-13. Deficiencies that were identified in the Tier 1 Screening were then analyzed using a BSE-1E (20% probability of exceedence in 50 years, 225-year return period) seismic event; some were found to be "Compliant" and others were found to remain "Deficient."

As part of the more detailed Tier 2 analysis, a three-dimensional computer model was created and subjected to a linear dynamic analysis using the anticipated seismic earthquake ground motions (225-year event response spectra). From this computer analysis, the anticipated demand forces were extracted and compared to their respective acceptable capacities contained in ASCE 41-13.

Table 2-1. Basic Performance Objective for Existing Buildings (BPOE)

	Tier 1[a]	Tier 2[a]	Tier 3	
Risk Category	BSE-1E	BSE-1E	BSE-1E	BSE-2E
I & II	Life Safety Structural Performance Life Safety Nonstructural Performance (3-C)	Life Safety Structural Performance Life Safety Nonstructural Performance (3-C)	Life Safety Structural Performance Life Safety Nonstructural Performance (3-C)	Collapse Prevention Structural Performance Nonstructural Performance Not Considered (5-D)
III	See footnote *b* for Structural Performance Position Retention Nonstructural Performance (2-B)	Damage Control Structural Performance Position Retention Nonstructural Performance (2-B)	Damage Control Structural Performance Position Retention Nonstructural Performance (2-B)	Limited Safety Structural Performance Nonstructural Performance Not Considered (4-D)
IV	Immediate Occupancy Structural Performance Position Retention Nonstructural Performance (1-B)	Immediate Occupancy Structural Performance Position Retention Nonstructural Performance (1-B)	Immediate Occupancy Structural Performance Position Retention Nonstructural Performance (1-B)	Life Safety Structural Performance Nonstructural Performance Not Considered (3-D)

[a]For Tier 1 and 2 assessments, seismic performance for the BSE-2E is not explicitly evaluated.
[b]For Risk Category III, the Tier 1 screening checklists shall be based on the Life Safety Performance Level (S-3), except that checklist statements using the Quick Check procedures of Section 4.5.3 shall be based on MS-factors and other limits that are an average of the values for Life Safety and Immediate Occupancy.

14.1 ASCE 41-13 Tier 1 Evaluation Summary

The following deficiencies were identified in the Tier 1 analysis:

1. Geometry
2. Overturning
3. Shear Stress
4. Wall Anchorage
5. Wood Ledgers
6. Use of Other Diaphragms

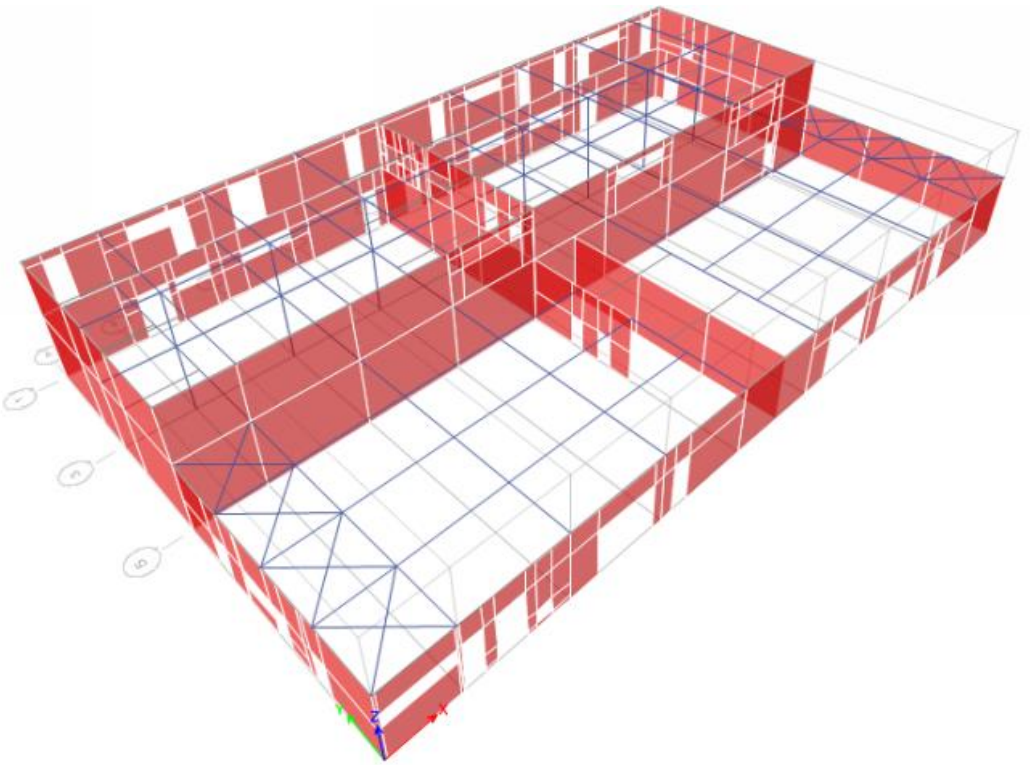
14.2 ASCE 41-13 Tier 2 Evaluation

All of the deficiencies listed above were reviewed using a Tier 2 Evaluation and some were found to remain deficient. Items not listed below have been verified to be compliant through calculation, which can be found in Appendix 3-B. The remaining Tier 2 deficiencies include:

1. Tier 2 Deficiency 4 per Section 5.7.1.1
   - Out-of-plane wall-to-roof anchors do not meet ASCE 41-13 Tier 2 acceptance criteria.
2. Tier 2 Deficiency 6 per Section 5.6.5
   - Non-structural diaphragm used at the low roof.
   - The roof diaphragm does not meet ASCE 41-13 Tier 2 acceptance criteria.

As noted earlier, the above deficiencies were determined with a linear dynamic computer model of the building, as well as engineering fundamentals. Capacities of structural materials were taken from ASCE 41-13, unless the strengths were indicated on the structural drawings. Refer to Appendix 3-B for detailed assumptions/design criteria.

As part of the Tier 2 checks, elements of the lateral system related to the itemized deficiency were also checked for adequacy in order to provide a complete load path all though the item may not have been an identified concern in Tier 1. For example, the out-of-plane adequacy of a concrete wall is reasonable to validate the wall anchorage deficiency was discovered since the wall should not fail before delivery of forces to wall anchors. Likewise, adequacy of the horizontal diaphragm is checked due to the delivery of the wall anchorage forces. The intent of this is to ensure that a complete and viable load path exists of the deficient items.



3D-Dynamic Computer Model

14.3 Tier 2 Evaluation and Proposed Retrofit Summary Table

Building	Identified Tier 1 Deficiencies	Tier 2 section number	Tier 2 Evaluation Result	Proposed Retrofit
Industrial Arts Building 6 Target Structural Performance Level: Damage Control	16.1 Building Geometry	5.4.2.4	Adequate	None – Dynamic analysis of Tier 2 proved item to be adequate.
	16.1 Overturning	5.4.3.3	Adequate	None – Wall coupling beams found adequate.
	16.15 Shear Stress	5.5.3.1.1	Adequate	None
	16.15 Wall Anchorage	5.7.1.1	Deficient	Retrofit is proposed. See structural retrofit sketches in Appendix 3-C
	16.15 Wood Ledgers	5.7.1.3	Deficient	Retrofit for wall anchorage. See structural retrofit sketches in Appendix 3-C
	16.15 Other Diaphragms	5.6.5	Deficient	Retrofit is proposed. See structural retrofit sketches in Appendix 3-C

15.0 Conclusions

Based on the Tier 2 evaluation performed, the following are the findings related to the anticipated seismic performance of the Industrial Arts Building. It should be noted that with any older structure such as this 40+ year old building, it would not be expected to conform to the current design code, as the design codes have evolved over the life of the building. The purpose of this report is to perform a Tier 2 evaluation of the deficiencies identified by a Tier 1 Evaluation of the building and not to upgrade the building to meet current code.

The primary seismic concerns with the Industrial Arts Building are the out-of-plane anchorage of the heavy walls to the existing diaphragms, as well as the lack of diaphragm capacity to transfer shear to the lateral load resisting system.

Each of the deficiencies increases the threat of damage to the building and/or the life safety of the occupants. For this reason we recommend that all of the recommended voluntary seismic upgrades be implemented, to improve the seismic performance of the building. Given the reasons above, a voluntary seismic retrofit is recommended for this structure.

15.1 Proposed Retrofit Options

Summary of Retrofit options:

1. Tier 2 Deficiency 4 per Section 5.7.1.1

   Recommendation: Create a “direct load path”, install out-of-plane wall anchorage system including cross/continuity ties. Refer to retrofit sketches.
2. Tier 2 Deficiency 6 per Section 5.6.5

   Recommendation: Replace insufficient diaphragms with new viable diaphragms and strengthen roof framing elements, as needed. Refer to retrofit sketches.

15.2 Structural Retrofit Selection Recommendations and Conclusions

Based on our analysis of the Industrial Arts (Building 6) Building, we strongly recommend implementing all the retrofit options discussed in Section 15.1 and presented in the accompanying sketches, which are summarized as:

1. Create a “direct load path” for the out-of-plane anchorage system by installing appropriate hardware at the walls-to-framing and within the roof framing (cross/continuity ties).

2. Remove and replace the roof diaphragm to a high capacity plywood sheathed system to complete load path of wall anchorage system as well as structural diaphragm. Includes providing adequate shear transfer mechanisms at the shear walls to delivery lateral forces.
3. Remove and replace low roof diaphragm to a viable structural diaphragm along with associated connectors to provide complete load path.

Note that these retrofit measures are inter-related and as such should be performed in their entirety to be fully effective.

16.0 Documents Reviewed

The following is a list of the building documentation that was made available for review.

Building	Structural Engineer of Record	Drawing Date(s)	Certified by State of California Department of Public Works Division of Architecture (i.e. DSA)
Industrial Arts (Bldg. 6)	Original: S.B. Barnes and Associates	1966	Yes (Application #27577)
	Geotechnical Investigation Proposed Roosevelt High School Campus Modifications by Geotechnical Professionals Inc.	2015	N.A.

17.0 Limitations

These reports represent *Saiful/Bouquet Inc.* professional engineering judgment as to the deficiencies which would be vulnerable in a moderate to severe seismic event. It must be acknowledged that deficiencies may exist in the structure that were not observed in this evaluation. The information and opinions provided in this report have been prepared in accordance with recognized engineering principles. These findings and opinions are not intended as a warranty by *Saiful/Bouquet Inc.* for the condition of the existing building and its performance in a major seismic event.

APPENDIX 1 -A
Auditorium / Classrooms: Tier 1 Screening Checklists

(SEE ASCE 41-13 TIER 2 DEFICIENCY-BASED EVALUATION & RETROFIT APPENDICES)

APPENDIX 1 -B

Auditorium / Classrooms: Tier 2 Evaluation Justification Calculations

(SEE ASCE 41-13 TIER 2 DEFICIENCY-BASED EVALUATION & RETROFIT APPENDICES)

APPENDIX 1 -A

Auditorium / Classrooms: Tier 2 Retrofit Options / Sketches

(SEE ASCE 41-13 TIER 2 DEFICIENCY-BASED EVALUATION & RETROFIT APPENDICES)

APPENDIX 1 -A

Auditorium / Classrooms: Original Structural Drawings

(SEE ASCE 41-13 TIER 2 DEFICIENCY-BASED EVALUATION & RETROFIT APPENDICES)

APPENDIX 1 -A
Auditorium / Classrooms: Tier 1 Screening Checklists

(SEE ASCE 41-13 TIER 2 DEFICIENCY-BASED EVALUATION & RETROFIT APPENDICES)

APPENDIX 2 -B
Gymnasium: Tier 2 Evaluation Justifications Calculations

(SEE ASCE 41-13 TIER 2 DEFICIENCY-BASED EVALUATION & RETROFIT APPENDICES)

APPENDIX 2 -C
Gymnasium: Tier 2 Retrofit Options / Sketches

(SEE ASCE 41-13 TIER 2 DEFICIENCY-BASED EVALUATION & RETROFIT APPENDICES)

APPENDIX 2 -D
Gymnasium: Original Structural Drawings

(SEE ASCE 41-13 TIER 2 DEFICIENCY-BASED EVALUATION & RETROFIT APPENDICES)

APPENDIX 3-A
Industrial Arts: Tier 1 Screening Checklists

(SEE ASCE 41-13 TIER 2 DEFICIENCY-BASED EVALUATION & RETROFIT APPENDICES)

APPENDIX 3-B
Industrial Arts: Tier 2 Evaluation Justifications Calculations

(SEE ASCE 41-13 TIER 2 DEFICIENCY-BASED EVALUATION & RETROFIT APPENDICES)

APPENDIX 3-C
Industrial Arts: Tier 2 Retrofit Options / Sketches

(SEE ASCE 41-13 TIER 2 DEFICIENCY-BASED EVALUATION & RETROFIT APPENDICES)

APPENDIX 3-D
Industrial Arts: Original Structural Drawings

(SEE ASCE 41-13 TIER 2 DEFICIENCY-BASED EVALUATION & RETROFIT APPENDICES)

3.0 PROGRAMMING AND EDUCATIONAL SPECIFICATIONS

3.1 COMPARATIVE PROGRAM ANALYSIS

- Enrollment fluctuations (5000/1600/2500)
- Template Program Classroom Count vs. Projected Count considering RHS Programs
- Square foot comparison

EXISTING CLASSROOM SUMMARY

LAUSD Roosevelt High School Modernization DLR Group # 75-15239-00

Existing Classroom (CR) Inventory May 28, 2015

CR Types	CR Count	% total CR	Total Area by CR Type		Avg CR Area	% CDE Area	CR < 800 SF	% CR type	< 768 SF	% CR type
General	110	72.37%	General	93,448	850	88.49%	39	35.45%	16	14.55%
Gen Sci	9	5.92%	Gen Sci	10,446	1,161	120.90%	0	0.00%	0	0.00%
Chem Sci	2	1.32%	Chem Sci	2,616	1,308	136.25%	0	0.00%	0	0.00%
Flex Sci	5	3.29%	Flex Sci	5,247	1,049	109.30%	0	0.00%	0	0.00%
Home Ec	8	5.26%	Home Ec	9,132	1,141	118.90%	0	0.00%	0	0.00%
Art/Shop	5	3.29%	Art/Shop	10,141	2,028	211.28%	0	0.00%	0	0.00%
Other	13	8.55%	Other	11,995	923	96.11%	6	46.15%	6	46.15%
TOTAL	**152**	TOTAL	**TOTAL**	**143,024**	941	98.02%	**45**	**29.61%**	**22**	**14.47%**

LARGE CLASSROOM BUILDINGS	*Age (Years)*	CR Count	% total CR	Total CR Area by Building		Avg CR Area	% CDE Area	CR < 800 SF	% bldg CR	< 768 SF	% CR type
A - Administration/Classroom	*43*	19	12.50%	16.07%	22,980	1,209	125.98%	2	10.53%	2	10.53%
C - Classroom (1937)	*78*	15	9.87%	9.57%	13,694	913	95.10%	4	26.67%	4	26.67%
E - Classroom (1977)	*38*	8	5.26%	5.00%	7,150	894	93.10%	0	0.00%	0	0.00%
L - Library/Classroom	*25*	9	5.92%	5.39%	7,715	857	89.29%	0	0.00%	0	0.00%
R - Auditorium/Classroom	*93*	48	31.58%	27.08%	38,735	807	84.06%	33	68.75%	10	20.83%
T - Industrial Arts	*47*	11	7.24%	9.65%	13,807	1,255	130.75%	5	45.45%	5	45.45%
	SUBTOTAL	**110**	**72.37%**	**72.77%**	**104,080**	**946**	**98.56%**	44	40.00%		**TOTAL**
Other 4 "Permanent" Classroom Buildings	*11*	*7.24%*	*7.46%*	*10,672*	*970*	*101.06%*	*0*	*0.00%*	*0*	*0.00%*	
All 20 Relocatable Buildings	*31*	*20.39%*	*19.77%*	*28,271*	*912*	*95.00%*	*1*	*3.23%*	*1*	*3.23%*	

3.2 UNIQUE REQUIREMENTS - RECOMMENDATIONS FOR PROGRAMS AND SPACES

- Math, Science, and Technology Magnet Academy
- Pathways
- Day Care/Infant Care
- Adult Ed
- CTE
- Performing Arts
- Service Learning Projects
- Robotics
- Health Center
- STEM School

3.3 PROPOSED CAMPUS PROGRAM

LOS ANGELES UNIFIED SCHOOL DISTRICT

NAME OF SCHOOL

CLASSROOM BUILDING ADDITION AND MODERNIZATION

PRELIMINARY

October, 30,2015

Project No:	TBD	Loc.Code:	8829		OPSC	CDE
Location:	456 S. Mathews Street, Los Angeles CA 90033	Acres:			3450	2500
Program:		PM:				
	Scope					
		DM:		**Total Number Of (E)Seats:**		**3450**
Architect:	DLR Group	BM:		**Total Number Of (N)Seats:**		**-950**
ESC:				**Total Number Of Classrooms**		**111**
ESC Superintendent:				**New HS Classrooms:**		**67**
	Facility Area Selected (New):	**#REF!**	**S.F.**	**New HS Science Classrooms:**		**5**
	Facility Area Selected (Existing):	**#REF!**	**S.F.**	**Remodeled Classrooms:**		**0**
Approvals:	Facility Area Selected (E) to be Remodeled:	**0**	**S.F.**	**Existing HS Science Classrooms:**		**10**
Asset Management:	Area per seat (sf)	**#REF!**	**S.F.**	**Existing HS Classrooms:**		**29**
Planning and Development:				**Total Area (E) + (R) +(N)**		**#REF!**
School Management Services:				**Demolition**	**Remodeled**	**New**	**Existing**
ESC:		**TOTAL AREA**			**-**	**#REF!**	**#REF!**

SPACE PROGRAM

Total HS Teaching Stations:	**0**	**0**	**0**	**0**
EXISTING BUILDING 5 - ADMINISTRATION & CLASSROOM BUILDING **Subtotal**		**0 SF**		**54,607 SF**
Teaching Stations:				17

Space	E	N	Sq Ft		Existing Use	New Use	(D) Sq Ft	(R) Sq Ft	(N) Sq Ft	(E) Sq Ft
001	1	0	542	S.F.	Lobby/Waiting					542
002	1	0	502	S.F.	Welcome/Community Room					502
003	1	0	344	S.F.	Principal's Office					344
004	3	0	220	S.F.	Asistant Principal's Office					660
005	1	0	511	S.F.	Principal Admin Assitants					511
006	1	0	129	S.F.	Student Services/Registar's Office					129
007	1	0	150	S.F.	Dean Office					150
008	1	0	704	S.F.	Attendance Clerks Area/Reception					704
009	1	0	120	S.F.	Speech Office					120
010	1	0	120	S.F.	Psycholgist Office					120
011	4	0	120	S.F.	Specialty Worker Office					480
012	1	0	138	S.F.	Police Liason /Security Office					138
013	1	0	446	S.F.	Conference Room - 20 People					446
014	1	0	120	S.F.	Break Room					120
015	1	0	421	S.F.	Work Room					421
016	2	0	354	S.F.	Faculty Restrooms					708
017	1	0	412	S.F.	IT Computer Tech Office					412
018	1	0	160	S.F.	Parent Center					160
019	1	0	931	S.F.	Lobby (accommodate 12 sutdents)					931
020	1	0	218	S.F.	Conference Room - 8 person					218
021	1	0	125	S.F.	College Career Counselor					125
022	7	0	90	S.F.	Counseling Offices					630
023	1	0	214	S.F.	Intervention Center					214
024	1	0	1,126	S.F.	General Classroom					1,126
025	1	0	1,039	S.F.	Specialty Classroom					1,039
026	1	0	1,274	S.F.	Specialty Classroom					1,274
027	1	0	1,126	S.F.	Specialty Classroom					1,126
028	1	0	1,840	S.F.	Specialty Classroom					1,840
034	1	0	1,502	S.F.	Science Classroom					1,502
035	1	0	1,509	S.F.	Science Classroom					1,509
036	1	0	925	S.F.	Science Classroom					925
037	1	0	1,001	S.F.	Science Classroom					1,001
038	1	0	1,381	S.F.	Science Classroom					1,381
039	1	0	1,353	S.F.	Science Classroom					1,353
040	1	0	1,353	S.F.	Science Classroom					1,353
041	1	0	1,356	S.F.	Science Classroom					1,356
042	1	0	1,353	S.F.	Science Classroom					1,353
043	1	0	1,380	S.F.	Science Classroom					1,380
044	1	0	1,368	S.F.	Chemestry Classroom					1,368
045	1	0	1,368	S.F.	Chemestry Classroom					1,368
046	4	0	275	S.F.	Science Prep Room					1,100
047	1	0	2,701	S.F.	Building Stairs					2,701
048	1	0	456	S.F.	Building Elevators					456
049	1	0	19,311	S.F.	Various Support Spaces					19,311
						Subtotal				*54,607*
							Total Existing Building 5			***54,607***

PRELIMINARY
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EXISTING BUILDING 2 - CAFETERIA BUILDING						Subtotal	0 SF	0 SF		14,323 SF
Space	**E**	**N**	**Sq Ft**		**Existing Use**		**(D) Sq Ft**	**(R) Sq Ft**	**(N) Sq Ft**	**(E) Sq Ft**
001	1	0	4,839	S.F.	Student Dinning					4,839
002	1	0	1,248	S.F.	Kitchen Area					1,248
003	1	0	2,075	S.F.	Service Area					2,075
004	1	0	380	S.F.	Dry Storage					380
005	1	0	69	S.F.	Freezer					69
006	1	0	119	S.F.	Cold Storage					119
007	1	0	286	S.F.	Receiving					286
008	1	0	75	S.F.	Office					75
009	1	0	84	S.F.	Janitor Closet					84
010	1	0	27	S.F.	Faculty /Employee Restrooms					27
011	1	0	1,095	S.F.	Faculty Dining					1,095
012	1	0	260	S.F.	Faculty Servery					260
013	1	0	104	S.F.	Electrical Room					104
014	1	0	180	S.F.	Mechanical Room					180
016	1	0	3,482	S.F.	Various Support Spaces					3,482
						Subtotal				*14,323*
							Total Existing Building 2			*14,323*

EXISTING BUILDING 22 - LUNCH SHELTER							8,469 SF			8,469 SF
Space	**E**	**N**	**Sq Ft**		**Existing Use**		**(D) Sq Ft**		**(N) Sq Ft**	**(E) Sq Ft**
001	1	0	8,469	S.F.	Lunch Shelter		8,469			8,469
							Total Existing Building 22			*8,469*
										8,469

EXISTING BUILDING 23 - LIBRARY/CLASSROOM BULDING										32,736 SF
						Teaching Stations:				11
Space	**E**	**N**	**Sq Ft**		**Existing Use**		**(D) Sq Ft**	**(R) Sq Ft**	**(N) Sq Ft**	**(E) Sq Ft**
001	5	0	902	S.F.	General Classroom					4,510
002	1	0	876	S.F.	General Classroom					876
003	1	0	802	S.F.	General Classroom					802
004	3	0	902	S.F.	Science Classroom					2,706
005	1	0	1,031	S.F.	Specialty Classroom					1,031
006	1	0	5,585	S.F.	Library Reading Area					5,585
007	1	0	635	S.F.	Multi-Purpose/Computer Lab					635
008	1	0	307	S.F.	Librarian Office					307
009	1	0	146	S.F.	Workroom Storage					146
010	1	0	65	S.F.	Faculty Toilet					65
011	1	0	2,349	S.F.	Building Stairs					2,349
012	1	0	210	S.F.	Building Elevator					210
013	1	0	13,514	S.F.	Various Support Spaces					13,514
						Subtotal				*32,736*
							Total First Floor			***32,736***

PRELIMINARY
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NEW CONSTRUCTION

INSTRUCTION SPACE	Subtotal			90,957 SF	

Teaching Stations:

GENERAL CLASSROOMS

Space	E	N	Sq Ft			(D) Sq Ft	(R) Sq Ft	N Sq Ft	E Sq Ft
1	0	27	960	S.F.	General Classrooms			25,920	
2	0	0	100	S.F.	Storage			-	
2	0	2	1,440	S.F.	Computer Lab			2,880	
					Subtotal			*28,800*	

SCIENCE CLASSROOMS

Space	E	N	Sq Ft			(D) Sq Ft	(R) Sq Ft	N Sq Ft	E Sq Ft
1	0	3	1,300	S.F.	ScienceClassrooms			3,900	
2	0	2	1,300	S.F.	Chemistry Clasroom			2,600	
3	0	1	400	S.F.	Prep Room			400	
4	0	1	200	S.F.	Storage Room			200	
					Subtotal			*7,100*	

CTE (Career & Techincal Education)

Space	E	N	Sq Ft			(D) Sq Ft	(R) Sq Ft	N Sq Ft	E Sq Ft
1	0	1	3,540	S.F.	Autoshop			3,540	
2	0	7	100	S.F.	Storage (Various)			700	
3	0	1	1,720	S.F.	Robotics			1,720	
4	0	3	1,440	S.F.	Elective			4,320	
5	0	5	960	S.F.	Elective			4,800	
6	0	1	960	S.F.	ROP			960	
7	0	1	960	S.F.	ROP Computer Lab			960	
8	0	1	120	S.F.	ROP Counselotr			120	
9	0	1	120	S.F.	ROP Office			120	
10	0	1	160	S.F.	ROP Conference Room (8 person)			160	
11	0	1	120	S.F.	ROP File Room			120	
12	0	1	1,120	S.F.	Journalism/Yearbook			1,120	
					Subtotal			*18,640*	

FINE ARTS

Space	E	N	Sq Ft			(D) Sq Ft	(R) Sq Ft	N Sq Ft	E Sq Ft
1	0	5	1,200	S.F.	Fine Arts Classrooms			6,000	
2	0	1	700	S.F.	Wet/Dry Ceramics Storage			700	
2	0	4	380	S.F.	Storage			1,520	
					Subtotal			*8,220*	

SPECIAL EDUCATION

Space	E	N	Sq Ft			(D) Sq Ft	(R) Sq Ft	N Sq Ft	E Sq Ft
1	0	1	960	S.F.	AUTA Classroom			960	
2	0	1	100	S.F.	AUTA Chair Office			100	
3	0	2	120	S.F.	AUTA Toilets			240	
4	0	1	50	S.F.	AUTA Time Out Room			50	
5	0	1	100	S.F.	AUTA Storage			100	
6	0	2	960	S.F.	ED Classroom			1,920	
5	0	1	100	S.F.	ED Chair Office			100	
6	0	1	50	S.F.	ED Time Out Room			50	
7	0	1	100	S.F.	ED Storage			100	
9	0	2	960	S.F.	MRM/MRS Classroom			1,920	
10	0	1	100	S.F.	MRM/MRS Chair Office			100	
11	0	2	120	S.F.	MRM/MRS Toilets			240	
12	0	3	50	S.F.	MRM/MRS Time Out Room			150	
8	0	1	100	S.F.	MRM/MRS Storage			100	
9	0	10	960	S.F.	SLD Classroom			9,600	
10	0	1	100	S.F.	SLD Storage			100	
11	0	1	100	S.F.	SLD Chair Office			100	
12	0	6	300	S.F.	RSP			1,800	
13	0	1	100	S.F.	RSP Chair Office			100	
14	0	1	100	S.F.	Storage			100	
					Subtotal			*17,930*	

Intructional Space Subtotal	*73,590*
Circulation @ 20%	*14,718*
Mechanical / Electrical	*2,649*
Instruction Space Total	**90,957**

PRELIMINARY
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SUPPORT SERVICES / SPACE						Subtotal			83 SF	
Space	**E**	**N**	**Sq Ft**				**(D) Sq Ft**	**(R) Sq Ft**	**N Sq Ft**	**E Sq Ft**
1	0	1	80	S.F.	Surveillance Room				80	
2	0	0	280	S.F.	Girls" Restroom				-	
3	0	0	280	S.F.	Boys Restroom					
4	0	0	65	S.F.	Womens' Restroom				-	
5	0	0	65	S.F.	Mens' Restroom				-	
6	0	0	210	S.F.	Storage (Tablet Charging Carts)				-	
						Subtotal			*80*	

Support Services Subtotal	*80*
Circulation @ 20%	*16*
Mechanical / Electrical	*3*
Support Services Total	**83**

STUDENT STORE						Subtotal			813 SF	
Space	**E**	**N**	**Sq Ft**				**(D) Sq Ft**	**(R) Sq Ft**	**N Sq Ft**	**E Sq Ft**
1	0	1	250	S.F.	Store Sales				250	
2	0	1	65	S.F.	Toilet				65	
3	0	1	100	S.F.	Secure Storage				100	
4	0	1	120	S.F.	Store Counting/Security				120	
5	0	1	250	S.F.	Store Office/Storage				250	
						Subtotal			*785*	

Student Store Subtotal	*785*
Circulation @ 20%	*157*
Mechanical / Electrical	*28*
Student Store Total	**813**

TEXT BOOK ROOM						Subtotal			995 SF	
Space	**E**	**N**	**Sq Ft**				**(D) Sq Ft**	**(R) Sq Ft**	**N Sq Ft**	**E Sq Ft**
1	0	1	960	S.F.	Textbook Room				960	
						Subtotal			*1,955*	

Textbook Room Subtotal	*960*

Circulation @ 20%	*192*
Mechanical / Electrical	*35*
Textbook Room Total	**995**

PHYSICAL EDUCATION/ATHLETICS	**Subtotal**			**40,026 SF**	

Space	E	N	Sq Ft				(D) Sq Ft	(R) Sq Ft	N Sq Ft	E Sq Ft
1	0	1	10,400	S.F.	Large Gym w/Motorized Bleacher				10,400	
2	0	1	250	S.F.	Lobby				250	
3	0	1	160	S.F.	Concession				160	
4	0	1	80	S.F.	Tickets				80	
5	0	1	180	S.F.	Concession				180	
6	0	2	360	S.F.	Public Restroom (incl. 40sf custodian)				720	
7	0	1	100	S.F.	P.A./Sound Room				100	
8	0	2	200	S.F.	Gym Equipment Storage				400	
9	0	2	100	S.F.	Equipment Circulation Room				200	
10	0	1	100	S.F.	Mat Storage				100	
11	0	1	2,000	S.F.	Weight Room/Fitness Classroom				2,000	
12	0	1	1,300	S.F.	Aerobics Classroom				1,300	
13	0	1	400	S.F.	Therapy Room for Special Ed				400	
14	0	2	400	S.F.	Faculty Office				800	
15	0	2	120	S.F.	Secured Storage				240	
16	0	2	350	S.F.	Faculty Shower/Locker/Toilet				700	
17	0	2	1,800	S.F.	Lockers				3,600	
18	0	2	480	S.F.	Team Room				960	
19	0	2	360	S.F.	Student Toilets				720	
20	0	2	300	S.F.	Showers/Drying (12 showers)				600	
21	0	1	125	S.F.	Handicapped Accessible Shower				125	
22	0	1	7,600	S.F.	Practice Gymnasium				7,600	
23	0	1	1,300	S.F.	Wrestling Room				1,300	
24	0	3	960	S.F.	Classroom				2,880	
25	0	1	120	S.F.	Snack Bars/Concession Stand				120	
26	0	2	360	S.F.	Field Restrooms				720	
27	0	2	100	S.F.	Storage Rooms (outdoor equipment)				200	
28	0	1	1,000	S.F.	Training Room				1,000	
29	0	1	100	S.F.	Washer/Dryer				100	
30	0	1	200	S.F.	Press Box				200	
31	0	1	480	S.F.	Visitor Team Rooms				480	
						Subtotal			*38,635*	

Physical Education/Athletics Subtotal	*38,635*
Circulation @ 20%	*7,727*
Mechanical / Electrical	*1,391*
Physical Education/Athletics Total	**40,026**

ADMINSTRATIVE OFFICES	**Subtotal**			**1,557 SF**	

Space	E	N	Sq Ft				(D) Sq Ft	(R) Sq Ft	N Sq Ft	E Sq Ft
2	0	1	960	S.F.	College Career Center				960	
3	0	1	300	S.F.	Records Room				300	
						Subtotal			*1,260*	

Adminstrative Offices Subtotal	*1,260*
Circulation @ 20%	*252*
Mechanical / Electrical	*45*
Adminstrative Offices Total	**1,557**

FACILITIES & OPERATIONS/MAINTENANCE	**Subtotal**			**2,812 SF**	

Space	E	N	Sq Ft				(D) Sq Ft	(R) Sq Ft	N Sq Ft	E Sq Ft
1	0	1	75	S.F.	Custodian				75	
2	0	1	200	S.F.	Gardeners Workroom				200	
3	0	1	400	S.F.	Outside Equipment Storage				400	
4	0	1	140	S.F.	Plant Manager				140	
5	0	1	400	S.F.	Receiving (w/loading dock)				400	
6	0	1	400	S.F.	Storage				400	
7	0	1	40	S.F.	Storage/Flammable				40	
8	0	2	130	S.F.	Toilet Lockers				260	
9	0	1	180	S.F.	Tool Storage				180	

10	0	1	180	S.F.	Utility Area					180	
						Subtotal				*2,275*	

Facilities & Operations/Maintenance	*2,275*
Circulation @ 20%	*455*
Mechanical / Electrical	*82*
Facilities & Operations Total	**2,812**

PERFORMING ARTS/AUDITORIUM						**Subtotal**				**27,989 SF**	
Performing Arts & Drama											
Space	**E**	**N**	**Sq Ft**				**(D) Sq Ft**	**(R) Sq Ft**	**N Sq Ft**	**E Sq Ft**	
1	0	1	1600	S.F.	Drama/Production					1,600	
2	0	1	1600	S.F.	Dance Studio					1,600	
3	0	1	1600	S.F.	Choral Room					1,600	
4	0	1	1600	S.F.	Instrumental Music					1,600	
5	0	1	400	S.F.	Instrument Storage					400	
6	0	2	100	S.F.	Uniform Storage					200	
7	0	2	200	S.F.	Music Work Room					400	
8	0	1	400	S.F.	Storage (Music & General)					400	
9	0	2	60	S.F.	Practice Room (small)					120	
10	0	1	100	S.F.	Practice Room (large)					100	

Auditorium

Space	**E**	**N**	**Sq Ft**				**(D) Sq Ft**	**(R) Sq Ft**	**N Sq Ft**	**E Sq Ft**	
11	0	1	8500	S.F.	Auditorium					8,500	
12	0	1	400	S.F.	Control Room					400	
13	0	1	2500	S.F.	Stage					2,500	
14	0	1	1500	S.F.	Scene Prep./Workshop/Storage					1,500	
15	0	1	320	S.F.	Boys Dressing Rm/Toilet/Shower					320	
16	0	1	320	S.F.	Girls Dressing Rm/Toilet/Shower					320	
17	0	1	150	S.F.	Dimmer Room					150	
18	0	1	380	S.F.	Mens Restroom					380	
19	0	1	380	S.F.	Womens Restroom					380	
20	0	1	100	S.F.	Tickets					100	
21	0	1	75	S.F.	Custodian					75	
						Subtotal				*22,645*	

Performing Arts & Auditorium	*22,645*
Circulation @ 20%	*4,529*
Mechanical / Electrical	*815*
Performing Arts & Auditorium Total	**27,989**

HEALTH OFFICE (Nurse)						**Subtotal**				**1,230 SF**	
Space	**E**	**N**	**Sq Ft**				**(D) Sq Ft**	**(R) Sq Ft**	**N Sq Ft**	**E Sq Ft**	
1	0	1	220	S.F.	Waiting					220	
2	0	1	135	S.F.	Office					135	
3	0	1	120	S.F.	Exam Room					120	
4	0	1	80	S.F.	Storage					80	
5	0	1	140	S.F.	Boys Cot Room (3 cots)					140	
6	0	1	140	S.F.	Girl's Cot Room (3 cots)					140	
7	0	2	80	S.F.	Toilets					160	
										995	

Health Office (Nurse)	*995*
Circulation @ 20%	*199*
Mechanical / Electrical	*36*
Health Office (Nurse) Total	**1,230**

LUNCH PAVILLION ADDITION / FOOD SERVICES						**Subtotal**				**169,462 SF**	
Space	**E**	**N**	**Sq Ft**				**(D) Sq Ft**	**(R) Sq Ft**	**N Sq Ft**	**E Sq Ft**	
1	0	1	9,000	S.F.	Lunch Pavillion @ 1/3					3,000	
						Subtotal				*3,000*	

Lunch Pavillion / Food Services Subtotal	*3,000*
TOTAL NEW CONSTRUCTION	***169,462***

PRELIMINARY
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NON-RHS FUNCTIONS

WELLNESS CENTER					Subtotal				1,601 SF	
Space	**E**	**N**	**Sq Ft**				**(D) Sq Ft**	**(R) Sq Ft**	**N Sq Ft**	**E Sq Ft**
1	0	1	125	S.F.	Front Desk Reception				125	
2	0	1	200	S.F.	Waiting Room				200	
3	0	1	100	S.F.	Health Counseling				100	
4	0	4	75	S.F.	Exam Room				300	
5	0	1	60	S.F.	Patient Restroom				60	
6	0	1	60	S.F.	Staff Restroom				60	
7	0	1	100	S.F.	Dispensary Storage				100	
8	0	1	40	S.F.	Signal Room				40	
9	0	1	135	S.F.	Laboratory				135	
10	0	1	25	S.F.	Janitor Closet				25	
11	0	1	50	S.F.	Bio-Hazard Room				50	
12	0	1	100	S.F.	Provider Triage Office				100	
									1,295	

Wellness Center	*1,295*
Circulation @ 20%	*259*
Mechanical / Electrical	*47*
Wellness Center Total	**1,601**

4.1.1 SCOPE DESCRIPTION

CLASSROOMS / PARKING

• EXISTING CLASSROOMS: 152
EXISTING PARKING: 370 (HMS 140 + RHS 230)
1 CLASSROOM : 1.5 PARKING SPACES (REQ. 342)

• PROPOSED CLASSROOMS: 131
~~PROPOSED PARKING: 505 (HMS 140~~ + RHS 365)
1 CLASSROOM : 4.0 PARKING SPACES (REQ. 205)

SUMMARY

• **BUILDING 22 (LUNCH SHELTER)**
  · REMOVE
    · STRUCTURAL REVIEW INDICATES 'AT RISK'

• **BUILDING 23 (CR. BLDG.)**
  · RETAIN EXISTING PARKING IN LIEU OF MORE CLASSROOMS

• **MODULAR BUILDINGS**
  · REMOVE ALL
    · BEYOND USEFUL LIFE (40 TO 60 YEARS OLD)
    · LIMITED COLLABORATIVE CONFIGURATIONS

• **BASEBALL AND SOFTBALL FIELDS**
  · RETAIN EXISTING UNDERSIZED FIELDS

• **FOOTBALL FIELD AND TRACK**
  · RETAIN EXISTING UNDERSIZED FIELD AND TRACK

• NEW NON-REGULATION PLAY FIELD

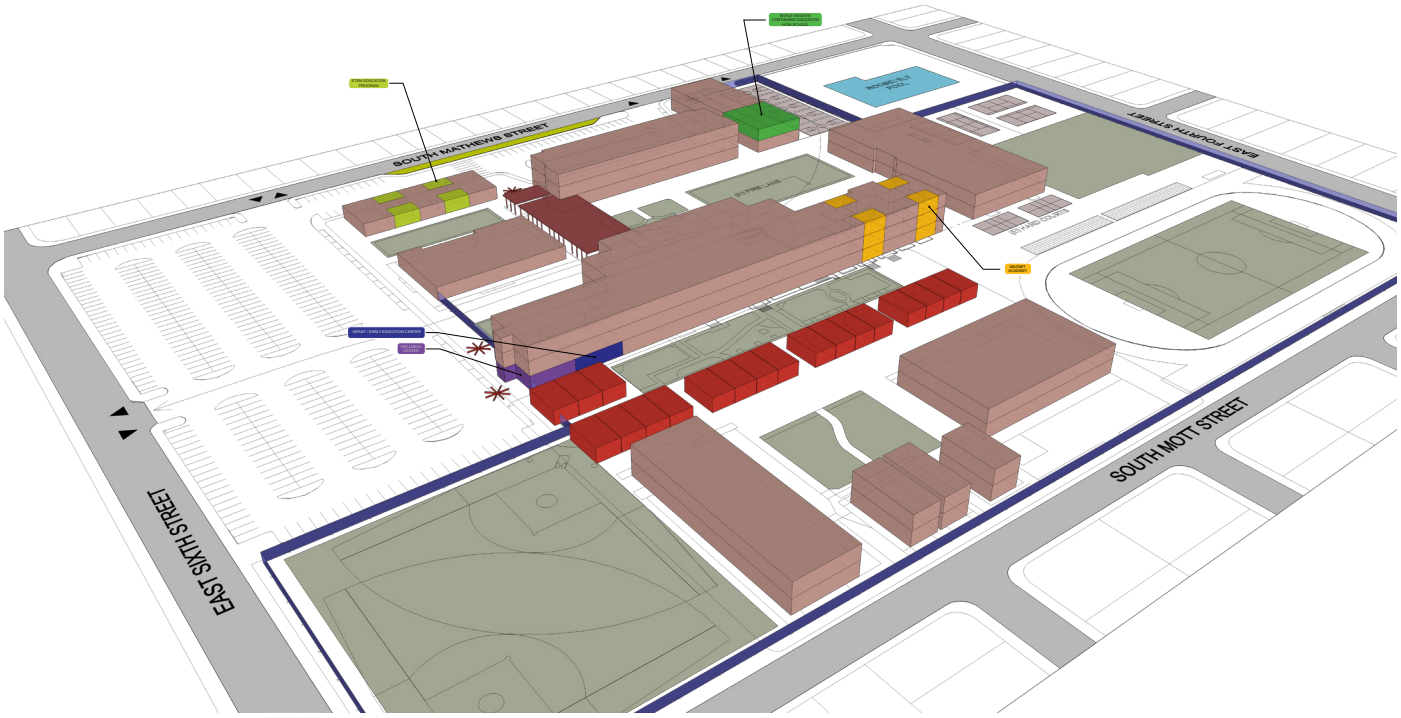
• CONTINUOUS L-SHAPED ATHLETIC ZONE

• **NEW DROP AREAS**
  · NEW DROP OFF AREA ON MATHEWS ST. FOR SCHOOL BUSES WITH OVERFLOW PARKING OUTSIDE DROP OFF TIMES

  · NEW DROP OFF / QUEUING AREA FOR RHS AND HMS IN PARKING LOT ALONG E. 6TH ST.

  · NEW DROP OFF / QUEUING AREA FOR WELLNESS CENTER AND INFANT / EARLY ED. IN PARKING LOT ALONG E. 6TH ST.

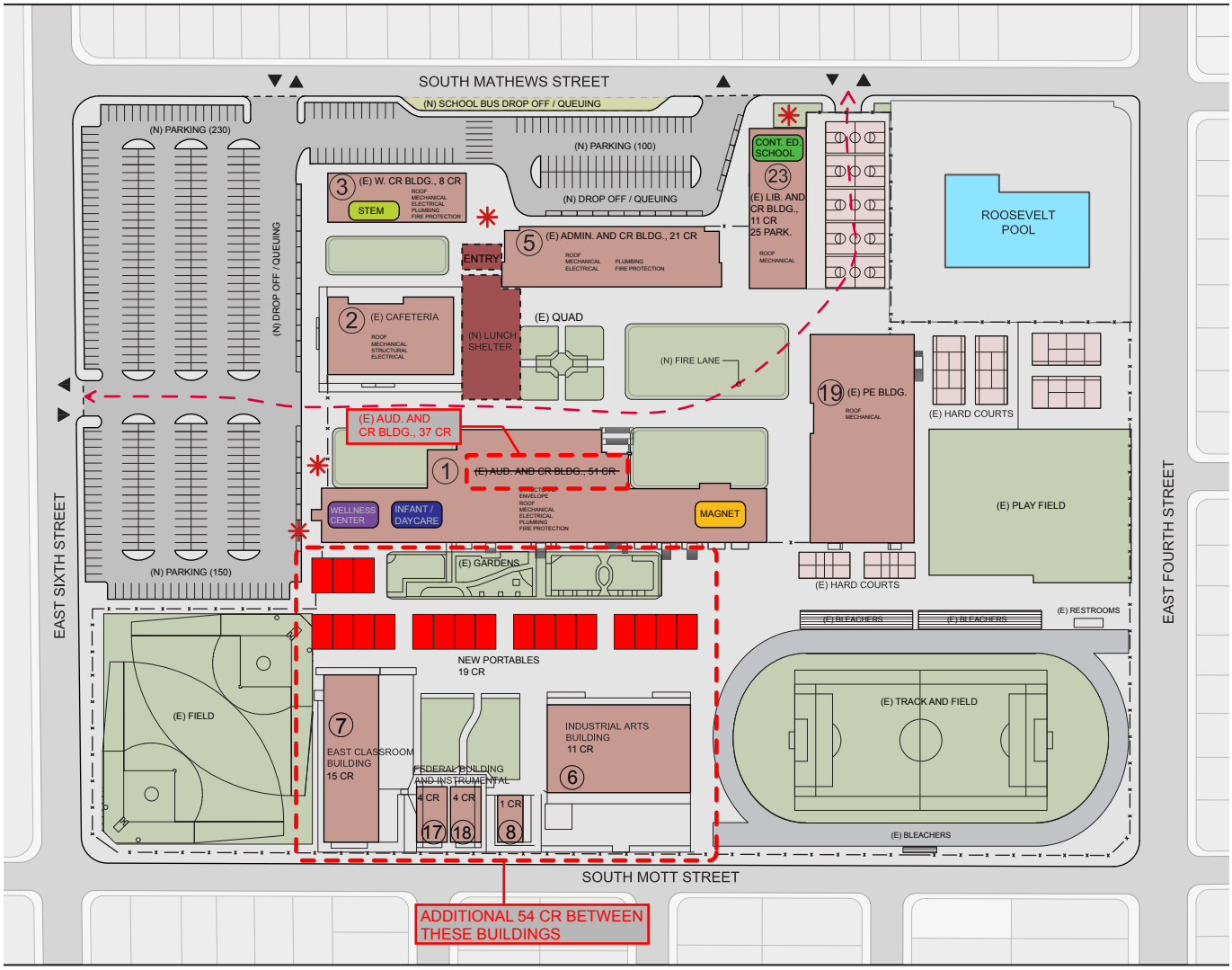
4.1.2 MASSING AND SITE ORGANIZATION



LEGEND

- EXISTING BUILDING TO BE MODERNIZED
- NEW BUILDING
- INFANT / EARLY EDUCATION CENTER
- WELLNESS CENTER
- MATH, SCIENCE, AND TECH. MAGNET ACADEMY
- BOYLE HEIGHTS CONT. EDUCATION HIGH SCHOOL

- SCHOOL ENTRANCES
- SECURITY FENCE
- FIRE LANE



OPTION A - $170,907,202

RETAIN AND MODERNIZE 6 EXISTING CORE BUILDINGS
NEW LUNCH SHELTER
EXISTING UNDERSIZED ATHLETIC FIELDS TO REMAIN

4.1.3 INTERIM HOUSING OPTIONS

Option A ($107,907,202)

- Portables
  - Remove all 13 portable classrooms in “east group,” all 11 portable classrooms in “south group,” and both (2) portable classrooms in “northwest group”
  - Replace those with 19 new portable classrooms
  - Net loss of 7 portable classrooms
- Permanent
  - Reconfigure Building 1 from 51 classrooms (mostly non-compliant) to 37 classrooms
  - Net loss of 14 permanent classrooms
- Overall net loss of 21 classrooms (to 131 total)

4.1.4 SCHEDULING / PHASING PLANS

Option A would make use of the existing 26 portable classrooms scheduled to be removed in full-time use (most are currently only occupied for part of the day) while phased renovations of Building 1 occurred. Once Building 1 renovations complete, the “northwest group” and “south group” portable classrooms (13 total) would remain in use while the “east group” portables were replaced in groups of 3 or 4. Once the “east group” portable classrooms were replaced (from 13 existing to 19 new), the remaining existing “northwest group” and “south group” portable classrooms would be removed.

- Phase A1: Renovate Building 1 while making better (full-time) use of existing 26 portable classrooms.
  - Start phase with 152 classrooms
  - Maintain at least 131 classrooms during phase (no more than 21 permanent classrooms under renovation at any given time)
- Phase A2: Demolish existing portable classrooms.
  - Start phase with 138 classrooms
  - Maintain at least 131 classrooms during phase (no more than 7 existing portable classrooms removed at any given time without replacement with new portable classrooms)
  - End phase with 131 classrooms

4.1.5 COST ESTIMATES

Concept Cost Model Construction Estimate

Basis of Estimate

The estimated construction cost is based on concept floor plans and building space program dated August 2015. Unit costs include average industry labor rates with competitive bid conditions. Competitive bid conditions generally occur when bids are received from a minimum of four general contractors and three subcontractors for each trade. Assumptions included for materials and specifications should be confirmed prior to completion of bid documents. The estimate includes general contractor general conditions, supervision, bonds, insurances, overhead, profit, cost escalation and estimating contingency. Project development soft costs, owner furnished equipment and furnishings are not included.

The estimated construction cost represents our best judgment as a professional consultant familiar with the construction industry. We have no control over the cost or supply of labor, materials and equipment, a contractor's methods of determining bid prices and market conditions. We cannot and do not warranty or represent that bids or negotiated prices will not vary from the estimated construction cost.

Construction Estimate Exclusions

Professional design, testing, inspection and management fees.
Fire and all risk insurance.
Legal and financing costs.
Building permits and fees.
Construction, project or staging contingencies.
Furnishings, loose equipment and modular workstations.
Sports equipment, scoreboards and broadcast systems.
Audio visual equipment.
Off-site improvements.
Unforeseen subsurface soils conditions and special foundations.
Utility metering.
Photovoltaic panels.
Communications wiring and equipment.
Independent commissioning.
Temporary buildings.

CONCEPTUAL COST ESTIMATE SUMMARY - OPTION A

Project Name: Roosevelt High School LAUSD — **Project No.** 10366732

Architect: DLR Group — **PM/DM/OAR:**

Project Description: High School Modernization — **Date:** 24-Sep-15

	Item	Area	Unit	Subtotal	Cost/SF	Total
A	**NEW CONSTRUCTION**					$0
B	**BUILDING RENOVATION**					$155,837,007
B1	BUILDING 1 - AUDITORIUM CLASSROOM	107,161	SF	$55,042,672	$513.64	
B2	BUILDING 2 - CAFETERIA	14,322	SF	$8,379,669	$585.09	
B3	BUILDING 3 - CLASSROOM	10,382	SF	$4,593,001	$442.40	
B4	BUILDING 5 - ADMINISTRATION CLASSROOM	57,764	SF	$25,927,880	$448.86	
B5	BUILDING 19 - GYM / PE	38,676	SF	$17,711,323	$457.94	
B6	BUILDING 23 - CLASSROOM LIBRARY	35,295	SF	$15,878,088	$449.87	
B7	BUILDING 6 - CLASSROOM	26,504	SF	$12,260,297	$462.58	
B8	BUILDING 7 - CLASSROOM	25,302	SF	$11,704,273	$462.58	
B9	BUILDING 8 - CLASSROOM	1,850	SF	$851,681	$460.37	
B10	BUILDING 17 - CLASSROOM	3,879	SF	$1,785,767	$460.37	
B11	BUILDING 18 - CLASSROOM	3,848	SF	$1,702,357	$442.40	
C	**SITE IMPROVEMENTS**					
C1	DEMOLITION / EARTHWORK	238,750	SF	$1,873,889	$7.85	$1,873,889
C2	SITE STRUCTURES					$1,737,713
C2.1	New Lunch Shelter	9,000	SF	$1,525,797	$169.53	
C2.2	New Trash Enclosure			$121,095		
C2.3	New Campus Entry			$90,821		
C3	SITE PAVING / PARKING / LANDSCAPING					$9,295,413
C3.1	Path of Travel ADA Corrections	45,000	SF	$635,670	$14.13	
C3.2	Asphalt Paving, Patch and Repair	135,000	SF	$1,273,610	$9.43	
C3.3	Concrete Paving	33,750	SF	$919,451	$27.24	
C3.4	Concrete Curbs	4,750	SF	$210,881	$44.40	
C3.5	New Quad	35,000	SF	$1,059,450	$30.27	
C3.6	New Entry Plaza and Main Entry	23,000	SF	$696,210	$30.27	
C3.7	New Drop Off Areas	80,000	SF	$2,744,480	$34.31	
C3.8	Directional Signage, ADA Compliance			$121,080		
C3.9	Landscaping and Irrigation	45,000	SF	$1,634,580	$36.32	
C4	ATHLETIC FIELDS					$0
C4.1	New Baseball Field			Existing		
C4.2	New Softball Field			Existing		
C4.3	New Regulation Football Field and Track			Existing		
C4.4	Tennis and Basket Ball Courts			Existing		

CONCEPTUAL COST ESTIMATE SUMMARY - OPTION A						
Project Name:	**Roosevelt High School LAUSD**				**Project No.**	**10366732**
Architect:	**DLR Group**				**PM/DM/OAR:**	
Project Description:	**High School Modernization**				**Date:**	**24-Sep-15**

	Item	Area	Unit	Subtotal	Cost/SF	Total
C	**SITE IMPROVEMENTS**					
C5	MISCELLANOUS SITE					$534,795
C5.1	Site Lighting	238,750	SF	$240,899	$1.01	
C5.2	Fences and Gates	238,750	SF	$86,724	$0.36	
C5.3	Trash Receptacles	238,750	SF	$24,090	$0.10	
C5.4	Benches	238,750	SF	$105,995	$0.44	
C5.5	Signage	238,750	SF	$77,088	$0.32	
C6	UTILITIES (NEW & MODIFICATIONS)					$1,628,476
C6.1	Domestic and Fire Water	238,750	SF	$289,079	$1.21	
C6.2	Sewer	238,750	SF	$240,899	$1.01	
C6.3	Storm Drainage	238,750	SF	$264,989	$1.11	
C6.4	Gas	238,750	SF	$38,544	$0.16	
C6.5	Electrical Power	238,750	SF	$361,348	$1.51	
C6.6	Electrical Data, Communications, Low Voltage	238,750	SF	$433,618	$1.82	
	TOTAL					$170,907,292

CONCEPTUAL COST ESTIMATE - OPTION A					
Project Name:	**Roosevelt High School LAUSD**			**Project No.**	**10366732**
Architect:	**DLR Group**			**PM/DM/OAR:**	
Project Description:	**High School Modernization**			**Date:**	**24-Sep-15**

	Item	Quantity	Unit	Unit Cost	Subtotal	Division Total
B	**BUILDING RENOVATION**					
B1	BUILDING 1 - AUDITORIUM CLASSROOM					
	Architectural Remodel	107,161	SF	103.00	$11,037,583	
	Structural Remodel	107,161	SF	46.00	$4,929,406	
	MEP Systems	107,161	SF	84.00	$9,001,524	
	Hazardous Material Abatement	107,161	SF	6.00	$642,966	
	Equipment	107,161	SF	5.50	$589,386	
	Interior Demolition	107,161	SF	10.00	$1,071,610	
	Subtotal			254.50	$27,272,475	
	General Conditions, Overhead and Profit	30.0%		76.35	$8,181,742	
	Design Contingency	20.0%		66.17	$7,090,843	
	Cost Escalation	12.5%		49.63	$5,318,133	
	Change Order Contingency	15.0%		67.00	$7,179,479	
	TOTAL			513.64	$55,042,672	$55,042,672
B2	BUILDING 2 - CAFETERIA					
	Architectural Remodel	14,322	SF	95.00	$1,360,590	
	Structural Remodel	14,322	SF	29.90	$428,228	
	MEP Systems	14,322	SF	94.00	$1,346,268	
	Hazardous Material Abatement	14,322	SF	6.00	$85,932	
	Equipment	14,322	SF	55.00	$787,710	
	Interior Demolition	14,322	SF	10.00	$143,220	
	Subtotal			289.90	$4,151,948	
	General Conditions, Overhead and Profit	30.0%		86.97	$1,245,584	
	Design Contingency	20.0%		75.37	$1,079,506	
	Cost Escalation	12.5%		56.53	$809,630	
	Change Order Contingency	15.0%		76.32	$1,093,000	
	TOTAL			585.09	$8,379,669	$8,379,669

CONCEPTUAL COST ESTIMATE - OPTION A					
Project Name:	**Roosevelt High School LAUSD**			**Project No.**	**10366732**
Architect:	**DLR Group**			**PM/DM/OAR:**	
Project Description:	**High School Modernization**			**Date:**	**24-Sep-15**

	Item	Quantity	Unit	Unit Cost	Subtotal	Division Total
B	**BUILDING RENOVATION**					
B3	BUILDING 3 - CLASSROOM					
	Architectural Remodel	10,382	SF	90.00	$934,380	
	Structural Remodel	10,382	SF	28.70	$297,963	
	MEP Systems	10,382	SF	81.00	$840,942	
	Hazardous Material Abatement	10,382	SF	6.00	$62,292	
	Equipment	10,382	SF	3.50	$36,337	
	Interior Demolition	10,382	SF	10.00	$103,820	
	Subtotal			219.20	$2,275,734	
	General Conditions, Overhead and Profit	30.0%		65.76	$682,720	
	Design Contingency	20.0%		56.99	$591,691	
	Cost Escalation	12.5%		42.74	$443,768	
	Change Order Contingency	15.0%		57.70	$599,087	
	TOTAL			442.40	$4,593,001	$4,593,001
B4	BUILDING 5 - ADMINISTRATION CLASSROOM					
	Architectural Remodel	57,764	SF	92.00	$5,314,288	
	Structural Remodel	57,764	SF	29.90	$1,727,144	
	MEP Systems	57,764	SF	81.00	$4,678,884	
	Hazardous Material Abatement	57,764	SF	6.00	$346,584	
	Equipment	57,764	SF	3.50	$202,174	
	Interior Demolition	57,764	SF	10.00	$577,640	
	Subtotal			222.40	$12,846,714	
	General Conditions, Overhead and Profit	30.0%		66.72	$3,854,014	
	Design Contingency	20.0%		57.82	$3,340,146	
	Cost Escalation	12.5%		43.37	$2,505,109	
	Change Order Contingency	15.0%		58.55	$3,381,897	
	TOTAL			448.86	$25,927,880	$25,927,880

CONCEPTUAL COST ESTIMATE - OPTION A

Project Name: Roosevelt High School LAUSD — **Project No.** 10366732

Architect: DLR Group — **PM/DM/OAR:**

Project Description: High School Modernization — **Date:** 24-Sep-15

	Item	Quantity	Unit	Unit Cost	Subtotal	Division Total
B	**BUILDING RENOVATION**					
B5	BUILDING 19 - GYM / PE					
	Architectural Remodel	38,676	SF	96.00	$3,712,896	
	Structural Remodel	38,676	SF	31.90	$1,233,764	
	MEP Systems	38,676	SF	78.00	$3,016,728	
	Hazardous Material Abatement	38,676	SF	6.00	$232,056	
	Equipment	38,676	SF	5.00	$193,380	
	Interior Demolition	38,676	SF	10.00	$386,760	
	Subtotal			226.90	$8,775,584	
	General Conditions, Overhead and Profit	30.0%		68.07	$2,632,675	
	Design Contingency	20.0%		58.99	$2,281,652	
	Cost Escalation	12.5%		44.25	$1,711,239	
	Change Order Contingency	15.0%		59.73	$2,310,173	
	TOTAL			457.94	$17,711,323	$17,711,323
B6	BUILDING 23 - CLASSROOM LIBRARY					
	Architectural Remodel	35,295	SF	92.00	$3,247,140	
	Structural Remodel	35,295	SF	29.90	$1,055,321	
	MEP Systems	35,295	SF	81.00	$2,858,895	
	Hazardous Material Abatement	35,295	SF	6.00	$211,770	
	Equipment	35,295	SF	4.00	$141,180	
	Interior Demolition	35,295	SF	10.00	$352,950	
	Subtotal			222.90	$7,867,256	
	General Conditions, Overhead and Profit	30.0%		66.87	$2,360,177	
	Design Contingency	20.0%		57.95	$2,045,486	
	Cost Escalation	12.5%		43.47	$1,534,115	
	Change Order Contingency	15.0%		58.68	$2,071,055	
	TOTAL			449.87	$15,878,088	$15,878,088

CONCEPTUAL COST ESTIMATE - OPTION A

Project Name: Roosevelt High School LAUSD — **Project No.** 10366732

Architect: DLR Group — **PM/DM/OAR:**

Project Description: High School Modernization — **Date:** 24-Sep-15

	Item	Quantity	Unit	Unit Cost	Subtotal	Division Total
B	**BUILDING RENOVATION**					
B7	BUILDING 6 - CLASSROOM					
	Architectural Remodel	26,504	SF	90.00	$2,385,360	
	Structural Remodel	26,504	SF	38.70	$1,025,705	
	MEP Systems	26,504	SF	81.00	$2,146,824	
	Hazardous Material Abatement	26,504	SF	6.00	$159,024	
	Equipment	26,504	SF	3.50	$92,764	
	Interior Demolition	26,504	SF	10.00	$265,040	
	Subtotal			229.20	$6,074,717	
	General Conditions, Overhead and Profit	30.0%		68.76	$1,822,415	
	Design Contingency	20.0%		59.59	$1,579,426	
	Cost Escalation	12.5%		44.69	$1,184,570	
	Change Order Contingency	15.0%		60.34	$1,599,169	
	TOTAL			462.58	$12,260,297	$12,260,297
B8	BUILDING 7 - CLASSROOM					
	Architectural Remodel	25,302	SF	90.00	$2,277,180	
	Structural Remodel	25,302	SF	38.70	$979,187	
	MEP Systems	25,302	SF	81.00	$2,049,462	
	Hazardous Material Abatement	25,302	SF	6.00	$151,812	
	Equipment	25,302	SF	3.50	$88,557	
	Interior Demolition	25,302	SF	10.00	$253,020	
	Subtotal			229.20	$5,799,218	
	General Conditions, Overhead and Profit	30.0%		68.76	$1,739,766	
	Design Contingency	20.0%		59.59	$1,507,797	
	Cost Escalation	12.5%		44.69	$1,130,848	
	Change Order Contingency	15.0%		60.34	$1,526,644	
	TOTAL			462.58	$11,704,273	$11,704,273

CONCEPTUAL COST ESTIMATE - OPTION A					
Project Name:	**Roosevelt High School LAUSD**			**Project No.**	**10366732**
Architect:	**DLR Group**			**PM/DM/OAR:**	
Project Description:	**High School Modernization**			**Date:**	**24-Sep-15**

	Item	Quantity	Unit	Unit Cost	Subtotal	Division Total
B	**BUILDING RENOVATION**					
B9	BUILDING 8 - CLASSROOM					
	Architectural Remodel	1,850	SF	92.70	$171,495	
	Structural Remodel	1,850	SF	30.85	$57,077	
	MEP Systems	1,850	SF	85.05	$157,343	
	Hazardous Material Abatement	1,850	SF	6.00	$11,100	
	Equipment	1,850	SF	3.50	$6,475	
	Interior Demolition	1,850	SF	10.00	$18,500	
	Subtotal			228.10	$421,990	
	General Conditions, Overhead and Profit	30.0%		68.43	$126,597	
	Design Contingency	20.0%		59.31	$109,717	
	Cost Escalation	12.5%		44.48	$82,288	
	Change Order Contingency	15.0%		60.05	$111,089	
	TOTAL			460.37	$851,681	$851,681
B10	BUILDING 17 - CLASSROOM					
	Architectural Remodel	3,879	SF	92.70	$359,583	
	Structural Remodel	3,879	SF	30.85	$119,677	
	MEP Systems	3,879	SF	85.05	$329,909	
	Hazardous Material Abatement	3,879	SF	6.00	$23,274	
	Equipment	3,879	SF	3.50	$13,577	
	Interior Demolition	3,879	SF	10.00	$38,790	
	Subtotal			228.10	$884,810	
	General Conditions, Overhead and Profit	30.0%		68.43	$265,443	
	Design Contingency	20.0%		59.31	$230,050	
	Cost Escalation	12.5%		44.48	$172,538	
	Change Order Contingency	15.0%		60.05	$232,926	
	TOTAL			460.37	$1,785,767	$1,785,767

CONCEPTUAL COST ESTIMATE - OPTION A

Project Name: Roosevelt High School LAUSD — **Project No.** 10366732

Architect: DLR Group — **PM/DM/OAR:**

Project Description: High School Modernization — **Date:** 24-Sep-15

	Item	Quantity	Unit	Unit Cost	Subtotal	Division Total
B	**BUILDING RENOVATION**					
B11	BUILDING 18 - CLASSROOM					
	Architectural Remodel	3,848	SF	90.00	$346,320	
	Structural Remodel	3,848	SF	28.70	$110,438	
	MEP Systems	3,848	SF	81.00	$311,688	
	Hazardous Material Abatement	3,848	SF	6.00	$23,088	
	Equipment	3,848	SF	3.50	$13,468	
	Interior Demolition	3,848	SF	10.00	$38,480	
	Subtotal			219.20	$843,482	
	General Conditions, Overhead and Profit	30.0%		65.76	$253,044	
	Design Contingency	20.0%		56.99	$219,305	
	Cost Escalation	12.5%		42.74	$164,479	
	Change Order Contingency	15.0%		57.70	$222,047	
	TOTAL			442.40	$1,702,357	$1,702,357

CONCEPTUAL COST ESTIMATE - OPTION A

Project Name: **Roosevelt High School LAUSD** **Project No.** **10366732**

Architect: **DLR Group** **PM/DM/OAR:**

Project Description: **High School Modernization** **Date:** **24-Sep-15**

	Item	Quantity	Unit	Unit Cost	Subtotal	Division Total
C	**SITE IMPROVEMENTS**					
C1	DEMOLITION / EARTHWORK					
	Building Demolition Including Hazardous Material Abatement					
	Building 6 & 7	35,928	SF	8.50	$305,388	
	Remove modular buildings	35,568	SF	5.00	$177,840	
	Remove and cap utility connections	22	EA	2,000.00	$44,000	
	Site Demolition	238,750	SF	0.15	$35,813	
	Grading					
	Rough grading	238,750	SF	0.18	$42,975	
	Import engineering fill and compact	3,095	CY	38.00	$117,606	
	Export surplus	6,000	CY	23.00	$138,000	
	Fine grading	238,750	SF	0.20	$47,750	
	Erosion control	238,750	SF	0.08	$19,100	
	Subtotal			3.89	$928,472	
	General Conditions, Overhead and Profit	30.0%		1.17	$278,542	
	Design Contingency	20.0%		1.01	$241,403	
	Cost Escalation	12.5%		0.76	$181,052	
	Change Order Contingency	15.0%		1.02	$244,420	
	TOTAL			7.85	$1,873,889	$1,873,889
C2	SITE STRUCTURES					
C2.1	New Lunch Shelter	9,000	SF	84.00	$756,000	
	Subtotal			84.00	$756,000	
	General Conditions, Overhead and Profit	30.0%		25.20	$226,800	
	Design Contingency	20.0%		21.84	$196,560	
	Cost Escalation	12.5%		16.38	$147,420	
	Change Order Contingency	15.0%		22.11	$199,017	
	TOTAL			169.53	$1,525,797	$1,525,797
C2.2	New Trash Enclosure	1	EA	60,000.00	$60,000	
	Subtotal				$60,000	
	General Conditions, Overhead and Profit	30.0%			$18,000	
	Design Contingency	20.0%			$15,600	
	Cost Escalation	12.5%			$11,700	
	Change Order Contingency	15.0%			$15,795	
	TOTAL				$121,095	$121,095

CONCEPTUAL COST ESTIMATE - OPTION A

Project Name: Roosevelt High School LAUSD — **Project No.** 10366732

Architect: DLR Group — **PM/DM/OAR:**

Project Description: High School Modernization — **Date:** 24-Sep-15

	Item	Quantity	Unit	Unit Cost	Subtotal	Division Total
C	**SITE IMPROVEMENTS**					
C2	SITE STRUCTURES					
C2.3	New Campus Entry	1	EA	45,000.00	$45,000	
	Subtotal				$45,000	
	General Conditions, Overhead and Profit	30.0%			$13,500	
	Design Contingency	20.0%			$11,700	
	Cost Escalation	12.5%			$8,775	
	Change Order Contingency	15.0%			$11,846	
	TOTAL				$90,821	$90,821
C3	SITE PAVING / PARKING / LANDSCAPING					
C3.1	Path of Travel ADA Corrections	45,000	SF	14.13	$635,670	
C3.2	Asphalt Paving - Patch and Repair	135,000	SF	9.43	$1,273,610	
C3.3	Concrete Paving	33,750	SF	27.24	$919,451	
C3.4	Concrete Curbs	4,750	LF	44.40	$210,881	
C3.5	New Quad	35,000	SF	30.27	$1,059,450	
C3.6	New Entry Plaza and Main Entry	23,000	SF	30.27	$696,210	
C3.7	New Drop Off Areas	80,000	SF	34.31	$2,744,480	
C3.8	Directional Signage, ADA Compliance	1	LS	121,080.00	$121,080	
C3.9	Landscaping and Irrigation	45,000	SF	36.32	$1,634,580	
	Subtotal				$9,295,413	
	General Conditions, Overhead and Profit			30% included in unit costs above		
	Design Contingency			20% included in unit costs above		
	Cost Escalation			12.5% included in unit costs above		
	Change Order Contingency			15% included in unit costs above		
	TOTAL				$9,295,413	$9,295,413
C4	ATHLETIC FIELDS					
C4.1	New Baseball Field				Existing	
C4.2	New Softball Field				Existing	
C4.3	New Regulation Football Field and Track				Existing	
C4.4	Tennis and Basket Ball Courts				Existing	
	Subtotal					
	General Conditions, Overhead and Profit					
	Design Contingency					
	Cost Escalation					
	Change Order Contingency					
	TOTAL					

C. P. O'Halloran Associates Inc.
Construction Cost Management

CONCEPTUAL COST ESTIMATE - OPTION A

Project Name: Roosevelt High School LAUSD — **Project No.** 10366732

Architect: DLR Group — **PM/DM/OAR:**

Project Description: High School Modernization — **Date:** 24-Sep-15

	Item	Quantity	Unit	Unit Cost	Subtotal	Division Total
C	**SITE IMPROVEMENTS**					
C5	MISCELLANEOUS SITE					
C5.1	Site Lighting	238,750	SF	1.01	$240,899	
C5.2	Fences and Gates	238,750	SF	0.36	$86,724	
C5.3	Trash Receptacles	238,750	SF	0.10	$24,090	
C5.4	Benches and Bleachers	238,750	SF	0.44	$105,995	
C5.5	Signage	238,750	SF	0.32	$77,088	
	Change Order Contingency					
	Subtotal				$534,795	
	General Conditions, Overhead and Profit			30% included in unit costs above		
	Design Contingency			20% included in unit costs above		
	Cost Escalation			12.5% included in unit costs above		
				15% included in unit costs above		
	TOTAL				$534,795	$534,795
C6	UTILITIES (NEW & MODIFICATIONS)					
C6.1	Domestic and Fire Water	238,750	SF	1.21	$289,079	
C6.2	Sewer	238,750	SF	1.01	$240,899	
C6.3	Storm Drainage	238,750	SF	1.11	$264,989	
C6.4	Gas	238,750	SF	0.16	$38,544	
C6.5	Electrical Power	238,750	SF	1.51	$361,348	
C6.6	Electrical Data, Communications, Low Voltage	238,750	SF	1.82	$433,618	
	Subtotal				$1,628,476	
	General Conditions, Overhead and Profit			30% included in unit costs above		
	Design Contingency			20% included in unit costs above		
	Cost Escalation			12.5% included in unit costs above		
	Change Order Contingency			15% included in unit costs above		
	TOTAL				$1,628,476	$1,628,476

4.2.1 SCOPE DESCRIPTION

CLASSROOMS / PARKING

- EXISTING CLASSROOMS: 152
  EXISTING PARKING: 370 (HMS 140 + RHS 230)
  1 CLASSROOM : 1.5 PARKING SPACES (REQ. 342)

- PROPOSED CLASSROOMS: 131
  PROPOSED PARKING: 405 (HMS 140 + RHS 265)
  1 CLASSROOM : 2.9 PARKING SPACES (REQ. 207)

SUMMARY

- **BUILDING 1 (AUD. AND CR. BLDG.)**
  - REMOVE
    - MAJOR STRUCTURAL REHABILITATION REQUIRED
    - UNDERSIZE CLASSROOMS, CANNOT EASILY BE ENLARGED

- **BUILDING 3 (WEST CR. BLDG.)**
  - REMOVE

- **BUILDING 22 (LUNCH SHELTER)**
  - REMOVE
    - STRUCTURAL REVIEW INDICATES 'AT RISK'

- **BUILDING 23 (CR. BLDG.)**
  - RETAIN EXISTING PARKING IN LIEU OF MORE CLASSROOMS

- **MODULAR BUILDINGS**
  - REMOVE ALL
    - BEYOND USEFUL LIFE (40 TO 60 YEARS OLD)
    - LIMITED COLLABORATIVE CONFIGURATIONS

- **BASEBALL AND SOFTBALL FIELDS**
  - RETAIN EXISTING UNDERSIZED FIELDS

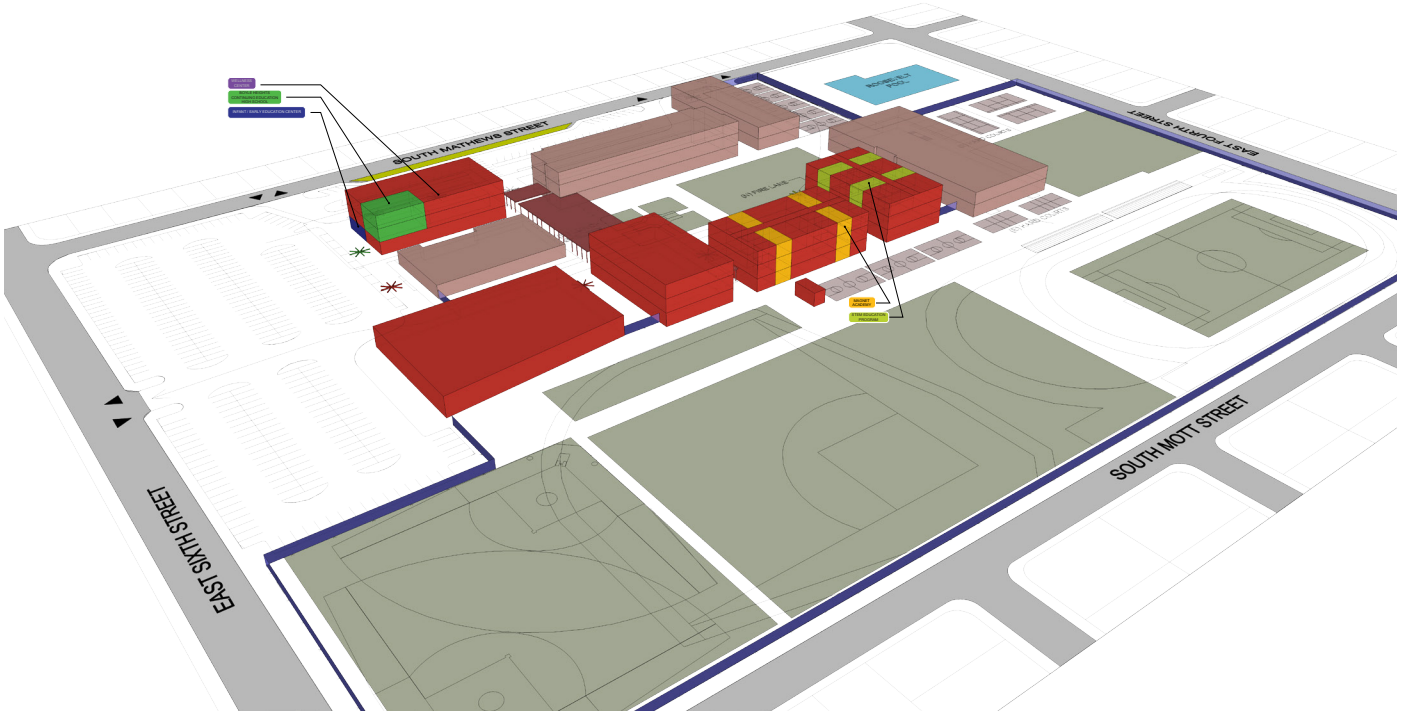
- **FOOTBALL FIELD AND TRACK**
  - RETAIN EXISTING UNDERSIZED FIELD AND TRACK

- NEW NON-REGULATION PLAY FIELD

- CONTINUOUS L-SHAPED ATHLETIC ZONE

- **NEW DROP AREAS**
  - NEW DROP OFF AREA ON MATHEWS ST. FOR SCHOOL BUSES WITH OVERFLOW PARKING OUTSIDE DROP OFF TIMES
  - NEW DROP OFF / QUEUING AREA FOR RHS AND HMS IN PARKING LOT ALONG E. 6TH ST.
  - NEW DROP OFF / QUEUING AREA FOR WELLNESS CENTER AND INFANT / EARLY ED. IN PARKING LOT ALONG E. 6TH ST.

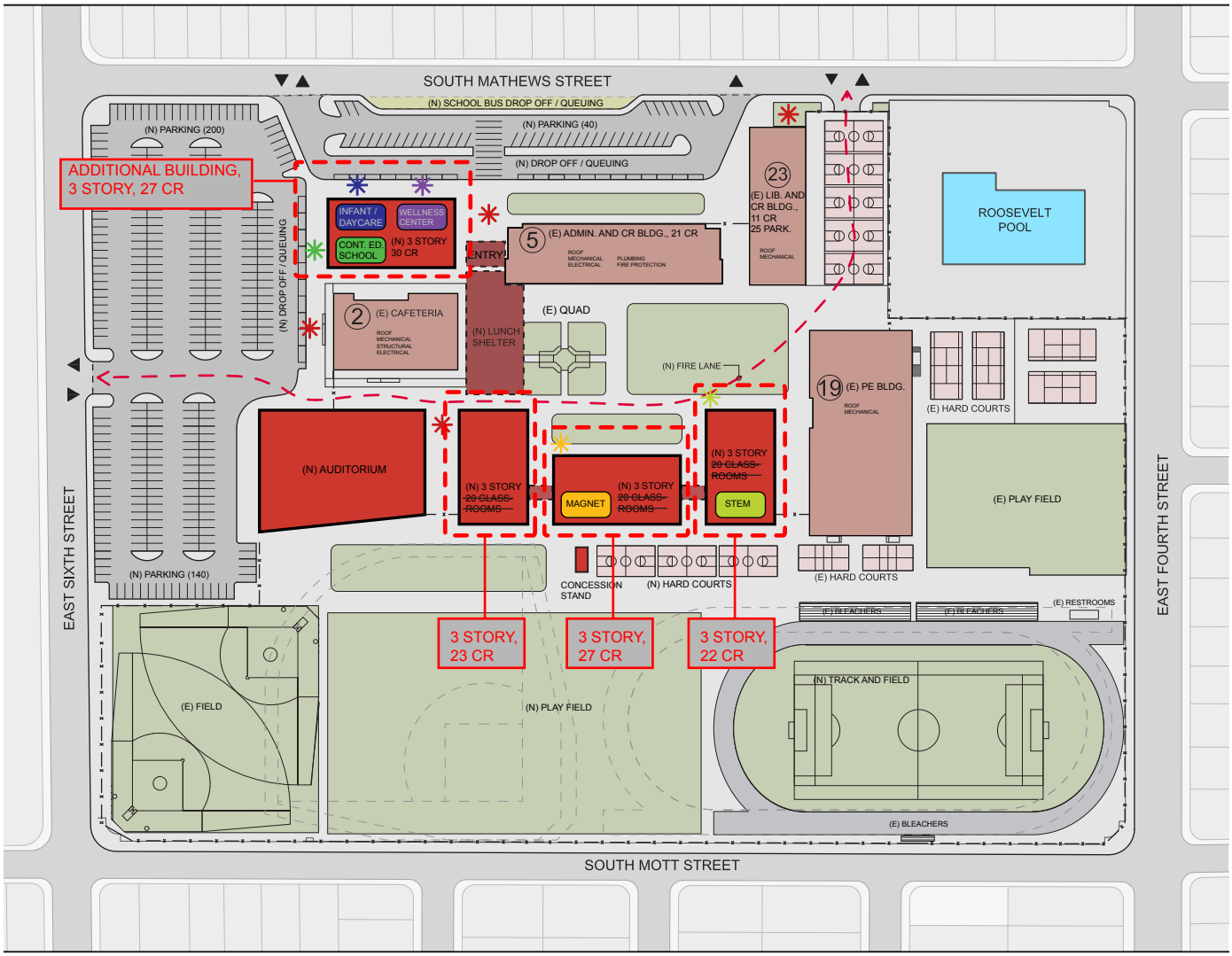
4.2.2 MASSING AND SITE ORGANIZATION



LEGEND

- EXISTING BUILDING TO BE MODERNIZED
- NEW BUILDING
- INFANT / EARLY EDUCATION CENTER
- WELLNESS CENTER
- MATH, SCIENCE, AND TECH. MAGNET ACADEMY
- BOYLE HEIGHTS CONT. EDUCATION HIGH SCHOOL

- SCHOOL ENTRANCES
- SECURITY FENCE
- FIRE LANE



OPTION B - $185,401,739

RETAIN AND MODERNIZE 4 EXISTING CORE BUILDINGS
3 NEW ACADEMIC BUILDINGS, NEW LUNCH SHELTER
EXISTING UNDERSIZED ATHLETIC FIELDS TO REMAIN

4.2.3 INTERIM HOUSING OPTIONS

Option B ($185,401,739)

- Portables
  - Demolish all 13 portable classrooms in “east group,” all 11 portable classrooms in “south group,” and both (2) portable classrooms in “northwest group”
  - No new or existing portable classrooms
  - Net loss of 26 portable classrooms
- Permanent
  - Demolish Building 1 (51 classrooms), Building 3 (8 classrooms), Building 6 (11 classrooms), Building 7 (15 classrooms), Building 8 (1 classroom), Building 17 (4 classrooms), and Building 18 (4 classrooms)
  - Replace those with new buildings containing 99 classrooms
  - Net gain of 5 permanent classrooms
- Overall net loss of 21 classrooms (to 131 total)

4.2.4 SCHEDULING / PHASING PLANS

Option B would make use of the existing 26 portable classrooms scheduled to be removed in full-time use (most are currently only occupied for part of the day) while the existing 8 classrooms of Building 3 were removed and replaced with a new 27-classroom building. The net gain of 19 classrooms at this point could mostly accommodate the 20 existing classrooms in the south wing of Building 1 (the 1924 addition), which would be demolished to allow construction to begin on the new Auditorium. This would require removal of the 11 portable classrooms in the “south group” to accommodate the proposed Auditorium footprint. However, the “south group” would only be relocated (not removed/demolished) in preparation of the next phase. A further 10 classrooms would be lost in the demolition of the existing Auditorium and the current “middle” portion of Building 1 (the south end of the original 1922 building) to allow a new 23-classroom building in that location; this would require interim housing consisting of at least 10 classrooms, which could be accommodated via the 11 portable classrooms of the relocated “south group” (no new portables required). Next, the last portion of Building 1 would be demolished to make room for two additional new buildings containing 22 and 27 classrooms, respectively. Lastly, the remaining permanent buildings at the east edge of the site and the remaining portable classrooms would all be removed.

- Phase B1: Demolish Building 3 while making better (full-time) use of existing 26 portable classrooms, and construct new 27-classroom building.
  - Start phase with 152 classrooms
  - Maintain at least 144 classrooms during phase
  - End phase with 171 classrooms

- Phase B2: Demolish 1924 addition (south wing) to Building 1, relocate “south group” portable classrooms (11), and construct new Auditorium.
  - Start phase with 171 classrooms
  - Maintain at least 140 classrooms during phase (20 permanent lost at Building 1, 11 portables temporarily lost at “south group” during relocation)
  - End phase with 151 classrooms
- Phase B3: Demolish existing Auditorium portion of Building 1 (south end of original 1922 building), and construct new 23-classroom building.
  - Start phase with 151 classrooms
  - Maintain at least 141 classrooms during phase (10 permanent lost at Building 1)
  - End phase with 164 classrooms

- Phase B4: Demolish remaining portion of Building 1 (north end of original 1922 building including existing lobby), and construct new 27-classroom and 22-classroom buildings.
  - Start phase with 164 classrooms
  - Maintain at least 143 classrooms during phase (21 permanent lost at Building 1)
  - End phase with 192 classrooms
- Phase B5: Demolish Building 6 (11 classrooms), Building 7 (15 classrooms), Building 8 (1 classroom), Building 17 (4 classrooms), and Building 18 (4 classrooms), and remaining portables (26 classrooms)
  - Start phase with 192 classrooms
  - Maintain at least 131 classrooms during phase (35 permanent and 26 portable classrooms lost)
  - End phase with 131 classrooms

C. P. O'HALLORAN ASSOCIATES INC.
CONSTRUCTION COST MANAGEMENT

CONCEPT COST MODEL
CONSTRUCTION ESTIMATE

for

Roosevelt High School - Option B
Los Angeles Unified School District

Prepared for :

DLR Group
Architecture, Engineering, Planning, Interiors
3130 Wilshire Boulevard, 6th Floor
Santa Monica, CA 90403

September 24, 2015

 # 15-2365

2659 TOWNSGATE ROAD, SUITE 213 · WESTLAKE VILLAGE, CA 91361-2792 · T 805-494-3703 · F 805-497-7721 · WWW.CPOHALLORAN.COM

Concept Cost Model Construction Estimate

Basis of Estimate

The estimated construction cost is based on concept floor plans and building space program dated August 2015. Unit costs include average industry labor rates with competitive bid conditions. Competitive bid conditions generally occur when bids are received from a minimum of four general contractors and three subcontractors for each trade. Assumptions included for materials and specifications should be confirmed prior to completion of bid documents. The estimate includes general contractor general conditions, supervision, bonds, insurances, overhead, profit, cost escalation and estimating contingency. Project development soft costs, owner furnished equipment and furnishings are not included.

The estimated construction cost represents our best judgment as a professional consultant familiar with the construction industry. We have no control over the cost or supply of labor, materials and equipment, a contractor's methods of determining bid prices and market conditions. We cannot and do not warranty or represent that bids or negotiated prices will not vary from the estimated construction cost.

Construction Estimate Exclusions

Professional design, testing, inspection and management fees.
Fire and all risk insurance.
Legal and financing costs.
Building permits and fees.
Construction, project or staging contingencies.
Furnishings, loose equipment and modular workstations.
Sports equipment, scoreboards and broadcast systems.
Audio visual equipment.
Off-site improvements.
Unforeseen subsurface soils conditions and special foundations.
Utility metering.
Photovoltaic panels.
Communications wiring and equipment.
Independent commissioning.
Temporary buildings.

CONCEPTUAL COST ESTIMATE SUMMARY - OPTION B

Project Name: Roosevelt High School LAUSD **Project No.** 10366732

Architect: DLR Group **PM/DM/OAR:**

Project Description: High School Modernization **Date:** 24-Sep-15

	Item	Area	Unit	Subtotal	Cost/SF	Total
A	**NEW CONSTRUCTION**					$100,418,029
A1	MULTIPURPOSE / PERFORMANCE	25,500	SF	$19,042,189	$746.75	
A2	CLASSROOM BUILDINGS	126,000	SF	$81,375,840	$645.84	
B	**BUILDING RENOVATION**					$67,896,960
B1	BUILDING 2 - CAFETERIA	14,322	SF	$8,379,669	$585.09	
B2	BUILDING 5 - ADMINISTRATION CLASSROOM	57,764	SF	$25,927,880	$448.86	
B3	BUILDING 19 - GYM / PE	38,676	SF	$17,711,323	$457.94	
B4	BUILDING 23 - CLASSROOM LIBRARY	35,295	SF	$15,878,088	$449.87	
C	**SITE IMPROVEMENTS**					
C1	DEMOLITION / EARTHWORK	238,750	SF	$3,890,353	$16.29	$3,890,353
C2	SITE STRUCTURES					$1,737,713
C2.1	New Lunch Shelter	9,000	SF	$1,525,797	$169.53	
C2.2	New Trash Enclosure			$121,095		
C2.3	New Campus Entry			$90,821		
C3	SITE PAVING / PARKING / LANDSCAPING					$9,295,413
C3.1	Path of Travel ADA Corrections	45,000	SF	$635,670	$14.13	
C3.2	Asphalt Paving, Patch and Repair	135,000	SF	$1,273,610	$9.43	
C3.3	Concrete Paving	33,750	SF	$919,451	$27.24	
C3.4	Concrete Curbs	4,750	SF	$210,881	$44.40	
C3.5	New Quad	35,000	SF	$1,059,450	$30.27	
C3.6	New Entry Plaza and Main Entry	23,000	SF	$696,210	$30.27	
C3.7	New Drop Off Areas	80,000	SF	$2,744,480	$34.31	
C3.8	Directional Signage, ADA Compliance			$121,080		
C3.9	Landscaping and Irrigation	45,000	SF	$1,634,580	$36.32	
C4	ATHLETIC FIELDS					$0
C4.1	New Baseball Field			Existing		
C4.2	New Softball Field			Existing		
C4.3	New Regulation Football Field and Track			Existing		
C4.4	Tennis and Basket Ball Courts			Existing		
C5	MISCELLANOUS SITE					$534,795
C5.1	Site Lighting	238,750	SF	$240,899	$1.01	
C5.2	Fences and Gates	238,750	SF	$86,724	$0.36	
C5.3	Trash Receptacles	238,750	SF	$24,090	$0.10	
C5.4	Benches	238,750	SF	$105,995	$0.44	
C5.5	Signage	238,750	SF	$77,088	$0.32	

C. P. O'Halloran Associates Inc.
Construction Cost Management

CONCEPTUAL COST ESTIMATE SUMMARY - OPTION B

Project Name: Roosevelt High School LAUSD **Project No.** 10366732

Architect: DLR Group **PM/DM/OAR:**

Project Description: High School Modernization **Date:** 24-Sep-15

	Item	Area	Unit	Subtotal	Cost/SF	Total
C	**SITE IMPROVEMENTS**					
C6	UTILITIES (NEW & MODIFICATIONS)					$1,628,476
C6.1	Domestic and Fire Water	238,750	SF	$289,079	$1.21	
C6.2	Sewer	238,750	SF	$240,899	$1.01	
C6.3	Storm Drainage	238,750	SF	$264,989	$1.11	
C6.4	Gas	238,750	SF	$38,544	$0.16	
C6.5	Electrical Power	238,750	SF	$361,348	$1.51	
C6.6	Electrical Data, Communications, Low Voltage	238,750	SF	$433,618	$1.82	
	TOTAL					$185,401,739

CONCEPTUAL COST ESTIMATE - OPTION B

Project Name: Roosevelt High School LAUSD **Project No.** 10366732

Architect: DLR Group **PM/DM/OAR:**

Project Description: High School Modernization **Date:** 24-Sep-15

	Item	Quantity	Unit	Unit Cost	Subtotal	Division Total
A	**NEW CONSTRUCTION**					
A1	MULTIPURPOSE / PERFORMANCE	25,500	SF	355.00	$9,052,500	
	Extra for methane barrier	25,500	SF	15.00	$382,500	
	Subtotal			370.00	$9,435,000	
	General Conditions, Overhead and Profit	30.0%		111.00	$2,830,500	
	Design Contingency	20.0%		96.20	$2,453,100	
	Cost Escalation	12.5%		72.15	$1,839,825	
	Change Order Contingency	15.0%		97.40	$2,483,764	
	TOTAL			746.75	$19,042,189	$19,042,189
A2	CLASSROOM BUILDINGS	126,000	SF	315.00	$39,690,000	
	Extra for methane barrier	42,000	SF	15.00	$630,000	
	Subtotal			320.00	$40,320,000	
	General Conditions, Overhead and Profit	30.0%		96.00	$12,096,000	
	Design Contingency	20.0%		83.20	$10,483,200	
	Cost Escalation	12.5%		62.40	$7,862,400	
	Change Order Contingency	15.0%		84.24	$10,614,240	
	TOTAL			645.84	$81,375,840	$81,375,840

CONCEPTUAL COST ESTIMATE - OPTION B

Project Name: Roosevelt High School LAUSD — **Project No.** 10366732

Architect: DLR Group — **PM/DM/OAR:**

Project Description: High School Modernization — **Date:** 24-Sep-15

	Item	Quantity	Unit	Unit Cost	Subtotal	Division Total
B	**BUILDING RENOVATION**					
B1	BUILDING 2 - CAFETERIA					
	Architectural Remodel	14,322	SF	95.00	$1,360,590	
	Structural Remodel	14,322	SF	29.90	$428,228	
	MEP Systems	14,322	SF	94.00	$1,346,268	
	Hazardous Material Abatement	14,322	SF	6.00	$85,932	
	Equipment	14,322	SF	55.00	$787,710	
	Interior Demolition	14,322	SF	10.00	$143,220	
	Subtotal			289.90	$4,151,948	
	General Conditions, Overhead and Profit	30.0%		86.97	$1,245,584	
	Design Contingency	20.0%		75.37	$1,079,506	
	Cost Escalation	12.5%		56.53	$809,630	
	Change Order Contingency	15.0%		76.32	$1,093,000	
	TOTAL			585.09	$8,379,669	$8,379,669
B2	BUILDING 5 - ADMINISTRATION CLASSROOM					
	Architectural Remodel	57,764	SF	92.00	$5,314,288	
	Structural Remodel	57,764	SF	29.90	$1,727,144	
	MEP Systems	57,764	SF	81.00	$4,678,884	
	Hazardous Material Abatement	57,764	SF	6.00	$346,584	
	Equipment	57,764	SF	3.50	$202,174	
	Interior Demolition	57,764	SF	10.00	$577,640	
	Subtotal			222.40	$12,846,714	
	General Conditions, Overhead and Profit	30.0%		66.72	$3,854,014	
	Design Contingency	20.0%		57.82	$3,340,146	
	Cost Escalation	12.5%		43.37	$2,505,109	
	Change Order Contingency	15.0%		58.55	$3,381,897	
	TOTAL			448.86	$25,927,880	$25,927,880

CONCEPTUAL COST ESTIMATE - OPTION B

Project Name: Roosevelt High School LAUSD — **Project No.** 10366732

Architect: DLR Group — **PM/DM/OAR:**

Project Description: High School Modernization — **Date:** 24-Sep-15

	Item	Quantity	Unit	Unit Cost	Subtotal	Division Total
B	**BUILDING RENOVATION**					
B3	BUILDING 19 - GYM / PE					
	Architectural Remodel	38,676	SF	96.00	$3,712,896	
	Structural Remodel	38,676	SF	31.90	$1,233,764	
	MEP Systems	38,676	SF	78.00	$3,016,728	
	Hazardous Material Abatement	38,676	SF	6.00	$232,056	
	Equipment	38,676	SF	5.00	$193,380	
	Interior Demolition	38,676	SF	10.00	$386,760	
	Subtotal			226.90	$8,775,584	
	General Conditions, Overhead and Profit	30.0%		68.07	$2,632,675	
	Design Contingency	20.0%		58.99	$2,281,652	
	Cost Escalation	12.5%		44.25	$1,711,239	
	Change Order Contingency	15.0%		59.73	$2,310,173	
	TOTAL			457.94	$17,711,323	$17,711,323
B4	BUILDING 23 - CLASSROOM LIBRARY					
	Architectural Remodel	35,295	SF	92.00	$3,247,140	
	Structural Remodel	35,295	SF	29.90	$1,055,321	
	MEP Systems	35,295	SF	81.00	$2,858,895	
	Hazardous Material Abatement	35,295	SF	6.00	$211,770	
	Equipment	35,295	SF	4.00	$141,180	
	Interior Demolition	35,295	SF	10.00	$352,950	
	Subtotal			222.90	$7,867,256	
	General Conditions, Overhead and Profit	30.0%		66.87	$2,360,177	
	Design Contingency	20.0%		57.95	$2,045,486	
	Cost Escalation	12.5%		43.47	$1,534,115	
	Change Order Contingency	15.0%		58.68	$2,071,055	
	TOTAL			449.87	$15,878,088	$15,878,088

CONCEPTUAL COST ESTIMATE - OPTION B

Project Name: Roosevelt High School LAUSD — **Project No.** 10366732

Architect: DLR Group — **PM/DM/OAR:**

Project Description: High School Modernization — **Date:** 24-Sep-15

	Item	Quantity	Unit	Unit Cost	Subtotal	Division Total
C	**SITE IMPROVEMENTS**					
C1	DEMOLITION / EARTHWORK					
	Building Demolition Including Hazardous Material Abatement					
	Building 1, 3, 6 & 7	153,471	SF	8.50	$1,304,504	
	Remove modular buildings	35,568	SF	5.00	$177,840	
	Remove and cap utility connections	22	EA	2,000.00	$44,000	
	Site Demolition	238,750	SF	0.15	$35,813	
	Grading					
	Rough grading	238,750	SF	0.18	$42,975	
	Import engineering fill and compact	3,095	CY	38.00	$117,606	
	Export surplus	6,000	CY	23.00	$138,000	
	Fine grading	238,750	SF	0.20	$47,750	
	Erosion control	238,750	SF	0.08	$19,100	
	Subtotal			8.07	$1,927,587	
	General Conditions, Overhead and Profit	30.0%		2.42	$578,276	
	Design Contingency	20.0%		2.10	$501,173	
	Cost Escalation	12.5%		1.57	$375,880	
	Change Order Contingency	15.0%		2.13	$507,437	
	TOTAL			16.29	$3,890,353	$3,890,353
C2	SITE STRUCTURES					
C2.1	New Lunch Shelter	9,000	SF	84.00	$756,000	
	Subtotal			84.00	$756,000	
	General Conditions, Overhead and Profit	30.0%		25.20	$226,800	
	Design Contingency	20.0%		21.84	$196,560	
	Cost Escalation	12.5%		16.38	$147,420	
	Change Order Contingency	15.0%		22.11	$199,017	
	TOTAL			169.53	$1,525,797	$1,525,797
C2.2	New Trash Enclosure	1	EA	60,000.00	$60,000	
	Subtotal			60,000.00	$60,000	
	General Conditions, Overhead and Profit	30.0%		18,000.00	$18,000	
	Design Contingency	20.0%		15,600.00	$15,600	
	Cost Escalation	12.5%		11,700.00	$11,700	
	Change Order Contingency	15.0%		15,795.00	$15,795	
	TOTAL			121,095.00	$121,095	$121,095

CONCEPTUAL COST ESTIMATE - OPTION B

Project Name: Roosevelt High School LAUSD — **Project No.** 10366732

Architect: DLR Group — **PM/DM/OAR:**

Project Description: High School Modernization — **Date:** 24-Sep-15

	Item	Quantity	Unit	Unit Cost	Subtotal	Division Total
C	**SITE IMPROVEMENTS**					
C2	SITE STRUCTURES					
C2.3	New Campus Entry	1	EA	45,000.00	$45,000	
	Subtotal			45,000.00	$45,000	
	General Conditions, Overhead and Profit	30.0%		13,500.00	$13,500	
	Design Contingency	20.0%		11,700.00	$11,700	
	Cost Escalation	12.5%		8,775.00	$8,775	
	Change Order Contingency	15.0%		11,846.25	$11,846	
	TOTAL			90,821.25	$90,821	$90,821
C3	SITE PAVING / PARKING / LANDSCAPING					
C3.1	Path of Travel ADA Corrections	45,000	SF	14.13	$635,670	
C3.2	Asphalt Paving - Patch and Repair	135,000	SF	9.43	$1,273,610	
C3.3	Concrete Paving	33,750	SF	27.24	$919,451	
C3.4	Concrete Curbs	4,750	LF	44.40	$210,881	
C3.5	New Quad	35,000	SF	30.27	$1,059,450	
C3.6	New Entry Plaza and Main Entry	23,000	SF	30.27	$696,210	
C3.7	New Drop Off Areas	80,000	SF	34.31	$2,744,480	
C3.8	Directional Signage, ADA Compliance	1	LS	121,080.00	$121,080	
C3.9	Landscaping and Irrigation	45,000	SF	36.32	$1,634,580	
	Subtotal				$9,295,413	
	General Conditions, Overhead and Profit			30% included in unit costs above		
	Design Contingency			20% included in unit costs above		
	Cost Escalation			12.5% included in unit costs above		
	Change Order Contingency			15% included in unit costs above		
	TOTAL				$9,295,413	$9,295,413
C4	ATHLETIC FIELDS					
C4.1	New Baseball Field				Existing	
C4.2	New Softball Field				Existing	
C4.3	New Regulation Football Field and Track				Existing	
C4.4	Tennis and Basket Ball Courts				Existing	
	Subtotal				$0	
	General Conditions, Overhead and Profit					
	Design Contingency					
	Cost Escalation					
	Change Order Contingency					
	TOTAL				$0	$0

CONCEPTUAL COST ESTIMATE - OPTION B

Project Name: Roosevelt High School LAUSD **Project No.** 10366732

Architect: DLR Group **PM/DM/OAR:**

Project Description: High School Modernization **Date:** 24-Sep-15

	Item	Quantity	Unit	Unit Cost	Subtotal	Division Total
C	**SITE IMPROVEMENTS**					
C5	MISCELLANEOUS SITE					
C5.1	Site Lighting	238,750	SF	1.01	$240,899	
C5.2	Fences and Gates	238,750	SF	0.36	$86,724	
C5.3	Trash Receptacles	238,750	SF	0.10	$24,090	
C5.4	Benches and Bleachers	238,750	SF	0.44	$105,995	
C5.5	Signage	238,750	SF	0.32	$77,088	
	Subtotal				$534,795	
	General Conditions, Overhead and Profit			30% included in unit costs above		
	Design Contingency			20% included in unit costs above		
	Cost Escalation			12.5% included in unit costs above		
	Change Order Contingency			15% included in unit costs above		
	TOTAL				$534,795	$534,795
C6	UTILITIES (NEW & MODIFICATIONS)					
C6.1	Domestic and Fire Water	238,750	SF	1.21	$289,079	
C6.2	Sewer	238,750	SF	1.01	$240,899	
C6.3	Storm Drainage	238,750	SF	1.11	$264,989	
C6.4	Gas	238,750	SF	0.16	$38,544	
C6.5	Electrical Power	238,750	SF	1.51	$361,348	
C6.6	Electrical Data, Communications, Low Voltage	238,750	SF	1.82	$433,618	
	Subtotal				$1,628,476	
	General Conditions, Overhead and Profit			30% included in unit costs above		
	Design Contingency			20% included in unit costs above		
	Cost Escalation			12.5% included in unit costs above		
	Change Order Contingency			15% included in unit costs above		
	TOTAL				$1,628,476	$1,628,476

4.3.1 SITE USE

CLASSROOMS / PARKING

- EXISTING CLASSROOMS: 152
  EXISTING PARKING: 370 (HMS 140 + RHS 230)
  1 CLASSROOM : 1.5 PARKING SPACES (REQ. 342)

- PROPOSED CLASSROOMS: 131
  PROPOSED PARKING: 415 (HMS 140 + RHS 275)
  1 CLASSROOM : 3.0 PARKING SPACES (REQ. 207)

SUMMARY

- **BUILDING 1 (AUD. AND CR. BLDG.)**
  - REMOVE
    - MAJOR STRUCTURAL REHABILITATION REQUIRED
    - UNDERSIZE CLASSROOMS, CANNOT EASILY BE ENLARGED
    - RELIEVES SITE LAYOUT PRESSURE ON NEW FIELDS

- **BUILDING 2 (CAFETERIA)**
  - REMOVE
    - STRUCTURAL REVIEW INDICATES 'AT RISK'

- **BUILDING 3 (WEST CR. BLDG.)**
  - REMOVE

- **BUILDING 22 (LUNCH SHELTER)**
  - REMOVE
    - STRUCTURAL REVIEW INDICATES 'AT RISK'

- **BUILDING 23 (CR. BLDG.)**
  - RETAIN EXISTING PARKING IN LIEU OF MORE CLASSROOMS

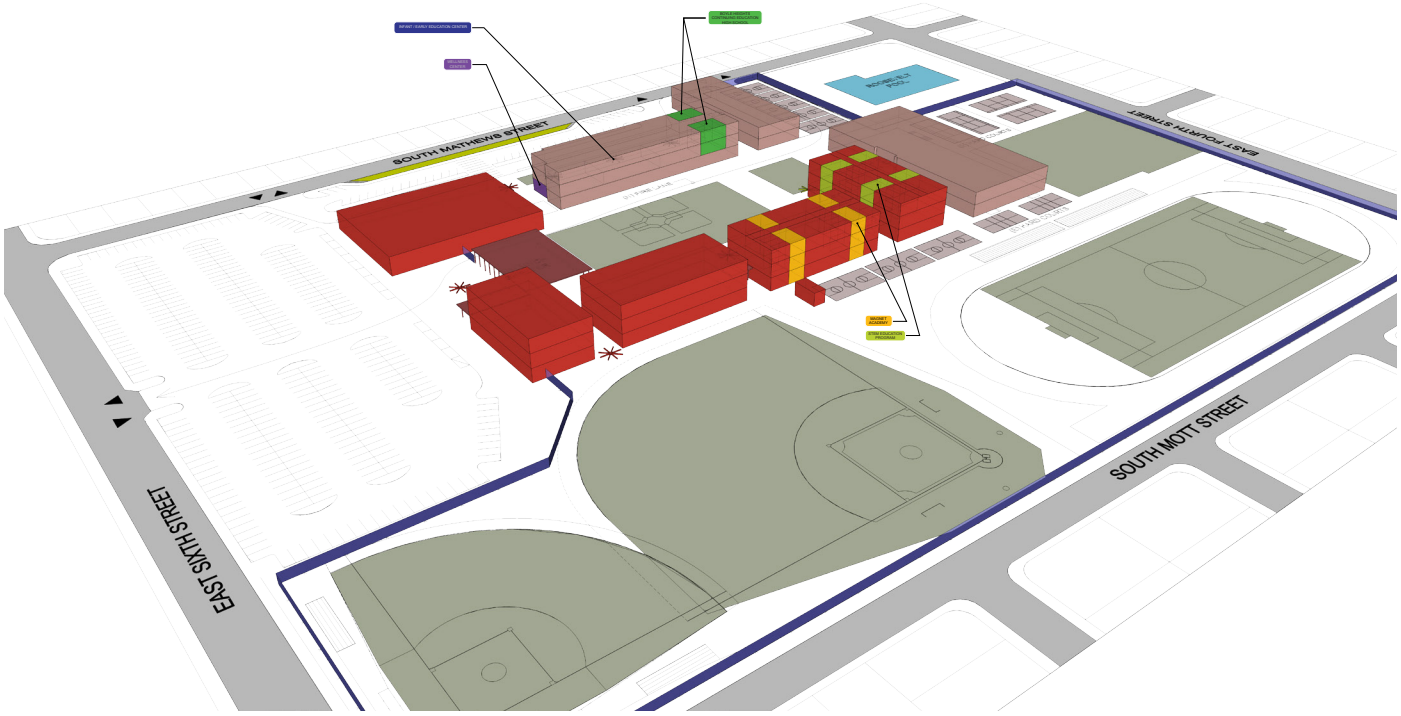
- **MODULAR BUILDINGS**
  - REMOVE ALL
    - BEYOND USEFUL LIFE (40 TO 60 YEARS OLD)
    - LIMITED COLLABORATIVE CONFIGURATIONS

- **BASEBALL AND SOFTBALL FIELDS**
  - NEW REGULATION-SIZED FIELDS

- **FOOTBALL FIELD AND TRACK**
  - NEW REGULATION-SIZED FIELDS

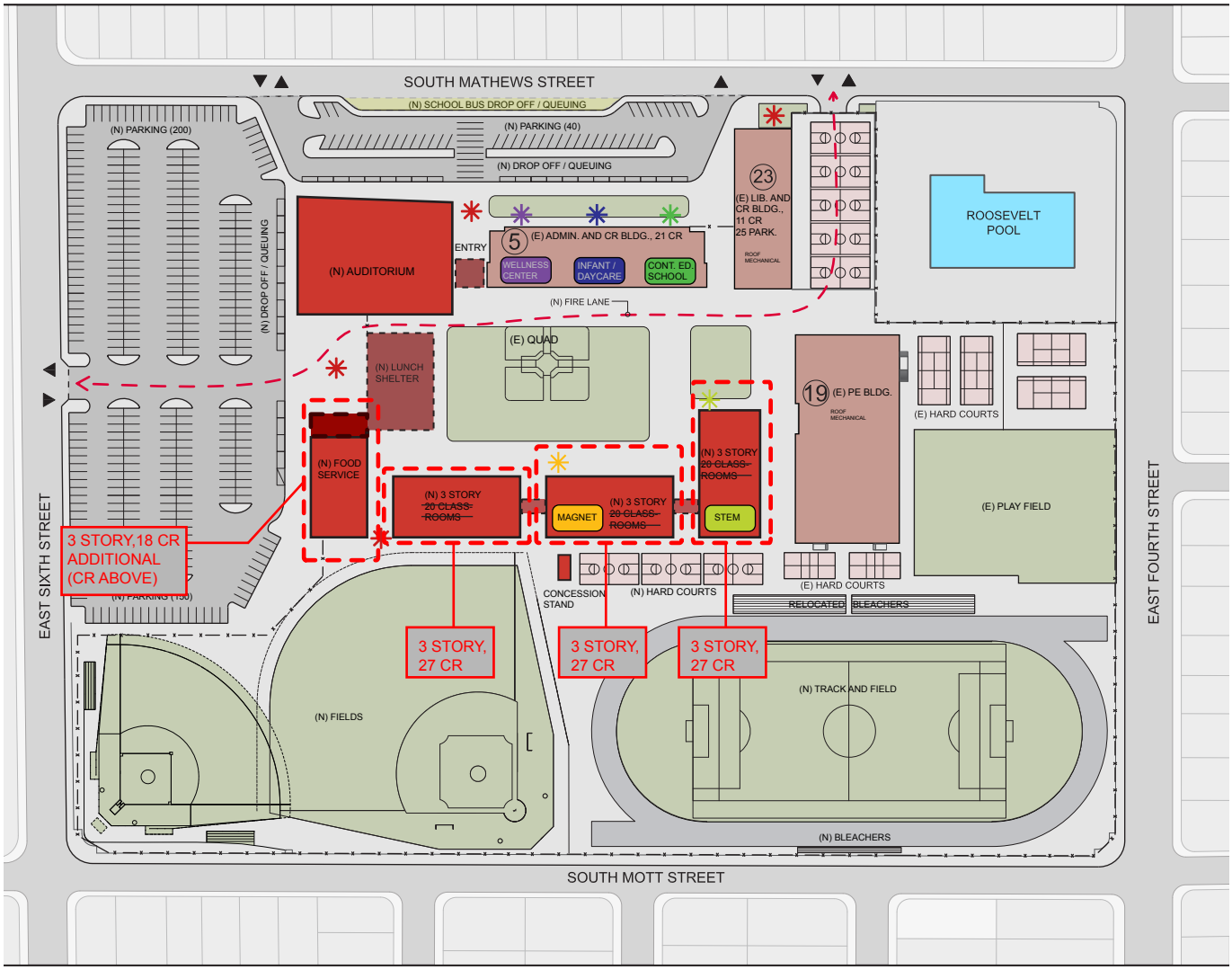
- **NEW DROP AREAS**
  - NEW DROP OFF AREA ON MATHEWS ST. FOR SCHOOL BUSES WITH OVERFLOW PARKING OUTSIDE DROP OFF TIMES
  - NEW DROP OFF / QUEUING AREA FOR RHS AND HMS IN PARKING LOT ALONG E. 6TH ST.
  - NEW DROP OFF / QUEUING AREA FOR WELLNESS CENTER AND INFANT / EARLY ED. IN PARKING LOT ALONG E. 6TH ST.

4.3.2 BUILDING - ROOM USE



LEGEND

- EXISTING BUILDING TO BE MODERNIZED
- NEW BUILDING
- INFANT / EARLY EDUCATION CENTER
- WELLNESS CENTER
- MATH, SCIENCE, AND TECH. MAGNET ACADEMY
- BOYLE HEIGHTS CONT. EDUCATION HIGH SCHOOL
- SCHOOL ENTRANCES
- SECURITY FENCE
- FIRE LANE



OPTION C - $187,051,047

RETAIN AND MODERNIZE 3 EXISTING CORE BUILDINGS
3 NEW ACADEMIC BUILDINGS, NEW FOOD SERVICE BUILDINGS, NEW AUDITORIUM
NEW REGULATION-SIZED ATHLETIC FIELDS

4.3.3 INTERIM HOUSING OPTIONS

Option C ($187,051,047)

- Portables
  - Demolish all 13 portable classrooms in “east group,” all 11 portable classrooms in “south group,” and both (2) portable classrooms in “northwest group”
  - No new or existing portable classrooms
  - Net loss of 26 portable classrooms
- Permanent
  - Demolish Building 1 (51 classrooms), Building 3 (8 classrooms), Building 6 (11 classrooms), Building 7 (15 classrooms), Building 8 (1 classroom), Building 17 (4 classrooms), and Building 18 (4 classrooms)
  - Replace those with new buildings containing 99 classrooms
  - Net gain of 5 permanent classrooms
- Overall net loss of 21 classrooms (to 131 total)

4.3.4 SCHEDULING / PHASING PLANS

Option C would make use of the existing 26 portable classrooms scheduled to be removed in full-time use (most are currently only occupied for part of the day) while the existing 8 classrooms of Building 3 were removed and replaced with a new Auditorium. The 11 portable classrooms in the “south group” would then be relocated in anticipation of the next phase. Another 20 existing classrooms would be lost in the south wing of Building 1 (the 1924 addition) when that is demolished to allow construction to begin on the new food service and classroom building (18 classrooms). Seven (7) additional portable classrooms would be required during this phase for interim housing, but upon completion of the new food service/classroom building they could be removed. A further 10 classrooms would be lost in the demolition of the existing Auditorium and the current “middle” portion of Building 1 (the south end of the original 1922 building) to accommodate a new 27-classroom building. Next, the last portion of Building 1 would be demolished to make room for two additional new buildings containing 27 classrooms each. Lastly, the remaining permanent buildings at the east edge of the site and the remaining portable classrooms would all be removed.

- Phase C1: Demolish Building 3 while making better (full-time) use of existing 26 portable classrooms, and construct new Auditorium.
  - Start phase with 152 classrooms
  - Maintain at least 144 classrooms during phase
  - End phase with 144 classrooms
- Phase C2: Relocate “south group” portable classrooms (11)
  - Start phase with 144 classrooms
  - Maintain at least 133 classrooms during phase
  - End phase with 144 classrooms
- Phase C3: Demolish 1924 addition (south wing) to Building 1, and construct new 18-classroom building with food service functions.
  - Start phase with 144 classrooms
  - Maintain at least 131 classrooms during phase (20 permanent lost at Building 1 = 7 classrooms short)
    + 7 new portable classrooms required for interim housing during phase (only needed during this phase)
  - End phase with 142 classrooms

- Phase C4: Demolish existing Auditorium portion of Building 1 (south end of original 1922 building), and construct new 27-classroom building.
    - Start phase with 142 classrooms
    - Maintain at least 132 classrooms during phase (10 permanent lost at Building 1)
    - End phase with 159 classrooms
- Phase C5: Demolish remaining portion of Building 1 (north end of original 1922 building including existing lobby), and construct two new 27-classroom buildings.
    - Start phase with 159 classrooms
    - Maintain at least 138 classrooms during phase (21 permanent lost at Building 1)
    - End phase with 192 classrooms
- Phase C6: Demolish Building 6 (11 classrooms), Building 7 (15 classrooms), Building 8 (1 classroom), Building 17 (4 classrooms), and Building 18 (4 classrooms), and remaining portables (26 classrooms)
    - Start phase with 192 classrooms
    - Maintain at least 131 classrooms during phase (35 permanent and 26 portable classrooms lost)
    - End phase with 131 classrooms

C. P. O'HALLORAN ASSOCIATES INC.
CONSTRUCTION COST MANAGEMENT

CONCEPT COST MODEL
CONSTRUCTION ESTIMATE

for

Roosevelt High School - Option C
Los Angeles Unified School District

Prepared for :

DLR Group
Architecture, Engineering, Planning, Interiors
3130 Wilshire Boulevard, 6th Floor
Santa Monica, CA 90403

September 24, 2015

 # 15-2365

2659 TOWNSGATE ROAD, SUITE 213 · WESTLAKE VILLAGE, CA 91361-2792 · T 805-494-3703 · F 805-497-7721 · WWW.CPOHALLORAN.COM

Concept Cost Model Construction Estimate

Basis of Estimate

The estimated construction cost is based on concept floor plans and building space program dated August 2015. Unit costs include average industry labor rates with competitive bid conditions. Competitive bid conditions generally occur when bids are received from a minimum of four general contractors and three subcontractors for each trade. Assumptions included for materials and specifications should be confirmed prior to completion of bid documents. The estimate includes general contractor general conditions, supervision, bonds, insurances, overhead, profit, cost escalation and estimating contingency. Project development soft costs, owner furnished equipment and furnishings are not included.

The estimated construction cost represents our best judgment as a professional consultant familiar with the construction industry. We have no control over the cost or supply of labor, materials and equipment, a contractor's methods of determining bid prices and market conditions. We cannot and do not warranty or represent that bids or negotiated prices will not vary from the estimated construction cost.

Construction Estimate Exclusions

Professional design, testing, inspection and management fees.
Fire and all risk insurance.
Legal and financing costs.
Building permits and fees.
Construction, project or staging contingencies.
Furnishings, loose equipment and modular workstations.
Sports equipment, scoreboards and broadcast systems.
Audio visual equipment.
Off-site improvements.
Unforeseen subsurface soils conditions and special foundations.
Utility metering.
Photovoltaic panels.
Communications wiring and equipment.
Independent commissioning.
Temporary buildings.

CONCEPTUAL COST ESTIMATE SUMMARY - OPTION C

Project Name: Roosevelt High School LAUSD **Project No.** 10366732

Architect: DLR Group **PM/DM/OAR:**

Project Description: High School Modernization **Date:** 24-Sep-15

	Item	Area	Unit	Subtotal	Cost/SF	Total
A	**NEW CONSTRUCTION**					$98,147,043
A1	MULTIPURPOSE / PERFORMANCE	25,500	SF	$19,042,189	$746.75	
A2	FOOD SERVICE	7,781	SF	$6,203,081	$797.21	
A3	CLASSROOM BUILDING	112,879	SF	$72,901,773	$645.84	
B	**BUILDING RENOVATION**					$59,517,291
B1	BUILDING 5 - ADMINISTRATION CLASSROOM	57,764	SF	$25,927,880	$448.86	
B2	BUILDING 19 - GYM / PE	38,676	SF	$17,711,323	$457.94	
B3	BUILDING 23 - CLASSROOM LIBRARY	35,295	SF	$15,878,088	$449.87	
C	**SITE IMPROVEMENTS**					
C1	DEMOLITION / EARTHWORK	598,750	SF	$4,691,464	$7.84	$4,691,464
C2	SITE STRUCTURES					$1,737,713
C2.1	New Lunch Shelter	9,000	SF	$1,525,797	$169.53	
C2.2	New Trash Enclosure			$121,095		
C2.3	New Campus Entry			$90,821		
C3	SITE PAVING / PARKING / LANDSCAPING					$9,272,381
C3.1	Path of Travel ADA Corrections	45,000	SF	$634,095	$14.09	
C3.2	Asphalt Paving, Patch and Repair	135,000	SF	$1,270,455	$9.41	
C3.3	Concrete Paving	33,750	SF	$917,173	$27.18	
C3.4	Concrete Curbs	4,750	SF	$210,359	$44.29	
C3.5	New Quad	35,000	SF	$1,056,825	$30.20	
C3.6	New Entry Plaza and Main Entry	23,000	SF	$694,485	$30.20	
C3.7	New Drop Off Areas	80,000	SF	$2,737,680	$34.22	
C3.8	Directional Signage, ADA Compliance			$120,780		
C3.9	Landscaping and Irrigation	45,000	SF	$1,630,530	$36.23	
C4	ATHLETIC FIELDS					$8,273,430
C4.1	New Baseball Field	100,000	SF	$1,610,400	$16.10	
C4.2	New Softball Field	50,000	SF	$805,200	$16.10	
C4.3	New Regulation Football Field and Track	150,000	SF	$4,529,250	$30.20	
C4.4	Tennis and Basket Ball Courts	60,000	SF	$1,328,580	$22.14	
C5	MISCELLANOUS SITE					$1,337,865
C5.1	Site Lighting	598,750	SF	$602,642	$1.01	
C5.2	Fences and Gates	598,750	SF	$216,951	$0.36	
C5.3	Trash Receptacles	598,750	SF	$60,264	$0.10	
C5.4	Benches	598,750	SF	$265,162	$0.44	
C5.5	Signage	598,750	SF	$192,845	$0.32	

CONCEPTUAL COST ESTIMATE SUMMARY - OPTION C

Project Name: Roosevelt High School LAUSD **Project No.** 10366732

Architect: DLR Group **PM/DM/OAR:**

Project Description: High School Modernization **Date:** 24-Sep-15

	Item	Area	Unit	Subtotal	Cost/SF	Total
C	**SITE IMPROVEMENTS**					
C6	UTILITIES (NEW & MODIFICATIONS)					$4,073,859
C6.1	Domestic and Fire Water	598,750	SF	$723,170	$1.21	
C6.2	Sewer	598,750	SF	$602,642	$1.01	
C6.3	Storm Drainage	598,750	SF	$662,906	$1.11	
C6.4	Gas	598,750	SF	$96,423	$0.16	
C6.5	Electrical Power	598,750	SF	$903,963	$1.51	
C6.6	Electrical Data, Communications, Low Voltage	598,750	SF	$1,084,755	$1.81	
	TOTAL					$187,051,047

C. P. O'Halloran Associates Inc.
Construction Cost Management

CONCEPTUAL COST ESTIMATE - OPTION C					
Project Name:	**Roosevelt High School LAUSD**			**Project No.**	**10366732**
Architect:	**DLR Group**			**PM/DM/OAR:**	
Project Description:	**High School Modernization**			**Date:**	**24-Sep-15**

	Item	Quantity	Unit	Unit Cost	Subtotal	Division Total
A	**NEW CONSTRUCTION**					
A1	MULTIPURPOSE / PERFORMANCE	25,500	SF	355.00	$9,052,500	
	Extra for methane barrier	25,500	SF	15.00	$382,500	
	Subtotal			370.00	$9,435,000	
	General Conditions, Overhead and Profit	30.0%		111.00	$2,830,500	
	Design Contingency	20.0%		96.20	$2,453,100	
	Cost Escalation	12.5%		72.15	$1,839,825	
	Change Order Contingency	15.0%		97.40	$2,483,764	
	TOTAL			746.75	$19,042,189	$19,042,189
A2	FOOD SERVICES	7,781	SF	380.00	$2,956,780	
	Extra for methane barrier	7,781	SF	15.00	$116,715	
	Subtotal			395.00	$3,073,495	
	General Conditions, Overhead and Profit	30.0%		118.50	$922,049	
	Design Contingency	20.0%		102.70	$799,109	
	Cost Escalation	12.5%		77.03	$599,332	
	Change Order Contingency	15.0%		103.98	$809,098	
	TOTAL			797.21	$6,203,081	$6,203,081
A3	CLASSROOM BUILDINGS	112,879	SF	315.00	$35,556,885	
	Extra for methane barrier	37,626	SF	15.00	$564,395	
	Subtotal			320.00	$36,121,280	
	General Conditions, Overhead and Profit	30.0%		96.00	$10,836,384	
	Design Contingency	20.0%		83.20	$9,391,533	
	Cost Escalation	12.5%		62.40	$7,043,650	
	Change Order Contingency	15.0%		84.24	$9,508,927	
	TOTAL			645.84	$72,901,773	$72,901,773

C. P. O'Halloran Associates Inc.
Construction Cost Management

CONCEPTUAL COST ESTIMATE - OPTION C

Project Name: Roosevelt High School LAUSD — **Project No.** 10366732

Architect: DLR Group — **PM/DM/OAR:**

Project Description: High School Modernization — **Date:** 24-Sep-15

	Item	Quantity	Unit	Unit Cost	Subtotal	Division Total
B	**BUILDING RENOVATION**					
B1	BUILDING 5 - ADMINISTRATION CLASSROOM					
	Architectural Remodel	57,764	SF	92.00	$5,314,288	
	Structural Remodel	57,764	SF	29.90	$1,727,144	
	MEP Systems	57,764	SF	81.00	$4,678,884	
	Hazardous Material Abatement	57,764	SF	6.00	$346,584	
	Equipment	57,764	SF	3.50	$202,174	
	Interior Demolition	57,764	SF	10.00	$577,640	
	Subtotal			222.40	$12,846,714	
	General Conditions, Overhead and Profit	30.0%		66.72	$3,854,014	
	Design Contingency	20.0%		57.82	$3,340,146	
	Cost Escalation	12.5%		43.37	$2,505,109	
	Change Order Contingency	15.0%		58.55	$3,381,897	
	TOTAL			448.86	$25,927,880	$25,927,880
B2	BUILDING 19 - GYM / PE					
	Architectural Remodel	38,676	SF	96.00	$3,712,896	
	Structural Remodel	38,676	SF	31.90	$1,233,764	
	MEP Systems	38,676	SF	78.00	$3,016,728	
	Hazardous Material Abatement	38,676	SF	6.00	$232,056	
	Equipment	38,676	SF	5.00	$193,380	
	Interior Demolition	38,676	SF	10.00	$386,760	
	Subtotal			226.90	$8,775,584	
	General Conditions, Overhead and Profit	30.0%		68.07	$2,632,675	
	Design Contingency	20.0%		58.99	$2,281,652	
	Cost Escalation	12.5%		44.25	$1,711,239	
	Change Order Contingency	15.0%		59.73	$2,310,173	
	TOTAL			457.94	$17,711,323	$17,711,323

CONCEPTUAL COST ESTIMATE - OPTION C

Project Name: Roosevelt High School LAUSD | **Project No.** 10366732

Architect: DLR Group | **PM/DM/OAR:**

Project Description: High School Modernization | **Date:** 24-Sep-15

	Item	Quantity	Unit	Unit Cost	Subtotal	Division Total
B	**BUILDING RENOVATION**					
B3	BUILDING 23 - CLASSROOM LIBRARY					
	Architectural Remodel	35,295	SF	92.00	$3,247,140	
	Structural Remodel	35,295	SF	29.90	$1,055,321	
	MEP Systems	35,295	SF	81.00	$2,858,895	
	Hazardous Material Abatement	35,295	SF	6.00	$211,770	
	Equipment	35,295	SF	4.00	$141,180	
	Interior Demolition	35,295	SF	10.00	$352,950	
	Subtotal			222.90	$7,867,256	
	General Conditions, Overhead and Profit	30.0%		66.87	$2,360,177	
	Design Contingency	20.0%		57.95	$2,045,486	
	Cost Escalation	12.5%		43.47	$1,534,115	
	Change Order Contingency	15.0%		58.68	$2,071,055	
	TOTAL			449.87	$15,878,088	$15,878,088

CONCEPTUAL COST ESTIMATE - OPTION C

Project Name: Roosevelt High School LAUSD | **Project No.** 10366732

Architect: DLR Group | **PM/DM/OAR:**

Project Description: High School Modernization | **Date:** 24-Sep-15

	Item	Quantity	Unit	Unit Cost	Subtotal	Division Total
C	**SITE IMPROVEMENTS**					
C1	DEMOLITION / EARTHWORK					
	Building Demolition Including Hazardous Material Abatement					
	Building 1, 3, 6 & 7	153,471	SF	8.50	$1,304,504	
	Remove modular buildings	35,568	SF	5.00	$177,840	
	Remove and cap utility connections	22	EA	2,000.00	$44,000	
	Site Demolition	598,750	SF	0.15	$89,813	
	Grading					
	Rough grading	598,750	SF	0.18	$107,775	
	Import engineering fill and compact	7,762	CY	38.00	$294,940	
	Export surplus	6,000	CY	23.00	$138,000	
	Fine grading	598,750	SF	0.20	$119,750	
	Erosion control	598,750	SF	0.08	$47,900	
	Subtotal			3.88	$2,324,521	
	General Conditions, Overhead and Profit	30.0%		1.16	$697,356	
	Design Contingency	20.0%		1.01	$604,375	
	Cost Escalation	12.5%		0.76	$453,282	
	Change Order Contingency	15.0%		1.02	$611,930	
	TOTAL			7.84	$4,691,464	$4,691,464
C2	SITE STRUCTURES					
C2.1	New Lunch Shelter	9,000	SF	84.00	$756,000	
	Subtotal			84.00	$756,000	
	General Conditions, Overhead and Profit	30.0%		25.20	$226,800	
	Design Contingency	20.0%		21.84	$196,560	
	Cost Escalation	12.5%		16.38	$147,420	
	Change Order Contingency	15.0%		22.11	$199,017	
	TOTAL			169.53	$1,525,797	$1,525,797
C2.2	New Trash Enclosure	1	EA	60,000.00	$60,000	
	Subtotal			60,000.00	$60,000	
	General Conditions, Overhead and Profit	30.0%		18,000.00	$18,000	
	Design Contingency	20.0%		15,600.00	$15,600	
	Cost Escalation	12.5%		11,700.00	$11,700	
	Change Order Contingency	15.0%		15,795.00	$15,795	
	TOTAL				$121,095	$121,095

CONCEPTUAL COST ESTIMATE - OPTION C					
Project Name: Roosevelt High School LAUSD				**Project No.**	**10366732**
Architect: DLR Group				**PM/DM/OAR:**	
Project Description: High School Modernization				**Date:**	**24-Sep-15**

	Item	Quantity	Unit	Unit Cost	Subtotal	Division Total
C	**SITE IMPROVEMENTS**					
C2	SITE STRUCTURES					
C2.3	New Campus Entry	1	EA	45,000.00	$45,000	
	Subtotal				$45,000	
	General Conditions, Overhead and Profit	30.0%		13,500.00	$13,500	
	Design Contingency	20.0%		11,700.00	$11,700	
	Cost Escalation	12.5%		8,775.00	$8,775	
	Change Order Contingency	15.0%		11,846.25	$11,846	
	TOTAL			90,821.25	$90,821	$90,821
C3	SITE PAVING / PARKING / LANDSCAPING					
C3.1	Path of Travel ADA Corrections	45,000	SF	14.09	$634,095	
C3.2	Asphalt Paving - Patch and Repair	135,000	SF	9.41	$1,270,455	
C3.3	Concrete Paving	33,750	SF	27.18	$917,173	
C3.4	Concrete Curbs	4,750	LF	44.29	$210,359	
C3.5	New Quad	35,000	SF	30.20	$1,056,825	
C3.6	New Entry Plaza and Main Entry	23,000	SF	30.20	$694,485	
C3.7	New Drop Off Areas	80,000	SF	34.22	$2,737,680	
C3.8	Directional Signage, ADA Compliance	1	LS	120,780.00	$120,780	
C3.9	Landscaping and Irrigation	45,000	SF	36.23	$1,630,530	
	Subtotal				$9,272,381	
	General Conditions, Overhead and Profit			30% included in unit costs above		
	Design Contingency			20% included in unit costs above		
	Cost Escalation			12.5% included in unit costs above		
	Change Order Contingency			15% included in unit costs above		
	TOTAL				$9,272,381	$9,272,381
C4	ATHLETIC FIELDS					
C4.1	New Baseball Field	100,000	SF	16.10	$1,610,400	
C4.2	New Softball Field	50,000	SF	16.10	$805,200	
C4.3	New Regulation Football Field and Track	150,000	SF	30.20	$4,529,250	
C4.4	Tennis and Basket Ball Courts	60,000	SF	22.14	$1,328,580	
	Subtotal				$8,273,430	
	General Conditions, Overhead and Profit			30% included in unit costs above		
	Design Contingency			20% included in unit costs above		
	Cost Escalation			12.5% included in unit costs above		
	Change Order Contingency			15% included in unit costs above		
	TOTAL				$8,273,430	$8,273,430

CONCEPTUAL COST ESTIMATE - OPTION C

Project Name: Roosevelt High School LAUSD **Project No.** 10366732

Architect: DLR Group **PM/DM/OAR:**

Project Description: High School Modernization **Date:** 24-Sep-15

	Item	Quantity	Unit	Unit Cost	Subtotal	Division Total
C	**SITE IMPROVEMENTS**					
C5	MISCELLANEOUS SITE					
C5.1	Site Lighting	598,750	SF	1.01	$602,642	
C5.2	Fences and Gates	598,750	SF	0.36	$216,951	
C5.3	Trash Receptacles	598,750	SF	0.10	$60,264	
C5.4	Benches and Bleachers	598,750	SF	0.44	$265,162	
C5.5	Signage	598,750	SF	0.32	$192,845	
	Subtotal				$1,337,865	
	General Conditions, Overhead and Profit			30% included in unit costs above		
	Design Contingency			20% included in unit costs above		
	Cost Escalation			12.5% included in unit costs above		
	Change Order Contingency			15% included in unit costs above		
	TOTAL				$1,337,865	$1,337,865
C6	UTILITIES (NEW & MODIFICATIONS)					
C6.1	Domestic and Fire Water	598,750	SF	1.21	$723,170	
C6.2	Sewer	598,750	SF	1.01	$602,642	
C6.3	Storm Drainage	598,750	SF	1.11	$662,906	
C6.4	Gas	598,750	SF	0.16	$96,423	
C6.5	Electrical Power	598,750	SF	1.51	$903,963	
C6.6	Electrical Data, Communications, Low Voltage	598,750	SF	1.81	$1,084,755	
	Subtotal				$4,073,859	
	General Conditions, Overhead and Profit			30% included in unit costs above		
	Design Contingency			20% included in unit costs above		
	Cost Escalation			12.5% included in unit costs above		
	Change Order Contingency			15% included in unit costs above		
	TOTAL				$4,073,859	$4,073,859

5.0 EXHIBITS

5.1 WORKBOOK

Building Number	Building Name Location Description	CAFM ID#	School's Building Name/ Designation	Square Feet	Building Insurance #	PORT/ PERM	Year Built	DSA Number	DSA Year	DSA Status	FCI	# of Stories	Building Structure Classification (AB300)	Building Category (AB300)	Construction Material Type
1	AUDITORIUM & CLASSROOM BUILDING	21585	R-Building	108,270	8829-001CFF	PERM	1922	A-1613 A-7020 A-11575 A-33406 A-46484 A-63192 A03-100523 A03-110294 A03-110395 A03-111456	1936 1949 1954 1970 1985 1995 1998 2006 2007 2007		51.0%	3+B	M	CATEGORY 2	MASONRY OR CONCRETE
2	CAFETERIA BUILDING	15158	-	12,586	8829-002DAT	PERM	1977	A-38340	1975		45.7%	1			WOOD FRAME
3	CLASSROOM BUILDING #1	24081	E-Building	8,896	8829-003DAT	PERM	1977	A-38340	1975		45.9%	1			WOOD FRAME
4	MUSIC BUILDING	21641	M-Building	3,630	8829-004DAT	PERM	1977	A-38340	1975		82.6%	1			WOOD FRAME
5	ADMINISTRATIVE / CLASSROOM BUILDING	23689	A-Building	57,709	8829-005BFS	PERM	1972	A-31314 A03-110395	1969 2007		55.1%	3+B			REINFORCED CONCRETE
6	INDUSTRIAL ARTS BUILDING	24215	T-Building	25,546	8829-006CCR	PERM	1968	A-27577 A-63192	1966 1995		54.4%	2	M	CATEGORY 2	MASONRY OR CONCRETE
7	CLASSROOM BUILDING #2	17199	C-Building	26,097	8829-008BDJ	PERM	1937	A-1639 A-37515 A-63192 A03-100523 A03-111456	1936 1974 1995 1998 2007		50.2%	2+B			REINFORCED CONCRETE
8	INSTRUMENTAL MUSIC BUILDING	21890	Music	1,800	8829-009DAN	PERM	1959	A-18534 A-63192	1958 1995		50.3%	1			WOOD FRAME
9	GARAGE BUILDING	17742	-	889	8829-010DAS	PERM	1972	A-31314	1969		61.0%	1			WOOD FRAME
10	FLAMMABLE STORAGE BUILDING	22718	-	60	8829-011BOM	PERM	1953	?	?	?	99.7%	1			REINFORCED CONCRETE
11	FIELD SANITARY BUILDING	25799	-	562	8829-012DAN	PERM	1958	A-16647 A03-100523 A03-111456	1958 1998 2007		68.6%	1			WOOD FRAME
12	EQUIPMENT FIELD STORAGE	25770	-	528	8829-013DOK	PERM	1941	?	?	?	90.2%	1			WOOD FRAME
13	GAZEBO	18415	-	466	8829-014PAT	PERM	1977	A-38340	1975		0.0%	1			ARCADE
14	HOME BLEACHERS	34747 34748	-	5,600	8829-279096	PERM	2008	A03-110484	2008		0.0%	1			METAL
15	VISITORS BLEACHERS	34749	-	0	8829-279097	PERM	2008	A03-110484	2008		0.0%	1			METAL
16	FIELD LIGHT CONTROLS	20549	-	72	8829-017DOL	PERM	1949	A-7320 A03-106310	1948 2002		64.5%	1			WOOD FRAME
17	CLASSROOM BUILDING	23829	Building A	3,940	8829-018DCP	PERM	1964	A-24733 A-63192	1963 1995		41.9%	2			WOOD FRAME
18	CLASSROOM BUILDING	21628	Building B	3,940	8829-019DCP	PERM	1964	A-24733 A-63192	1963 1995		32.2%	2			WOOD FRAME

Building Number	Building Name Location Description	CAFM ID#	School's Building Name/ Designation	Square Feet	Building Insurance #	PORT/ PERM	Year Built	DSA Number	DSA Year	DSA Status	FCI	# of Stories	Building Structure Classification (AB300)	Building Category (AB300)	Construction Material Type
19	PHYSICAL EDUCATION BUILDING	20906	Gymnasium	38,799	8829-020CER	PERM	1968	A-27577 A-63192 A03-110660 A03-110294 A03-110395 A03-110484	1966 1995 2005 2006 2007 2008		39.8%	3	M	CATEGORY 2	MASONRY OR CONCRETE
20	UTILITY BUILDING	23892	Plant Manager's Office	2,537	8829-021DAR	PERM	1968	A-27577 A-63192	1966 1995		74.0%	1			WOOD FRAME
21	AUTO SERVICE BUILDING	15815	-	900	8829-023HAT	PERM	1975	A-35713	1972		22.8%	1	S3	CATEGORY 2	ALL METAL
22	**ARCADE**	**36022**	**Covered Lunch Area**	**36**	**8829-024POT**	**PERM**	**1977**	**A-38340**	**1975**		**56.4%**	**1**			**ARCADE**
23	LIBRARY & CLASSROOM BUILDING	20796	L-Building	35,120	8829-025CEW	PERM	1990	A-48733	1987		32.7%	3			MASONRY OR CONCRETE
24	TWO / THREE UNIT RELOCATABLE	20955	AA-2684	1,920	2562-X2684S	port	1971	A-34403	1971		61.7%	1			WOOD FRAME
25	TWO / THREE UNIT RELOCATABLE	20958	AA-2685	1,920	2562-X2685S	port	1971	A-34403	1971		39.6%	1			WOOD FRAME
26	TWO / THREE UNIT RELOCATABLE	22262	AA-1917	1,792	2616-X1917N	port	1959	A-17801	1958		56.7%	1			WOOD FRAME
27	TWO / THREE UNIT RELOCATABLE	21332	AA-923	1,824	2959-X0923M	port	1950	A-8097	1950		81.7%	1			WOOD FRAME
28	TWO / THREE UNIT RELOCATABLE	21330	AA-1322	1,824	3014-X1322M	port	1954	A-11374	1953		59.3%	1			WOOD FRAME
29	TWO / THREE UNIT RELOCATABLE	21319	AA-2038	1,792	5894-X2038P	port	1960	A-19013	1959		20.0%	1			WOOD FRAME
30	TWO / THREE UNIT RELOCATABLE	21691	AA-2543	1,792	8113-X2543R	port	1966	A-19013	1959		28.9%	1			WOOD FRAME
31	TWO / THREE UNIT RELOCATABLE	21098	AA-2249	2,688	8168-X2249P	port	1961	A-21099	1961		24.6%	1			WOOD FRAME
32	TWO / THREE UNIT RELOCATABLE	20171	AA-831	864	8377-X0831M	port	1950	A-7702	1950		18.2%	1			WOOD FRAME
33	SANITARY RELOCATABLE	21634	J-308	320	8462-J0308T	port	1975	A-38054	1975		85.1%	1			WOOD FRAME
34	TWO / THREE UNIT RELOCATABLE	21914	AA-955	1,728	8571-X0955M	port	1950	A-8093	1950		70.8%	1			WOOD FRAME
35	SINGLE UNIT RELOCATABLE	21629	A-683	896	8664-A0683R	port	1966	A-27764	1966		67.5%	1			WOOD FRAME
36	TWO / THREE UNIT RELOCATABLE	20329	**AA-828**	1,728	8721-X0828M	port	1950	A-7702	1950		36.6%	1			WOOD FRAME
37	SINGLE UNIT RELOCATABLE	21251	A-651	896	8729-A0651R	port	1966	A-27470	1966		45.9%	1			WOOD FRAME
38	SINGLE UNIT RELOCATABLE	21373	A-652	896	8829-A0652R	port	1966	A-27470	1966		44.5%	1			WOOD FRAME
39	SINGLE UNIT RELOCATABLE	22228	A-653	896	8829-A0653R	port	1966	A-27470	1966		45.2%	1			WOOD FRAME
40	SINGLE UNIT RELOCATABLE	21682	A-690	896	8829-A0690R	port	1967	A-28978	1967		35.6%	1			WOOD FRAME
41	SINGLE UNIT RELOCATABLE	18330	A-748	1,456	8829-A0748S	port	1972	A-35207	1972		47.0%	1			WOOD FRAME
42	TWO / THREE UNIT RELOCATABLE	23828	AA-2573	1,792	8829-X2573R	port	1967	A-28978	1967		52.0%	1			WOOD FRAME
43	**2 CLASSROOM RELO-DOH / PARENT CENTER**	**34750**	**College Track**	**1,440**	**8829-265345**	**port**	**?**	**?**	**?**	**?**	**62.6%**	**1**			**WOOD FRAME**
44	TWO / THREE UNIT RELOCATABLE (BOYLE HEIGHTS CONTINUATION)	16814	AA-586	1,824	6233-X0586L	port	1949	A-7056	1949		36.1%	1			WOOD FRAME
45	TWO / THREE UNIT RELOCATABLE (BOYLE HEIGHTS CONTINUATION)	14696	AA-1493	1,728	8283-X1493N	port	1955	A-13472	1955		48.2%	1			WOOD FRAME
46	TWO / THREE UNIT RELOCATABLE – INFANT / EARLY EDUCATION CENTER	15476	AA-1287	1,728	8377-X1287M	port	1953	A-10565	1953		45.6%	1			WOOD FRAME

5.2 CAFM DIAGRAMS

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29. TWO / THREE UNIT RELOCATABLE
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32. TWO / THREE UNIT RELOCATABLE
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45. TWO / THREE UNIT RELOCATABLE (BOYLE HEIGHTS CONT.)
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AREAS OF DISCREPANCY BETWEEN CAFM DIAGRAMS AND ON SITE OBSERVATIONS

WELLNESS CENTER





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AREAS OF DISCREPANCY BETWEEN CAFM DIAGRAMS AND ON SITE OBSERVATIONS

Roosevelt Senior High School - Floor 2



Prepared by: Facilities Technology Services
Source: CAFM Database

Roosevelt Senior High School - Floor 3



Prepared by: Facilities Technology Services
Source: CAFM Database

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AREAS OF DISCREPANCY BETWEEN CAFM DIAGRAMS AND ON SITE OBSERVATIONS

Roosevelt Senior High School - Mezzanine Level



Prepared by: Facilities Technology Services
Source: CAFM Database

Roosevelt Senior High School - Roof



Prepared by: Facilities Technology Services
Source: CAFM Database

LOS ANGELES UNIFIED SCHOOL DISTRICT

ROOSEVELT HIGH SCHOOL

CLASSROOM BUILDING ADDITION AND MODERNIZATION

DRAFT

PRELIMINARY
date

Project No:	TBD	Loc.Code:	8829			OPSC	CDE
Location:	Address:456 S. Mathews Street, Los Angeles CA 90033	Acres:				3450	3450
Program:		PM:					
	Scope						
		DM:		Total Number Of (E)Seats:			3450
Architect:	DLR Group	BM:		Total Number Of (N)Seats:			0
ESC:				Total Number Of Classrooms			138
ESC Superintendent:				New HS Classrooms:			0
	Facility Area Selected (New):	#REF!	S.F.	New HS Science Classrooms:			0
	Facility Area Selected (Existing):	#REF!	S.F.	Remodeled Classrooms:			0
Approvals:	Facility Area Selected (E) to be Remodeled:	0	S.F.	Existing HS Science Classrooms:			8
Asset Management:	Area per seat (sf)	#REF!	S.F.	Existing HS Classrooms:			130
Planning and Development:				Total Area (E) + (R) +(N)			#REF!
School Management Services:				Demolition	Remodeled	New	Existing
ESC:			TOTAL AREA	#REF!	-	#REF!	#REF!

SPACE PROGRAM

Total ES ES Teaching Stations:	0	0	0	0
EXISTING BUILDING 1 - AUDITORIUM & CLASSROOM BUILDING Subtotal		0 SF		107,489 SF
Teaching Stations:				0

Space	Level	E	N	Sq Ft		Existing Use	New Use	(D) Sq Ft	(R) Sq Ft	(N) Sq Ft	(E) Sq Ft
001	First Floor	1	0	46	S.F.	Storage					46
002	First Floor	1	0	162	S.F.	Entry (Covered) (1/3)					54
003	First Floor	1	0	96	S.F.	Storage					96
004	First Floor	1	0	1,640	S.F.	Textbook Room					1,640
005	First Floor	1	0	637	S.F.	Corridor					637
006	First Floor	1	0	767	S.F.	Textbook Room					767
007	First Floor	1	0	809	S.F.	General Classroom					809
008	First Floor	1	0	27	S.F.	Entry (closed)					27
009	First Floor	1	0	127	S.F.	Dark Room					127
010	First Floor	1	0	109	S.F.	Stairs (Interior)					109
011	First Floor	1	0	52	S.F.	Vestibule					52
012	First Floor	1	0	353	S.F.	All Purpose Room/Area/Space					353
013	First Floor	1	0	593	S.F.	All Purpose Room/Area/Space					593
014	First Floor	1	0	606	S.F.	All Purpose Room/Area/Space					606
015	First Floor	1	0	447	S.F.	All Purpose Room/Area/Space					447
016	First Floor	1	0	796	S.F.	Rifle Range					796
017	First Floor	1	0	2,236	S.F.	Plastic Shop					2,236
018	First Floor	1	0	318	S.F.	Equipment Storage					318
019	First Floor	1	0	238	S.F.	All Purpose Room/Area/Space					238
020	First Floor	1	0	140	S.F.	All Purpose Room/Area/Space					140
021	First Floor	1	0	2,540	S.F.	Boiler Room					2,540
022	First Floor	1	0	128	S.F.	Equipment Storage					128
023	First Floor	1	0	19	S.F.	Toilet					19
024	First Floor	1	0	109	S.F.	Passage					109
025	First Floor	1	0	287	S.F.	Storage					287
026	First Floor	1	0	287	S.F.	Storage (Interior)					287
027	First Floor	1	0	140	S.F.	Vestibule					140
028	First Floor	1	0	1,027	S.F.	Lobby					1,027
029	First Floor	1	0	111	S.F.	Entry (Covered) (1/3)					37
030	First Floor	1	0	78	S.F.	Duct Space					78
031	First Floor	1	0	127	S.F.	Women's Toilet					127
032	First Floor	1	0	42	S.F.	Vestibule					42
033	First Floor	1	0	57	S.F.	Stairs (Interior)					57
034	First Floor	1	0	1,015	S.F.	Foyer					1,015
035	First Floor	1	0	36	S.F.	Vestibule					36
036	First Floor	1	0	37	S.F.	Vestibule					37
037	First Floor	1	0	71	S.F.	Ticket Room					71
038	First Floor	1	0	72	S.F.	Stairs (Interior)					72
039	First Floor	1	0	32	S.F.	Vestibule					32
040	First Floor	1	0	118	S.F.	Men's Toilet					118
041	First Floor	1	0	89	S.F.	Duct Space					89
042	First Floor	1	0	9,093	S.F.	Assembly Room					9,093
043	First Floor	1	0	137	S.F.	Vestibule					137
044	First Floor	1	0	166	S.F.	Dressing Room					166
045	First Floor	1	0	60	S.F.	Toilet					60
046	First Floor	1	0	2,128	S.F.	Platform					2,128
047	First Floor	1	0	213	S.F.	Dressing Room					213
048	First Floor	1	0	129	S.F.	Vestibule					129
049	First Floor	1	0	1,495	S.F.	All Purpose Room/Area/Space					1,495
050	First Floor	1	0	1,402	S.F.	General Classroom					1,402
051	First Floor	1	0	75	S.F.	Vestibule					75
052	First Floor	1	0	84	S.F.	Entry (Closed)					84
053	First Floor	1	0	129	S.F.	Storage					129
054	First Floor	1	0	574	S.F.	Corridor					574
055	First Floor	1	0	378	S.F.	Boy's Toilet					378
056	First Floor	1	0	378	S.F.	Girl's Toilet					378
057	First Floor	1	0	182	S.F.	Storage					182
058	First Floor	1	0	351	S.F.	Storage					351
059	First Floor	1	0	105	S.F.	Vestibule					105
060	First Floor	1	0	906	S.F.	General Classroom					906
061	First Floor	1	0	215	S.F.	Entry (Closed)					215
062	First Floor	1	0	275	S.F.	Office					275
063	First Floor	1	0	821	S.F.	General Classroom					821
064	First Floor	1	0	804	S.F.	General Classroom					804
065	First Floor	1	0	802	S.F.	General Classroom					802
066	First Floor	1	0	537	S.F.	General Classroom					537
067	First Floor	1	0	105	S.F.	Storage					105
068	First Floor	1	0	135	S.F.	Stairs (Interior)					135
069	First Floor	1	0	75	S.F.	Storage					75
070	First Floor	1	0	1,740	S.F.	Corridor					1,740
071	First Floor	1	0	222	S.F.	Entry Closed					222
072	First Floor	1	0	56	S.F.	Stairs (Interior)					56
073	First Floor	1	0	800	S.F.	General Classroom					800
074	First Floor	1	0	800	S.F.	General Classroom					800
075	First Floor	1	0	217	S.F.	Entry (Closed)					217
076	First Floor	1	0	56	S.F.	Stairs (Interior)					56
077	First Floor	1	0	800	S.F.	General Classroom					800
078	First Floor	1	0	826	S.F.	General Classroom					826
079	First Floor	1	0	67	S.F.	Elevator Machine Room					67
080	First Floor	1	0	73	S.F.	Shaft Elevator					73
081	First Floor	1	0	133	S.F.	Lobby					133
001	Second Floor	1	0	286	S.F.	Office					286
002	Second Floor	1	0	112	S.F.	Office					112
003	Second Floor	1	0	384	S.F.	Office					384
004	Second Floor	1	0	187	S.F.	Office					187
005	Second Floor	1	0	116	S.F.	Office					116
006	Second Floor	1	0	164	S.F.	Office					164
007	Second Floor	1	0	27	S.F.	Toilet					27
008	Second Floor	1	0	419	S.F.	Offcie					419
009	Second Floor	1	0	172	S.F.	Stairs (Interior)					172
010	Second Floor	1	0	954	S.F.	General Classroom					954
011	Second Floor	1	0	112	S.F.	Storage					112
012	Second Floor	1	0	206	S.F.	Dark Room					206
013	Second Floor	1	0	47	S.F.	Vestibule					47
014	Second Floor	1	0	14	S.F.	Vestibule					14
015	Second Floor	1	0	1,012	S.F.	Photo Studio					1,012
016	Second Floor	1	0	101	S.F.	Storage					101
017	Second Floor	1	0	140	S.F.	Storage					140
018	Second Floor	1	0	575	S.F.	Stairs (Interior)					575
019	Second Floor	1	0	69	S.F.	Duct Space					69
020	Second Floor	1	0	202	S.F.	Stairs (Interior)					202
021	Second Floor	1	0	74	S.F.	Vestibule					74
022	Second Floor	1	0	14	S.F.	Duct Space					14
023	Second Floor	1	0	127	S.F.	Projection Room					127
024	Second Floor	1	0	86	S.F.	Vestibule					86
025	Second Floor	1	0	78	S.F.	Duct Space					78
026	Second Floor	1	0	210	S.F.	Stairs (Interior)					210
027	Second Floor	1	0	3,864	S.F.	Assembly Room					3,864
028	Second Floor	1	0	137	S.F.	Stairs (Interior)					137
029	Second Floor	1	0	226	S.F.	Storage					226
030	Second Floor	1	0	129	S.F.	Stairs (Interior)					129
031	Second Floor	1	0	213	S.F.	Storage					213
032	Second Floor	1	0	209	S.F.	Stairs (Interior)					209
033	Second Floor	1	0	802	S.F.	General Classroom					802
034	Second Floor	1	0	1,186	S.F.	General Classroom					1,186
035	Second Floor	1	0	89	S.F.	Storage					89
036	Second Floor	1	0	29	S.F.	Janitor					29
037	Second Floor	1	0	1,157	S.F.	General Classroom					1,157
038	Second Floor	1	0	884	S.F.	General Classroom					884
039	Second Floor	1	0	56	S.F.	Storage					56
040	Second Floor	1	0	17	S.F.	Closet					17
041	Second Floor	1	0	142	S.F.	Workroom					142
042	Second Floor	1	0	211	S.F.	Stairs (Interior)					211
043	Second Floor	1	0	6,006	S.F.	Corridor					6,006
044	Second Floor	1	0	830	S.F.	General Classroom					830
045	Second Floor	1	0	793	S.F.	Oral Arts Classroom					793

046	Second Floor	1	0	202	S.F.	Office				202
047	Second Floor	1	0	194	S.F.	Dressing Room				194
048	Second Floor	1	0	41	S.F.	Vestibule				41
049	Second Floor	1	0	62	S.F.	Janitor				62
050	Second Floor	1	0	113	S.F.	Storage				113
051	Second Floor	1	0	109	S.F.	Women's Faculty Toilet				109
052	Second Floor	1	0	96	S.F.	Toilet				96
053	Second Floor	1	0	421	S.F.	Entry (Closed)				421
054	Second Floor	1	0	87	S.F.	Storage				87
055	Second Floor	1	0	87	S.F.	Stairs				87
056	Second Floor	1	0	130	S.F.	Office				130
057	Second Floor	1	0	992	S.F.	Work Experience Office				992
058	Second Floor	1	0	420	S.F.	Office				420
059	Second Floor	1	0	52	S.F.	Toilet				52
060	Second Floor	1	0	793	S.F.	General Classroom				793
061	Second Floor	1	0	817	S.F.	General Classroom				817
062	Second Floor	1	0	403	S.F.	Entry (Closed)				403
063	Second Floor	1	0	87	S.F.	Storage				87
064	Second Floor	1	0	87	S.F.	Stairs (Closed)				87
065	Second Floor	1	0	817	S.F.	General Classroom				817
066	Second Floor	1	0	793	S.F.	General Classroom				793
067	Second Floor	1	0	817	S.F.	General Classroom				817
068	Second Floor	1	0	273	S.F.	Stairs (interior)				273
069	Second Floor	1	0	800	S.F.	General Classroom				800
070	Second Floor	1	0	800	S.F.	General Classroom				800
071	Second Floor	1	0	273	S.F.	General Classroom				273
072	Second Floor	1	0	880	S.F.	General Classroom				880
073	Second Floor	1	0	617	S.F.	General Classroom				617
074	Second Floor	1	0	32	S.F.	Janitor				32
075	Second Floor	1	0	36	S.F.	Closet				36
076	Second Floor	1	0	61	S.F.	Closet				61
077	Second Floor	1	0	73	S.F.	Shaft Elevator				73
078	Second Floor	1	0	133	S.F.	Lobby				133
001	Third Floor	1	0	3,730	S.F.	Reading Center				3,730
002	Third Floor	1	0	634	S.F.	Library's Office				634
003	Third Floor	1	0	806	S.F.	General Classroom				806
004	Third Floor	1	0	797	S.F.	General Classroom				797
005	Third Floor	1	0	105	S.F.	Office				105
006	Third Floor	1	0	893	S.F.	General Classroom				893
007	Third Floor	1	0	5,269	S.F.	Corridor				5,269
008	Third Floor	1	0	209	S.F.	Stairs (Interior)				209
009	Third Floor	1	0	802	S.F.	General Classroom				802
010	Third Floor	1	0	973	S.F.	General Classroom				973
011	Third Floor	1	0	111	S.F.	Storage				111
012	Third Floor	1	0	1,031	S.F.	General Classroom				1,031
013	Third Floor	1	0	802	S.F.	General Classroom				802
014	Third Floor	1	0	537	S.F.	General Classroom				537
015	Third Floor	1	0	211	S.F.	Storage				211
016	Third Floor	1	0	105	S.F.	Stairs (Interior)				105
017	Third Floor	1	0	397	S.F.	Reading Room				397
018	Third Floor	1	0	843	S.F.	General Classroom				843
019	Third Floor	1	0	596	S.F.	Stairs (Interior)				596
020	Third Floor	1	0	819	S.F.	General Classroom				819
021	Third Floor	1	0	776	S.F.	General Classroom				776
022	Third Floor	1	0	66	S.F.	Closet				66
023	Third Floor	1	0	338	S.F.	General Classroom				338
024	Third Floor	1	0	310	S.F.	Boy's Toilet				310
025	Third Floor	1	0	52	S.F.	Janitor				52
026	Third Floor	1	0	319	S.F.	Girl's Toilet				319
027	Third Floor	1	0	56	S.F.	Vestibule				56
028	Third Floor	1	0	50	S.F.	Vestibule				50
029	Third Floor	1	0	349	S.F.	Office				349
030	Third Floor	1	0	26	S.F.	Toilet				26
031	Third Floor	1	0	20	S.F.	Toilet				20
032	Third Floor	1	0	24	S.F.	Closet				24
033	Third Floor	1	0	576	S.F.	Stairs (Interior)				576
034	Third Floor	1	0	817	S.F.	General Classroom				817
035	Third Floor	1	0	793	S.F.	General Classroom				793
036	Third Floor	1	0	817	S.F.	General Classroom				817
037	Third Floor	1	0	273	S.F.	Stairs (Interior)				273
038	Third Floor	1	0	800	S.F.	General Classroom				800
039	Third Floor	1	0	800	S.F.	General Classroom				800
040	Third Floor	1	0	273	S.F.	Stairs (Interior)				273
041	Third Floor	1	0	42	S.F.	Vestibule				42
042	Third Floor	1	0	329	S.F.	Boy's Toilet				329
043	Third Floor	1	0	439	S.F.	Girl's Toilet				439

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044	Third Floor	1	0	68	S.F.	Vestibule				68
045	Third Floor	1	0	33	S.F.	Hall				33
046	Third Floor	1	0	31	S.F.	Janitor				31
047	Third Floor	1	0	287	S.F.	Faculty Room (Women)				287
048	Third Floor	1	0	91	S.F.	Women's Faculty Toilet				91
049	Third Floor	1	0	71	S.F.	Men's Faculty Toilet				71
050	Third Floor	1	0	238	S.F.	Faculty Room (Men)				238
051	Third Floor	1	0	73	S.F.	Shaft Elevator				73
052	Third Floorr	1	0	133	S.F.	Lobby				133
						Subtotal				*107,489*

Total Existing Building 1 ***107,489***

EXISTING BUILDING 2 - CAFETERIA BUILDING	**Subtotal**	**0 SF**	**0 SF**		**17,147 SF**

Space		E	N	Sq Ft		Existing Use		(D) Sq Ft	(R) Sq Ft	(N) Sq Ft	(E) Sq Ft
001	First Floor	1	0	941	S.F.	Lunch Shelter					2,824
002	First Floor	1	0	591	S.F.	Walk (Covered)					1,772
003	First Floor	1	0	229	S.F.	Mechanical Room					229
004	First Floor	1	0	104	S.F.	Electric Room					104
005	First Floor	1	0	104	S.F.	Paper Storage					104
006	First Floor	1	0	37	S.F.	Stairs (interior)					37
007	First Floor	1	0	1,248	S.F.	Kitchen Area					1,248
008	First Floor	1	0	286	S.F.	Supply Room					286
009	First Floor	1	0	154	S.F.	Entry Closed					154
010	First Floor	1	0	75	S.F.	Office					75
011	First Floor	1	0	39	S.F.	Men's Toilet					39
012	First Floor	1	0	50	S.F.	Custodian Room					50
013	First Floor	1	0	107	S.F.	Dressing Room					107
014	First Floor	1	0	55	S.F.	Women's Toilet					55
015	First Floor	1	0	126	S.F.	Can Wash					126
016	First Floor	1	0	43	S.F.	Pump Room					43
017	First Floor	1	0	119	S.F.	Walk-in Refrigerator					119
018	First Floor	1	0	69	S.F.	Walk-in Freezer					69
019	First Floor	1	0	260	S.F.	Faculty Serving					260
020	First Floor	1	0	237	S.F.	Dish Washing					237
021	First Floor	1	0	1,095	S.F.	Faculty Dining					1,095
022	First Floor	1	0	232	S.F.	Faculty Alcove					232
023	First Floor	1	0	84	S.F.	Closet					84
024	First Floor	1	0	2,075	S.F.	Student Serving					2,075
025	First Floor	1	0	55	S.F.	Change Room					55
026	First Floor	1	0	4,839	S.F.	Dining Room (Closed)					4,839
027	First Floor	1	0	102	S.F.	Change Room					102
028	First Floor	1	0	59	S.F.	Pop Corn Room					59
029	First Floor	1	0	217	S.F.	Office					217
030	First Floor	1	0	27	S.F.	Toilet					27
031	First Floor	1	0	170	S.F.	Storage					170
032	First Floor	1	0	254	S.F.	Store					254
						Subtotal					*17,147*

Total Existing Building 2 *17,147*

EXISTING BUILDING 3 - CLASSROOM BUIING # 1	**#REF!**			**11,098 SF**
Teaching Stations:				0

Space		E	N	Sq Ft		Existing Use		(D) Sq Ft	(N) Sq Ft	(E) Sq Ft
001	First Floor	1	0	494	S.F.	Walk (Covered)				1,483
002	First Floor	1	0	358	S.F.	Teachers Work Room				1,074
003	First Floor	1	0	69	S.F.	Cot Room				69
004	First Floor	1	0	161	S.F.	Women's Faculty Toilet				161
005	First Floor	1	0	128	S.F.	Men's Faculty Toilet				128
006	First Floor	1	0	931	S.F.	Men's Faculty Toilet				931
007	First Floor	1	0	931	S.F.	General Classroom				931
008	First Floor	1	0	931	S.F.	General Classroom				931
009	First Floor	1	0	931	S.F.	General Classroom				931
010	First Floor	1	0	931	S.F.	General Classroom				931
011	First Floor	1	0	931	S.F.	General Classroom				931
012	First Floor	1	0	931	S.F.	General Classroom				931
013	First Floor	1	0	931	S.F.	General Classroom				931
014	First Floor	1	0	248	S.F.	Boy's Toilet				248
015	First Floor	1	0	225	S.F.	Girl's Toilet				225
016	First Floor	1	0	70	S.F.	Stairs (Interior)				70

017	First Floor	1	0	89	S.F.	Custodian Room					89
018	First Floor	1	0	103	S.F.	Mechanical Room					103
								Total Existing Building 3			*11,098*
											11,098

EXISTING BUILDING 4 - MUSIC BUILDING — **10,777 SF**

Teaching Stations:

Space		E	N	Sq Ft		Existing Use	(D) Sq Ft	(N) Sq Ft		(E) Sq Ft
001	First Floor	1	0	1,201	S.F.	Choral Room/Classroom				3,603
002	First Floor	1	0	280	S.F.	Storage				840
003	First Floor	1	0	69	S.F.	Electric Room				207
004	First Floor	1	0	95	S.F.	Stairs (Interior)				285
005	First Floor	1	0	1,444	S.F.	Insrumental Music Classroom				4,332
006	First Floor	1	0	59	S.F.	Practice Room				177
007	First Floor	1	0	71	S.F.	Office				213
008	First Floor	1	0	51	S.F.	Practice Room				153
009	First Floor	1	0	59	S.F.	Practice Room				177
010	First Floor	1	0	58	S.F.	Storage				174
011	First Floor	1	0	243	S.F.	Toilet				243
012	First Floor	1	0	124	S.F.	Walk (Covered)				373
						Subtotal				*10,777*
								Total First Floor		***10,777***

EXISTING BUILDING 5 - ADMIN/CLASSROOM BUILDING — **59,457 SF**

Teaching Stations:

Space		E	N	Sq Ft		Existing Use	(D) Sq Ft	(N) Sq Ft		(E) Sq Ft
001	Basement	1	0	164	S.F.	Stairs (Interior)				164
002	Basement	1	0	164	S.F.	Heating & Ventilation Room				164
003	Basement	1	0	38	S.F.	Storage				38
004	Basement	1	0	113	S.F.	Vestibule				113
005	Basement	1	0	72	S.F.	Shaft Elevator				72
006	Basement	1	0	694	S.F.	Transformer Room				694
007	Basement	1	0	682	S.F.	Switch Board Room				682
001	First Floor	1	0	37	S.F.	Storage				37
002	First Floor	1	0	346	S.F.	Stairs (Interior)				346
003	First Floor	1	0	145	S.F.	Telephone Equip.				145
004	First Floor	1	0	64	S.F.	Elev. Machine Room				64
005	First Floor	1	0	96	S.F.	Shaft Elevator				96
006	First Floor	1	0	96	S.F.	Passage				96
007	First Floor	1	0	136	S.F.	Women's Faculty Toilet				136
008	First Floor	1	0	121	S.F.	Women's Faculty Toilet				121
009	First Floor	1	0	138	S.F.	Custodian Room				138
010	First Floor	1	0	1,667	S.F.	Supply Room				1,667
011	First Floor	1	0	511	S.F.	Admin Main Office				511
012	First Floor	1	0	502	S.F.	Public Area/Space				502
013	First Floor	1	0	40	S.F.	Principal's Toilet				40
014	First Floor	1	0	29	S.F.	Vestibule				29
015	First Floor	1	0	43	S.F.	Electic Room				43
016	First Floor	1	0	344	S.F.	Principal's Office				344
017	First Floor	1	0	446	S.F.	Conference Room				446
018	First Floor	1	0	542	S.F.	Lobby				542
019	First Floor	1	0	207	S.F.	Canopy				69
020	First Floor	1	0	163	S.F.	Office				163
021	First Floor	1	0	97	S.F.	Counselor's Office				97
022	First Floor	1	0	97	S.F.	Counselor's Office				97
023	First Floor	1	0	709	S.F.	Office				709
024	First Floor	1	0	247	S.F.	Office				247
025	First Floor	1	0	510	S.F.	Work Experience Office				510
026	First Floor	1	0	974	S.F.	General Classroom				974
027	First Floor	1	0	309	S.F.	Stairs (Interior)				309
028	First Floor	1	0	74	S.F.	Storage				74
029	First Floor	1	0	96	S.F.	Canopy				32
030	First Floor	1	0	3,236	S.F.	Corridor				3,236
031	First Floor	1	0	96	S.F.	Canopy				32
032	First Floor	1	0	28	S.F.	Vestibule				28
033	First Floor	1	0	410	S.F.	Girl's Toilet				410
034	First Floor	1	0	354	S.F.	Boy's Toilet				354

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035	First Floor	1	0	27	S.F.	Vestibule					27
036	First Floor	1	0	421	S.F.	Waiting Room					421
037	First Floor	1	0	220	S.F.	Boy's Vice Principal Office					220
038	First Floor	1	0	9	S.F.	Closet					9
039	First Floor	1	0	9	S.F.	Closet					9
040	First Floor	1	0	35	S.F.	Boy's Vice Principal Toilet					35
041	First Floor	1	0	38	S.F.	Girls's Vice Principal Toilet					38
042	First Floor	1	0	220	S.F.	Girls's Vice Principal Office					220
043	First Floor	1	0	147	S.F.	Cot Room					147
044	First Floor	1	0	9	S.F.	Closet					9
045	First Floor	1	0	9	S.F.	Closet					9
046	First Floor	1	0	30	S.F.	Girl's Toilet					30
047	First Floor	1	0	30	S.F.	Boy's Toilet					30
048	First Floor	1	0	161	S.F.	Cot Room					161
049	First Floor	1	0	574	S.F.	Health's Office					574
050	First Floor	1	0	142	S.F.	Doctor's Office					142
051	First Floor	1	0	29	S.F.	Dressing Room					29
052	First Floor	1	0	704	S.F.	Attendance Office					704
053	First Floor	1	0	129	S.F.	Registrar Office					129
054	First Floor	1	0	64	S.F.	Hall					64
055	First Floor	1	0	93	S.F.	Office					93
056	First Floor	1	0	133	S.F.	Office					133
057	First Floor	1	0	384	S.F.	Waiting Room					384
058	First Floor	1	0	139	S.F.	Office					139
059	First Floor	1	0	114	S.F.	Office					114
060	First Floor	1	0	158	S.F.	Office					158
061	First Floor	1	0	417	S.F.	Work Experience Office					417
062	First Floor	1	0	81	S.F.	Advisor's Office					81
063	First Floor	1	0	77	S.F.	Advisor's Office					77
064	First Floor	1	0	125	S.F.	Office					125
065	First Floor	1	0	931	S.F.	Counselling Office					931
066	First Floor	1	0	87	S.F.	Advisor's Office					87
067	First Floor	1	0	87	S.F.	Advisor's Office					87
068	First Floor	1	0	87	S.F.	Advisor's Office					87
069	First Floor	1	0	87	S.F.	Advisor's Office					87
070	First Floor	1	0	90	S.F.	Advisor's Office					90
071	First Floor	1	0	218	S.F.	Storage					218
072	First Floor	1	0	214	S.F.	Councelor's Office					214
073	First Floor	1	0	1,440	S.F.	Canopy					480
001	Second Floor	1	0	412	S.F.	Stairs (Interior)					412
002	Second Floor	1	0	96	S.F.	Shaft Elevator					96
003	Second Floor	1	0	789	S.F.	Teacher's Work Room					789
004	Second Floor	1	0	1,309	S.F.	Home Living Room					1,309
005	Second Floor	1	0	1,279	S.F.	Clothing Room					1,279
006	Second Floor	1	0	2,261	S.F.	Sewing Classroom					2,261
007	Second Floor	1	0	111	S.F.	Storage					111
008	Second Floor	1	0	95	S.F.	Storage					95
009	Second Floor	1	0	92	S.F.	Storage					92
010	Second Floor	1	0	320	S.F.	Storage					320
011	Second Floor	1	0	412	S.F.	Stairs (Interior)					412
012	Second Floor	1	0	57	S.F.	Duct Space					57
013	Second Floor	1	0	2,970	S.F.	Corridor					2,970
014	Second Floor	1	0	57	S.F.	Duct Space					57
015	Second Floor	1	0	74	S.F.	Custodian Room					74
016	Second Floor	1	0	14	S.F.	Vestibule					14
017	Second Floor	1	0	358	S.F.	Girl's Toilet					358
018	Second Floor	1	0	1,502	S.F.	All Purpose Room					1,502
019	Second Floor	1	0	273	S.F.	Living Room					273
020	Second Floor	1	0	331	S.F.	Dining Room					331
021	Second Floor	1	0	1,509	S.F.	Foods Classroom					1,509
022	Second Floor	1	0	245	S.F.	Storage					245
023	Second Floor	1	0	112	S.F.	Office					112
024	Second Floor	1	0	3,109	S.F.	Consumer Management					3,109
001	Third Floor	1	0	380	S.F.	Stairs (Interior)					380
002	Third Floor	1	0	32	S.F.	Storage					32
003	Third Floor	1	0	96	S.F.	Shaft Elevator					96
004	Third Floor	1	0	209	S.F.	Lab Workroom					209
005	Third Floor	1	0	1,381	S.F.	Physics Lab					1,381
006	Third Floor	1	0	275	S.F.	Lab Workroom					275
007	Third Floor	1	0	1,354	S.F.	Modern Sciences Lab					1,354
008	Third Floor	1	0	1,354	S.F.	Modern Sciences Lab					1,354

009	Third Floor	1	0	298	S.F.	Lab Workroom					298
010	Third Floor	1	0	1,356	S.F.	Modern Sciences Lab					1,356
011	Third Floor	1	0	32	S.F.	Storage					32
012	Third Floor	1	0	380	S.F.	Stairs (Interior)					380
013	Third Floor	1	0	57	S.F.	Duct Space					57
014	Third Floor	1	0	2,970	S.F.	Corridor					2,970
015	Third Floor	1	0	57	S.F.	Duct Space					57
016	Third Floor	1	0	74	S.F.	Custodian Room					74
017	Third Floor	1	0	14	S.F.	Vestibule					14
018	Third Floor	1	0	358	S.F.	Boy's Toilet					358
019	Third Floor	1	0	27	S.F.	Vestibule					27
020	Third Floor	1	0	56	S.F.	Boy's Toilet					56
021	Third Floor	1	0	98	S.F.	Vestibule					98
022	Third Floor	1	0	88	S.F.	Men's Faculty Toilet					88
023	Third Floor	1	0	109	S.F.	Cot Room					109
024	Third Floor	1	0	177	S.F.	Hall					177
245	Third Floor	1	0	1,354	S.F.	Women's Faculty Toilet					1,354
026	Third Floor	1	0	298	S.F.	Cot Room					298
027	Third Floor	1	0	1,381	S.F.	Biology Lab					1,381
028	Third Floor	1	0	1,369	S.F.	Chemistry Lab					1,369
029	Third Floor	1	0	298	S.F.	Lab Workroom					298
030	Third Floor	1	0	1,369	S.F.	Chemistry Lab					1,369
031	Third Floor	1	0	431	S.F.	Office					431
001	Fourth Floor	1	0	149	S.F.	Stairs (Interior)					149
002	Fourth Floor	1	0	84	S.F.	Chair Storage					84
003	Fourth Floor	1	0	96	S.F.	Shaft Elevator					96
004	Fourth Floor	1	0	125	S.F.	Vestibule					125
005	Fourth Floor	1	0	42	S.F.	Electic Room					42
006	Fourth Floor	1	0	1,544	S.F.	Faculty Room					1,544
007	Fourth Floor	1	0	123	S.F.	Electic Room					123
008	Fourth Floor	1	0	149	S.F.	Stairs (Interior)					149
012		1	0	46	S.F.	Arcades (1/3)					46
						Subtotal					*59,457*
						Total First Floor					***59,457***

EXISTING BUILDING 6 - INDUSTRIAL BUILDING — **25,470 SF**

Teaching Stations: 0

Space	Level	E	N	Sq Ft	Existing Use	(D) Sq Ft		(N) Sq Ft	(E) Sq Ft
001	First Floor	1	0	148	Walk (covered)				443
002	First Floor	1	0	2,563	Metal				2,563
003	First Floor	1	0	117	Finish Room				117
004	First Floor	1	0	368	Storage				368
005	First Floor	1	0	209	Adult Storage				209
006	First Floor	1	0	475	Instruction Area/Room				475
007	First Floor	1	0	487	Instruction Area/Room				487
008	First Floor	1	0	3,030	Wood Working				3,030
009	First Floor	1	0	284	Lumber Storage				284
010	First Floor	1	0	256	Adult Storage				256
011	First Floor	1	0	423	Studetn Storage				423
012	First Floor	1	0	159	Finish Room				159
013	First Floor	1	0	565	Instruction Area/Room				565
014	First Floor	1	0	3,005	Auto Mechanics				3,005
015	First Floor	1	0	164	Storage				164
016	First Floor	1	0	140	Day Tool Room				140
017	First Floor	1	0	192	Adult Storage				192
018	First Floor	1	0	126	Storage				126
019	First Floor	1	0	98	Adult Storage				98
020	First Floor	1	0	77	Equipment Storage				77
021	First Floor	1	0	461	Instruction Area/Room				461
022	First Floor	1	0	1,701	Auto Mechanics				1,701
023	First Floor	1	0	88	Men's Faculty Toilet				88
024	First Floor	1	0	223	Boy's Toilet				223
025	First Floor	1	0	64	Janitor				64
026	First Floor	1	0	27	Entry (covered)				9
027	First Floor	1	0	115	Office				115
028	First Floor	1	0	446	Faculty Room (men)				446
029	First Floor	1	0	382	Tool Room				382
030	First Floor	1	0	357	Mechanical Room				357

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031	First Floor	1	0	221		Walk (covered)					664
001	Second Floor	1	0	1,329		Walk (covered)					443
002	Second Floor	1	0	1,303		Ceramics					1,303
003	Second Floor	1	0	203		Kiln Room					203
004	Second Floor	1	0	108		Supply Room					108
005	Second Floor	1	0	2,118		Electric Room					2,118
006	Second Floor	1	0	93		Amateur Radio					93
007	Second Floor	1	0	206		Test Room					206
008	Second Floor	1	0	132		Storage					132
009	Second Floor	1	0	102		Storage					102
010	Second Floor	1	0	1,798		Drafting Room					1,798
011	Second Floor	1	0	74		Girl's Toilet					74
012	Second Floor	1	0	112		Blueprint					112
013	Second Floor	1	0	105		Adult Storage					105
014	Second Floor	1	0	91		Storage					91
015	Second Floor	1	0	97		Storage					97
016	Second Floor	1	0	1,828		Drafting Room					1,828.00
						Subtotal					*26,504*
						Total First Floor					***26,504***

EXISTING BUILDING 7 - CLASSROOM BLDG #2 — **26,504 SF**

Teaching Stations: 0

Space		E	N	Sq Ft	Existing Use	(D) Sq Ft		(N) Sq Ft	(E) Sq Ft
001	Basement	1	0	66	Vestibule				66
002	Basement	1	0	66	Stairs (Interior)				66
003	Basement	1	0	240	Boy's Toilet				240
004	Basement	1	0	1,204	Storage				1,204
005	Basement	1	0	66	Stairs (Interior)				66
006	Basement	1	0	66	Vestibule				66
007	Basement	1	0	240	Girl's Toilet				240
008	Basement	1	0	8	Entry (Covered)				24
									-
001	First Floor	1	0	933	General Classroom				933
002	First Floor	1	0	243	Office				243
003	First Floor	1	0	228	Work Room				228
004	First Floor	1	0	909	General Classroom				909
005	First Floor	1	0	267	Work Room				267
006	First Floor	1	0	61	Storage				61
007	First Floor	1	0	920	General Classroom				920
008	First Floor	1	0	170	Storage				170
009	First Floor	1	0	138	Supply Room				138
010	First Floor	1	0	1,084	Driver Educ. Demonstration & TES				1,084
011	First Floor	1	0	2,252	Corridor				2,252
012	First Floor	1	0	296	Stairs (Interior)				296
013	First Floor	1	0	76	Janitor				76
014	First Floor	1	0	91	General Classroom				91
015	First Floor	1	0	180	Store Room				180
016	First Floor	1	0	150	Conference Room				150
017	First Floor	1	0	937	General Classroom				937
018	First Floor	1	0	937	General Classroom				937
019	First Floor	1	0	184	Store Room				184
020	First Floor	1	0	911	General Classroom				911
021	First Floor	1	0	296	Stairs (Interior)				296
022	First Floor	1	0	76	Janitor				76
001	Second Floor	1	0	1,095	Typing Classroom				1,095
002	Second Floor	1	0	1,050	Typing Classroom				1,050
003	Second Floor	1	0	119	Storage				119
004	Second Floor	1	0	48	Janitor				48
005	Second Floor	1	0	41	Vestibule				41
006	Second Floor	1	0	53	Closet				53
007	Second Floor	1	0	235	Teacher's Work Room				235
008	Second Floor	1	0	1,234	Typing Classroom				1,234
009	Second Floor	1	0	1,078	Accounting Classroom				1,078
010	Second Floor	1	0	2,252	Corridor				2,252
011	Second Floor	1	0	132	Stairs (Interior)				132
012	Second Floor	1	0	240	Girl's Toilet				240
013	Second Floor	1	0	787	General Classroom				787

014	Second Floor	1	0	796		General Classroom				796
015	Second Floor	1	0	1,040		Typing Classroom				1,040
016	Second Floor	1	0	791		General Classroom				791
017	Second Floor	1	0	796		General Classroom				796
018	Second Floor	1	0	132		Stairs (Interior)				132
019	Second Floor	1	0	240		Boy's Toilet				240
						Subtotal				*25,470*
						Total First Floor				***25,470***

EXISTING BUILDING 8 - INSTRUMENTAL MUSIC BUILDING — **1,850 SF**

Space		E	N	Sq Ft		Existing Use	New Use	(D) Sq Ft	(N) Sq Ft	(E) Sq Ft
001	First Floor	1	0	1,448	S.F.	Insrumental Music Classroom				1,448
002	First Floor	1	0	56	S.F.	Arcades				168
003	First Floor	1	0	72	S.F.	Office				72
004	First Floor	1	0	54	S.F.	Practice Room				54
005	First Floor	1	0	54	S.F.	Practice Room				54
006	First Floor	1	0	54	S.F.	Practice Room				54
						Subtotal				1,850
						Total Existing Building 7				***1,850***

EXISTING BUILDING 9 - GARAGE BUILDING — **Subtotal** — **857 SF**

Space		E	N	Sq Ft		Existing Use	New Use	(D) Sq Ft	(N) Sq Ft	(E) Sq Ft
001	First Floor	1	0	857	S.F.	Parking Garages				857
						Subtotal				857
						Total Existing Building 8				***857***

EXISTING BUILDING 10 - FLAMABLE STORAGE BUILDING — **Subtotal** — **60 SF**

Space		E	N	Sq Ft		Existing Use	New Use	(D) Sq Ft	(N) Sq Ft	(E) Sq Ft
001	First Floor	1	0	60	S.F.	Storage (Portable Building)				60
						Subtotal				60
						Total Existing Building 9				***60***

EXISTING BUILDING 11 - FIELD SANITARY BUILDING — **Subtotal** — **478 SF**

Space		E	N	Sq Ft		Existing Use	New Use	(D) Sq Ft	(N) Sq Ft	(E) Sq Ft
001	First Floor	1	0	212	S.F.	Toilet				212
002	First Floor	1	0	215	S.F.	Toilet				215
003	First Floor	1	0	51	S.F.	Janitor				51
						Subtotal				478
						Total Existing Building 10				***478***

EXISTING BUILDING 12- EQUIPMENT FIELD STORAGE — **Subtotal** — **552 SF**

Space		E	N	Sq Ft		Existing Use	New Use	(D) Sq Ft	(N) Sq Ft	(E) Sq Ft
001	First Floor	1	0	552	S.F.	Equipment Storage				552
						Subtotal				552
						Total Existing Building 10				***552***

EXISTING BUILDING 13 - GAZEBO — **Subtotal** — **149 SF**

Space		E	N	Sq Ft		Existing Use	New Use	(D) Sq Ft	(N) Sq Ft	(E) Sq Ft
001	First Floor	1	0	50	S.F.	Pavilion				149
						Subtotal		-		149
						Total Existing Building 12				***149***

EXISTING BUILDING 14 - HOME BLEACHERS — **Subtotal** — **6,042 SF**

Teaching Stations:

Space		E	N	Sq Ft		Existing Use	New Use	(D) Sq Ft	(N) Sq Ft	(E) Sq Ft
001	First Floor	1	0	3,010	S.F.	Bleachers				3,010

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002	First Floor	1	0	3,032	S.F.	Bleachers				3,032
						Subtotal				6,042
						Total Existing Building 14				***6,042***

EXISTING BUILDING 15 - VISITORS BLEACHERS — **Subtotal** — **0 SF**

Teaching Stations:

NOTE: NOT IN SP-2A DIAGRAM

Space		E	N	Sq Ft		Existing Use	New Use	(D) Sq Ft	(N) Sq Ft	(E) Sq Ft
001	Bleachers	1	0	-		Bleachers				-
						Subtotal				-
						Total Existing Building 15				***-***

EXISTING BUILDING 16 - FIELD LIGHT CONTROLS — **Subtotal** — **72 SF**

Teaching Stations:

Space		E	N	Sq Ft		Existing Use	New Use	(D) Sq Ft	(N) Sq Ft	(E) Sq Ft
001	First Floor	1	0	72	S.F.	Electric Room				72
						Subtotal				72
						Total Existing Building 16				***72***

EXISTING BUILDING 17- CLASSROOM BUILDING — **Subtotal** — **3,879 SF**

Teaching Stations: 0

Space		E	N	Sq Ft		Existing Use	New Use	(D) Sq Ft	(N) Sq Ft	(E) Sq Ft
001	First Floor	1	0	878	S.F.	General Classroom				878
002	First Floor	1	0	878	S.F.	General Classroom				878
003	First Floor	1	0	41	S.F.	Heating and Ventilating Room				41
004	First Floor	1	0	600	S.F.	Walk (Covered)				200
005	Second Floor	1	0	878	S.F.	General Classroom				878
006	Second Floor	1	0	878	S.F.	General Classroom				878
007	Second Floor	1	0	41	S.F.	Heating and Ventilating Room				41
008	Second Floor	1	0	255	S.F.	Overhang				85
						Subtotal				3,879
						Total Existing Building 17				***3,879***

EXISTING BUILDING 18- CLASSROOM BUILDING — **Subtotal** — **3,849 SF**

Teaching Stations: 0

Space		E	N	Sq Ft		Existing Use	New Use	(D) Sq Ft	(N) Sq Ft	(E) Sq Ft
001	First Floor	1	0	878	S.F.	General Classroom				878
002	First Floor	1	0	878	S.F.	General Classroom				878
003	First Floor	1	0	41	S.F.	Heating and Ventilating Room				41
004	First Floor	1	0	510	S.F.	Walk (Covered)				170
005	Second Floor	1	0	878	S.F.	General Classroom				878
006	Second Floor	1	0	878	S.F.	General Classroom				878
007	Second Floor	1	0	41	S.F.	Heating and Ventilating Room				41
008	Second Floor	1	0	255	S.F.	Overhang				85
						Subtotal				3,849
						Total Existing Building 18				***3,849***

EXISTING BUILDING 19 - PHYSICAL EDUCATION BLDG — **Subtotal** — **38,885 SF**

Teaching Stations:

Space		E	N	Sq Ft		Existing Use	New Use		(D) Sq Ft	(N) Sq Ft	(E) Sq Ft
001	Mezzanine	1	0	1,134	S.F.	Mechanical Room					1,134
002	Mezzanine	1	0	78	S.F.	Stairs (Interior)					78
003	Mezzanine	1	0	1,007	S.F.	Storage					1,007
004	Mezzanine	1	0	30	S.F.	Stairs (Interior)					30
005	First Floor	1	0	436	S.F.	Office					436
006	First Floor	1	0	149	S.F.	Field Equipment					149
007	First Floor	1	0	62	S.F.	Storage					62
008	First Floor	1	0	23	S.F.	Women's Faculty Toilet					23
009	First Floor	1	0	84	S.F.	Shower Room					84
010	First Floor	1	0	203	S.F.	Locker Room					203
011	First Floor	1	0	234	S.F.	Storage					234

012	First Floor	1	0	46	S.F.	Janitor						46
013	First Floor	1	0	3,238	S.F.	Locker/Shower Room (Girl's)						3,238
014	First Floor	1	0	24	S.F.	Entry (Covered)						8
015	First Floor	1	0	48	S.F.	Storage						48
016	First Floor	1	0	64	S.F.	Towel room						64
017	First Floor	1	0	277	S.F.	Drying Room						277
018	First Floor	1	0	713	S.F.	Shower Room (Girl's)						713
019	First Floor	1	0	27	S.F.	Entry (Covered)						9
020	First Floor	1	0	199	S.F.	Entry (Closed)						199
021	First Floor	1	0	306	S.F.	Stairs (Interior)						306
022	First Floor	1	0	28	S.F.	Vestibule						28
023	First Floor	1	0	279	S.F.	Girl's Toilet						279
024	First Floor	1	0	99	S.F.	Transformer Room						99
025	First Floor	1	0	292	S.F.	Electrical Room						292
026	First Floor	1	0	693	S.F.	Mechanical Room						693
027	First Floor	1	0	86	S.F.	Duct Space						86
028	First Floor	1	0	78	S.F.	Canopy						26
029	First Floor	1	0	90	S.F.	Canopy						30
030	Second Floor	1	0	309	S.F.	Apparatus Room						309
031	Second Floor	1	0	78	S.F.	Stairs (Interior)						78
032	Second Floor	1	0	232	S.F.	Buffet Room						232
033	Second Floor	1	0	291	S.F.	Corridor						291
034	Second Floor	1	0	100	S.F.	Storage						100
035	Second Floor	1	0	201	S.F.	Entry(Closed)						201
036	Second Floor	1	0	4,417	S.F.	Exercise Room (Girls)						4,417
037	Second Floor	1	0	313	S.F.	Stairs (Interior)						313
038	Second Floor	1	0	106	S.F.	Storage						106
039	Second Floor	1	0	1,247	S.F.	Corrective Room (Girls)						1,247
040	Second Floor	1	0	132	S.F.	Cot Room						132
041	Second Floor	1	0	86	S.F.	Duct Space						86
042	Second Floor	1	0	203	S.F.	Women's Toilet						203
043	Second Floor	1	0	237	S.F.	Vestibule						237
044	Second Floor	1	0	37	S.F.	Vestibule						37
045	Second Floor	1	0	270	S.F.	Canopy						90
046	Second Floor	1	0	620	S.F.	Lobby						620
047	Second Floor	1	0	36	S.F.	Vestibule						36
048	Second Floor	1	0	46	S.F.	Janitor						46
049	Second Floor	1	0	149	S.F.	Cloak Room						149
050	Second Floor	1	0	198	S.F.	Men's Toilet						198
051	Second Floor	1	0	285	S.F.	Visitor's Room						285
052	Second Floor	1	0	82	S.F.	Shower Room						82
053	Second Floor	1	0	69	S.F.	Drying Room						69
054	Second Floor	1	0	90	S.F.	Toilet						90
055	Second Floor	1	0	105	S.F.	Office						105
056	Second Floor	1	0	41	S.F.	Vestibule						41
057	Second Floor	1	0	36	S.F.	Passage						36
058	Second Floor	1	0	279	S.F.	Storage						279
059	Second Floor	1	0	9,929	S.F.	Exercise Room (Boy's)						9,929
060	Second Floor	1	0	393	S.F.	Dressing Room						393
061	Second Floor	1	0	203	S.F.	Locker Room						203
062	Second Floor	1	0	76	S.F.	Shower Room						76
063	Second Floor	1	0	22	S.F.	Men's Faculty Toilet						22
064	Second Floor	1	0	67	S.F.	Storage						67
065	Second Floor	1	0	465	S.F.	Office						465
066	Second Floor	1	0	165	S.F.	Field Equipment						165
067	Second Floor	1	0	141	S.F.	Canopy						47
068	Second Floor	1	0	3,693	S.F.	Locker (Boy's)						3,693
069	Second Floor	1	0	81	S.F.	Janitor						81
070	Second Floor	1	0	37	S.F.	Duct Space						37
071	Second Floor	1	0	521	S.F.	Shower Room (Boy's)						521
072	Second Floor	1	0	399	S.F.	Drying Room						399
073	Second Floor	1	0	87	S.F.	Towel Room						87
074	Second Floor	1	0	65	S.F.	Stairs (Interior)						65
075	Second Floor	1	0	342	S.F.	Uniform Drying						342
076	Second Floor	1	0	404	S.F.	Entry (Closed)						404
077	Second Floor	1	0	63	S.F.	Canopy						21
078	Second Floor	1	0	1,230	S.F.	Corrective Room (Boy's)						1,230
079	Second Floor	1	0	114	S.F.	Cot Room						114
080	Second Floor	1	0	111	S.F.	Storage						111

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081	Second Floor	1	0	342	S.F.	Boy's Toilet						342
082	Second Floor	1	0	129	S.F.	Canopy						43
083	Second Floor	1	0	63	S.F.	Canopy						21
084	Second Floor	1	0	33	S.F.	Canopy						11
						Subtotal						*38,885*

Total Existing Building 19 ***38,885***

EXISTING BUILDING 20 - UTILITY BUILDING **Subtotal** **3,017 SF**

Teaching Stations: 0

Space		E	N	Sq Ft		Existing Use	New Use	(D) Sq Ft		(N) Sq Ft	(E) Sq Ft
001	First Floor	1	0	268	S.F.	Overhang					268
002	First Floor	1	0	51	S.F.	Men's Toilet					51
003	First Floor	1	0	51	S.F.	Women's Toilet					51
004	First Floor	1	0	238	S.F.	Locker Room					238
005	First Floor	1	0	198	S.F.	Locker Room					198
006	First Floor	1	0	222	S.F.	Custodian Room					222
007	First Floor	1	0	451	S.F.	Locked Storage					451
008	First Floor	1	0	659	S.F.	Receiving					659
009	First Floor	1	0	76	S.F.	Flammable Storage					76
010	First Floor	1	0	76	S.F.	Flammable Storage					76
011	First Floor	1	0	68	S.F.	Flammable Storage					68
012	First Floor	1	0	392	S.F.	Sweeper Storage					392
013	First Floor	1	0	267	S.F.	Overhang					267
						Subtotal					3,017

Total Existing Building 20 ***3,017***

EXISTING BUILDING 21 - AUTO SERVICE BUILDING **Subtotal** **300 SF**

Teaching Stations: 0

Space		E	N	Sq Ft		Existing Use	New Use	(D) Sq Ft		(N) Sq Ft	(E) Sq Ft
001	First Floor	1	0	900	S.F.	Pavilion					300
						Subtotal					300

Total Existing Building 21 ***300***

EXISTING BUILDING 22 - ARCADE BOOTH **Subtotal** **12 SF**

Teaching Stations: 0

Space		E	N	Sq Ft		Existing Use	New Use	(D) Sq Ft		(N) Sq Ft	(E) Sq Ft
001	First Floor	1	0	36	S.F.	Arcades					12
						Subtotal					12

Total Existing Building 22 ***12***

EXISTING BUILDING 23 - LIBRARY & CLASROOM BUILDING **35,403 SF**

Teaching Stations: 0

Space		E	N	Sq Ft		Existing Use	New Use		(D) Sq Ft		(N) Sq Ft	(E) Sq Ft
001	First Floor	1	0	10,480	S.F.	Parking Area						10,480
002	First Floor	1	0	160	S.F.	Electric Room						160
003	First Floor	1	0	80	S.F.	Elevator Machine Room						80
004	First Floor	1	0	70	S.F.	Shaft Elevator						70
005	First Floor	1	0	70	S.F.	Vestibule						70
006	First Floor	1	0	102	S.F.	Entry (1/3)						34
007	First Floor	1	0	272	S.F.	Stairs						272
008	First Floor	1	0	272	S.F.	Stairs						272
009	First Floor	1	0	102	S.F.	Entry (1/3)						34
010	First Floor	1	0	129	S.F.	Walk (1/3)						43
011	First Floor	1	0	212	S.F.	Stairs						212
012	Second Floor	1	0	70	S.F.	Shaft Elevator						70
013	Second Floor	1	0	70	S.F.	Vestibule						70
014	Second Floor	1	0	70	S.F.	Entry						70
015	Second Floor	1	0	272	S.F.	Stairs						272
016	Second Floor	1	0	896	S.F.	General Classroom						896
017	Second Floor	1	0	896	S.F.	General Classroom						896
018	Second Floor	1	0	896	S.F.	General Classroom						896

019	Second Floor	1	0	896	S.F.	General Classroom						896
020	Second Floor	1	0	896	S.F.	General Classroom						896
021	Second Floor	1	0	1,964	S.F.	Corridor						1,964
022	Second Floor	1	0	868	S.F.	General Classroom						868
023	Second Floor	1	0	41	S.F.	Vestibule						41
024	Second Floor	1	0	285	S.F.	Boy's Toilet						285
025	Second Floor	1	0	51	S.F.	Janitor						51
026	Second Floor	1	0	40	S.F.	Vestibule						40
027	Second Floor	1	0	268	S.F.	Girl's Toilet						268
028	Second Floor	1	0	212	S.F.	Stairs						212
029	Second Floor	1	0	114	S.F.	Entry						38
030	Second Floor	1	0	896	S.F.	General Classroom						896
031	Second Floor	1	0	896	S.F.	General Classroom						896
032	Second Floor	1	0	896	S.F.	General Classroom						896
033	Second Floor	1	0	272	S.F.	Stairs						272
034	Second Floor	1	0	103	S.F.	Entry						103
035	Third Floor	1	0	70	S.F.	Shaft Elevator						70
036	Third Floor	1	0	70	S.F.	Vestibule						70
037	Third Floor	1	0	103	S.F.	Entry						103
038	Third Floor	1	0	272	S.F.	Stairs						272
039	Third Floor	1	0	944	S.F.	Learning Lab						944
040	Third Floor	1	0	45	S.F.	Storage						45
041	Third Floor	1	0	35	S.F.	Storage						35
042	Third Floor	1	0	108	S.F.	Office						108
043	Third Floor	1	0	240	S.F.	Faculty Room						240
044	Third Floor	1	0	192	S.F.	Conference Room						192
045	Third Floor	1	0	190	S.F.	Recreational Reading Room/Area						190
046	Third Floor	1	0	60	S.F.	Duct Space						60
047	Third Floor	1	0	95	S.F.	Hall						95
048	Third Floor	1	0	58	S.F.	Women's Faculty Toilet						58
049	Third Floor	1	0	50	S.F.	Men's Faculty Toilet						50
050	Third Floor	1	0	60	S.F.	Janitor						60
051	Third Floor	1	0	29	S.F.	Electric Room						29
052	Third Floor	1	0	635	S.F.	Media Center						635
053	Third Floor	1	0	42	S.F.	Storage						42
054	Third Floor	1	0	39	S.F.	Storage						39
055	Third Floor	1	0	39	S.F.	Storage						39
056	Third Floor	1	0	42	S.F.	Storage						42
057	Third Floor	1	0	171	S.F.	All Purpose Room/Area/Space						171
058	Third Floor	1	0	37	S.F.	Vestibule						37
059	Third Floor	1	0	103	S.F.	Dark Room						103
060	Third Floor	1	0	210	S.F.	Audio Visual						210
061	Third Floor	1	0	53	S.F.	Storage						53
062	Third Floor	1	0	818	S.F.	Corridor						818
063	Third Floor	1	0	33	S.F.	Entry (1/3)						11
064	Third Floor	1	0	293	S.F.	Stairs						293
065	Third Floor	1	0	307	S.F.	Library's Office						307
066	Third Floor	1	0	65	S.F.	Toilet						65
067	Third Floor	1	0	245	S.F.	Office						245
068	Third Floor	1	0	5,585	S.F.	Reading Center						5,585
069	Third Floor	1	0	47	S.F.	Duct Space						47
070	Third Floor	1	0	146	S.F.	Storage						146
071	Third Floor	1	0	272	S.F.	Stairs						272
072	Third Floor	1	0	103	S.F.	Entry						103
						Subtotal						35,403

Total Existing Building 23 ***35,403***

EXISTING BUILDING 24 - TWO / THREE UNIT RELOCATABLE	Subtotal				1,920 SF
	Teaching Stations:				0

Space		E	N	Sq Ft		Existing Use	New Use	(D) Sq Ft		(N) Sq Ft	(E) Sq Ft
001	First Floor	1	0	960	S.F.	General Classroom					960
002	First Floor	1	0	960	S.F.	General Classroom					960
						Subtotal					1,920

Total Existing Building 24 ***1,920***

EXISTING BUILDING 25 - TWO / THREE UNIT RELOCATABLE	Subtotal				1,920 SF
	Teaching Stations:				0

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Space		E	N	Sq Ft		Existing Use	New Use	(D) Sq Ft		(N) Sq Ft	(E) Sq Ft
001	First Floor	1	0	960	S.F.	General Classroom					960
002	First Floor	1	0	960	S.F.	General Classroom					960
						Subtotal					1,920

Total Existing Building 25 ***1,920***

EXISTING BUILDING 26 - TWO / THREE UNIT RELOCATABLE	Subtotal				1,776 SF
	Teaching Stations:				0

Space		E	N	Sq Ft		Existing Use	New Use	(D) Sq Ft		(N) Sq Ft	(E) Sq Ft
001	First Floor	1	0	888	S.F.	General Classroom					888
002	First Floor	1	0	888	S.F.	General Classroom					888
						Subtotal					1,776

Total Existing Building 26 ***1,776***

EXISTING BUILDING 27 - TWO / THREE UNIT RELOCATABLE	Subtotal				1,824 SF
	Teaching Stations:				0

Space		E	N	Sq Ft		Existing Use	New Use	(D) Sq Ft		(N) Sq Ft	(E) Sq Ft
001	First Floor	1	0	912	S.F.	General Classroom					912
002	First Floor	1	0	912	S.F.	General Classroom					912
						Subtotal					1,824

Total Existing Building 27 ***1,824***

EXISTING BUILDING 28 - TWO / THREE UNIT RELOCATABLE	Subtotal				1,824 SF
	Teaching Stations:				0

Space		E	N	Sq Ft		Existing Use	New Use	(D) Sq Ft		(N) Sq Ft	(E) Sq Ft
001	First Floor	1	0	912	S.F.	General Classroom					912
002	First Floor	1	0	912	S.F.	General Classroom					912
						Subtotal					1,824

Total Existing Building 28 ***1,824***

EXISTING BUILDING 29 - TWO / THREE UNIT RELOCATABLE	Subtotal				1,792 SF
	Teaching Stations:				0

Space		E	N	Sq Ft		Existing Use	New Use	(D) Sq Ft		(N) Sq Ft	(E) Sq Ft
001	First Floor	1	0	896	S.F.	General Classroom					896
002	First Floor	1	0	896	S.F.	General Classroom					896
						Subtotal					1,792

Total Existing Building 29 ***1,792***

EXISTING BUILDING 30 - TWO / THREE UNIT RELOCATABLE	Subtotal				1,776 SF
	Teaching Stations:				0

Space		E	N	Sq Ft		Existing Use	New Use	(D) Sq Ft		(N) Sq Ft	(E) Sq Ft
001	First Floor	1	0	888	S.F.	General Classroom					888
002	First Floor	1	0	888	S.F.	General Classroom					888
						Subtotal					1,776

Total Existing Building 30 ***1,776***

EXISTING BUILDING 31 - TWO / THREE UNIT RELOCATABLE	Subtotal				2,668 SF
	Teaching Stations:				0

Space		E	N	Sq Ft		Existing Use	New Use	(D) Sq Ft		(N) Sq Ft	(E) Sq Ft
001	First Floor	1	0	891	S.F.	General Classroom					891
002	First Floor	1	0	886	S.F.	General Classroom					886
003	First Floor	1	0	891	S.F.	General Classroom					891
						Subtotal					2,668

Total Existing Building 31 ***2,668***

EXISTING BUILDING 32 - TWO / THREE UNIT RELOCATABLE	Subtotal				904 SF
Teaching Stations:					0

Space		E	N	Sq Ft		Existing Use	New Use	(D) Sq Ft	(N) Sq Ft	(E) Sq Ft
001	First Floor	1	0	904	S.F.	General Classroom				904
				Subtotal						904

Total Existing Building 32 ***904***

EXISTING BUILDING 33 - SANITARY RELOCATABLE	Subtotal				320 SF
Teaching Stations:					0

Space		E	N	Sq Ft		Existing Use	New Use	(D) Sq Ft	(N) Sq Ft	(E) Sq Ft
001	First Floor	1	0	320	S.F.	Toilet				320
				Subtotal						320

Total Existing Building 33 ***320***

EXISTING BUILDING 34 - TWO / THREE UNIT RELOCATABLE	Subtotal				1,728 SF
Teaching Stations:					0

Space		E	N	Sq Ft		Existing Use	New Use	(D) Sq Ft	(N) Sq Ft	(E) Sq Ft
001	First Floor	1	0	864	S.F.	General Classroom				864
002	First Floor	1	0	864	S.F.	General Classroom				864
				Subtotal						1,728

Total Existing Building 34 ***1,728***

EXISTING BUILDING 35 - SINGLE UNIT RELOCATABLE	Subtotal				881 SF
Teaching Stations:					0

Space		E	N	Sq Ft		Existing Use	New Use	(D) Sq Ft	(N) Sq Ft	(E) Sq Ft
001	First Floor	1	0	881	S.F.	General Classroom				881
				Subtotal						881

Total Existing Building 35 ***881***

EXISTING BUILDING 36 - TWO / THREE UNIT RELOCATABLE	Subtotal				1,808 SF
Teaching Stations:					0

Space		E	N	Sq Ft		Existing Use	New Use	(D) Sq Ft	(N) Sq Ft	(E) Sq Ft
001	First Floor	1	0	904	S.F.	General Classroom				904
002	First Floor	1	0	904	S.F.	General Classroom				904
				Subtotal						1,808

Total Existing Building 36 ***1,808***

EXISTING BUILDING 37 - SINGLE UNIT RELOCATABLE	Subtotal				881 SF
Teaching Stations:					0

Space		E	N	Sq Ft		Existing Use	New Use	(D) Sq Ft	(N) Sq Ft	(E) Sq Ft
001	First Floor	1	0	881	S.F.	General Classroom				881
				Subtotal						881

Total Existing Building 37 ***881***

EXISTING BUILDING 38 - SINGLE UNIT RELOCATABLE	Subtotal				881 SF
Teaching Stations:					0

Space		E	N	Sq Ft		Existing Use	New Use	(D) Sq Ft	(N) Sq Ft	(E) Sq Ft
001	First Floor	1	0	881	S.F.	General Classroom				881
				Subtotal						881

Total Existing Building 38 ***881***

EXISTING BUILDING 39 - SINGLE UNIT RELOCATABLE	Subtotal				881 SF
Teaching Stations:					0

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Space		E	N	Sq Ft		Existing Use	New Use	(D) Sq Ft	(N) Sq Ft	(E) Sq Ft
001	First Floor	1	0	881	S.F.	General Classroom				881
				Subtotal						881

Total Existing Building 39 ***881***

EXISTING BUILDING 40 - SINGLE UNIT RELOCATABLE	Subtotal				881 SF
Teaching Stations:					0

Space		E	N	Sq Ft		Existing Use	New Use	(D) Sq Ft	(N) Sq Ft	(E) Sq Ft
001	First Floor	1	0	881	S.F.	Mathematics Classroom				881
				Subtotal						881

Total Existing Building 40 ***881***

EXISTING BUILDING 41 - SINGLE UNIT RELOCATABLE	Subtotal				1,443 SF
Teaching Stations:					0

Space		E	N	Sq Ft		Existing Use	New Use	(D) Sq Ft	(N) Sq Ft	(E) Sq Ft
001	First Floor	1	0	1,443	S.F.	Home & Hospital				1,443
				Subtotal						1,443

Total Existing Building 41 ***1,443***

EXISTING BUILDING 42 - TWO / THREE UNIT RELOCATABLE	Subtotal				1,777 SF
Teaching Stations:					0

Space		E	N	Sq Ft		Existing Use	New Use	(D) Sq Ft	(N) Sq Ft	(E) Sq Ft
001	First Floor	1	0	1,513	S.F.	Resource Center Room				1,513
002	First Floor	1	0	200	S.F.	Storage				200
003	First Floor	1	0	64	S.F.	Toilet				64
				Subtotal						1,777

Total Existing Building 42 ***1,777***

EXISTING BUILDING 43 - 2 CLASSROOM RELO-DOH / PARENT CENTER	Subtotal				0 SF
NOTE: NOT IN SP-2A DIAGRAM				*Teaching Stations:*	

Space		E	N	Sq Ft		Existing Use	New Use	(D) Sq Ft	(N) Sq Ft	(E) Sq Ft
001	First Floor	1	0		S.F.					
				Subtotal						

Total Existing Building 43 -

EXISTING BUILDING 44 - TWO / THREE UNIT RELOCATABLE (BOYLE HEIGHTS CONTINUATION)	Subtotal				0 SF
NOTE: NOT IN SP-2A DIAGRAM				*Teaching Stations:*	

Space		E	N	Sq Ft		Existing Use	New Use	(D) Sq Ft	(N) Sq Ft	(E) Sq Ft
001	First Floor	1	0		S.F.					
				Subtotal						

Total Existing Building 44 -

EXISTING BUILDING 45 - TWO / THREE UNIT RELOCATABLE (BOYLE HEIGHTS CONTINUATION)	Subtotal				0 SF
NOTE: NOT IN SP-2A DIAGRAM				*Teaching Stations:*	

Space		E	N	Sq Ft		Existing Use	New Use	(D) Sq Ft	(N) Sq Ft	(E) Sq Ft
001	First Floor	1	0		S.F.					
				Subtotal						

Total Existing Building 45 -

EXISTING BUILDING 46 - TWO / THREE UNIT RELOCATABLE - INFANT / EARLY EDUCATION CENTER	Subtotal				#REF!
				Teaching Stations:	0

Space		E	N	Sq Ft		Existing Use	New Use	(D) Sq Ft	(N) Sq Ft	(E) Sq Ft
001	First Floor	1	0	904	S.F.	General Classroom				904
002	First Floor	1	0	904	S.F.	General Classroom				904

5.4 BUILDING CONDITION ANALYSIS (FCI REPORT)

Roosevelt High School overview of critical physical conditions is as follows:

Seismic Risk Factor

Four (4) buildings, totaling 173,999 square feet have been identified for Seismic Evaluation and will be studied to determine whether structural upgrades are necessary, and upgrade/retrofit options will be analyzed.

Facilities Condition Index (FCI)

School Site is considered to have a critical need to replace certain building components based on their remaining service life as surveyed by the maintenance & operations facility conditions assessment team; the most urgent components that may need to be addressed include:

- HVAC (100%)
- Roofing (95%)
- Electrical (75%)
- Plumbing (57%)

Food Service Facilities are smaller than the size recommended to serve the current enrollment based on LAUSD Design Standards.

The School is one of the most dense secondary schools in the district based on the school site size and current enrollment.

Play space is less than the minimum size recommended in the Rodriguez Consent Decree.

The School does not have a physical controlled access point.

Note:

This FCI report does not include the following:

→ Building 14 home bleachers (2008)
→ Building 15 visitor bleachers (2008)
→ Building 47 chiller yard (which is a new designation created to capture the covered enclosure just north of building 20)

In addition, Building 22 is counted twice (noted by *) because the Lunch Shelter was not given a separate building number in the Johnson Favaro Master Plan (Building 22 is technically just the enclosed kiosk at the north end of the Shelter).

BUILDING FCI

	10 YR FCI
ROOSEVELT SH	**48.0%**
BUILDING 16 **FIELD LIGHT CONTROL (id=20549)**	**64.5%**
Electrical	100.0%
Interior Construction	0.0%
Interior Finishes	13.4%
Roofing	100.0%
Super Structure	100.0%
BUILDING 10 **FLAMMABLE STORAGE (id=22718)**	**99.7%**
HVAC	100.0%
Roofing	100.0%
Super Structure	28.6%
BUILDING 22* **KIOSK (id=14870)**	**100.0%**
Roofing	100.0%
Super Structure	100.0%
BUILDING 1 **AUDITORIUM AND CLASSROOM BUILDING (id=21585)**	**51.0%**
Electrical	74.8%
Equipment	100.0%
Exterior Enclosure	12.2%
Fire Protection	96.5%
Furnishings	45.8%
HVAC	100.0%
Interior Construction	16.9%
Interior Finishes	47.2%
Plumbing	77.0%
Roofing	85.8%
Stairs	0.3%
Super Structure	100.0%
BUILDING 19 **PHYSICAL EDUCATION BUILDING (id=20906)**	**39.8%**
Electrical	88.4%
Equipment	0.0%
Exterior Enclosure	16.8%
Fire Protection	100.0%
Furnishings	6.9%
HVAC	100.0%
Interior Construction	2.8%
Interior Finishes	45.2%
Plumbing	32.2%
Roofing	99.7%
Site Mechanical Utilities	100.0%
Stairs	0.0%
Super Structure	99.5%
BUILDING 37 **A-651 (id=21251)**	**45.9%**
Electrical	45.5%
Exterior Enclosure	13.2%
Furnishings	93.4%
HVAC	100.0%

BUILDING FCI

	10 YR FCI
ROOSEVELT SH	**48.0%**
Interior Construction	100.0%
Interior Finishes	6.1%
Roofing	100.0%
Super Structure	100.0%
BUILDING 32 **AA-831 (id=20171)**	**18.2%**
Electrical	15.1%
Exterior Enclosure	0.0%
Furnishings	91.9%
Interior Construction	100.0%
Interior Finishes	0.0%
Roofing	100.0%
Super Structure	100.0%
BUILDING 33 **J-308 (id=21634)**	**85.1%**
Electrical	100.0%
Interior Construction	100.0%
Interior Finishes	72.2%
Plumbing	100.0%
Roofing	100.0%
Site Improvements	0.0%
Super Structure	100.0%
BUILDING 27 **AA-923 (id=21332)**	**81.7%**
Electrical	19.6%
Exterior Enclosure	35.6%
Furnishings	90.7%
HVAC	100.0%
Interior Construction	100.0%
Interior Finishes	100.0%
Roofing	100.0%
Super Structure	100.0%
BUILDING 28 **AA-1322 (id=21330)**	**59.3%**
Electrical	35.7%
Exterior Enclosure	26.6%
Furnishings	93.8%
HVAC	100.0%
Interior Construction	100.0%
Interior Finishes	63.6%
Roofing	100.0%
Super Structure	100.0%
BUILDING 34 **AA-955 (id=21914)**	**70.8%**
Electrical	100.0%
Exterior Enclosure	0.0%
Furnishings	94.0%
HVAC	100.0%
Interior Finishes	87.9%
Roofing	100.0%

BUILDING FCI

		10 YR FCI
	ROOSEVELT SH	**48.0%**
	Site Improvements	100.0%
	Super Structure	100.0%
BUILDING 29	**AA-2038 (id=21319)**	**20.0%**
	Electrical	55.6%
	Exterior Enclosure	0.0%
	Furnishings	10.7%
	HVAC	100.0%
	Interior Construction	0.0%
	Interior Finishes	0.0%
	Roofing	100.0%
BUILDING 45	**AA-1493 (id=14696)**	**48.2%**
	Electrical	100.0%
	Exterior Enclosure	0.0%
	Furnishings	97.1%
	HVAC	100.0%
	Interior Construction	0.0%
	Interior Finishes	10.9%
	Plumbing	73.3%
	Roofing	100.0%
	Site Improvements	100.0%
	Super Structure	100.0%
BUILDING 44	**AA-586 (id=16814)**	**36.1%**
	Electrical	100.0%
	Exterior Enclosure	0.0%
	Furnishings	21.5%
	HVAC	100.0%
	Interior Construction	3.2%
	Interior Finishes	2.9%
	Plumbing	58.6%
	Roofing	100.0%
	Site Improvements	100.0%
	Super Structure	100.0%
BUILDING 3	**CLASSROOM BUILDING #1 (id=24081)**	**45.9%**
	Electrical	97.3%
	Exterior Enclosure	3.1%
	Fire Protection	100.0%
	Furnishings	13.2%
	HVAC	100.0%
	Interior Construction	1.1%
	Interior Finishes	52.3%
	Plumbing	75.8%
	Roofing	100.0%
	Stairs	0.0%
	Super Structure	0.0%
BUILDING 8	**INSTRUMENTAL MUSIC (id=21890)**	**50.3%**

BUILDING FCI

		10 YR FCI
	ROOSEVELT SH	**48.0%**
	Electrical	32.5%
	Exterior Enclosure	16.3%
	Furnishings	20.1%
	HVAC	100.0%
	Interior Construction	0.0%
	Interior Finishes	34.7%
	Plumbing	100.0%
	Roofing	100.0%
	Super Structure	100.0%
BUILDING 21	**AUTO SERVICE SHED (id=15815)**	**22.8%**
	Electrical	100.0%
	Interior Construction	0.0%
	Interior Finishes	1.3%
	Roofing	100.0%
BUILDING 11	**FIELD SANITARY (id=25799)**	**68.6%**
	Electrical	100.0%
	Exterior Enclosure	0.0%
	Furnishings	0.0%
	Interior Construction	100.0%
	Interior Finishes	64.0%
	Plumbing	100.0%
	Roofing	100.0%
	Site Improvements	0.0%
	Super Structure	100.0%
BUILDING 42	**AA-2573 (id=23828)**	**52.0%**
	Electrical	61.9%
	Fire Protection	#DIV/0!
	Furnishings	0.0%
	HVAC	100.0%
	Interior Construction	0.0%
	Interior Finishes	35.3%
	Roofing	90.7%
BUILDING 38	**A-652 (id=21373)**	**44.5%**
	Electrical	48.5%
	Exterior Enclosure	0.0%
	Furnishings	63.7%
	HVAC	100.0%
	Interior Construction	0.0%
	Interior Finishes	27.2%
	Roofing	100.0%
BUILDING 39	**A-653 (id=22228)**	**45.2%**
	Electrical	65.1%
	Exterior Enclosure	0.0%
	Furnishings	32.5%
	HVAC	100.0%

BUILDING FCI

		10 YR FCI
	ROOSEVELT SH	**48.0%**
	Interior Construction	0.0%
	Interior Finishes	38.9%
	Roofing	100.0%
BUILDING 36	**AA-828 (id=20329)**	**36.6%**
	Electrical	20.7%
	Exterior Enclosure	9.2%
	Furnishings	94.2%
	HVAC	100.0%
	Interior Construction	100.0%
	Interior Finishes	1.0%
	Roofing	100.0%
	Super Structure	100.0%
BUILDING 23	**LIBRARY/CLASSROOM BUILDING (id=20796)**	**32.7%**
	Electrical	62.8%
	Exterior Enclosure	7.9%
	Fire Protection	0.4%
	Furnishings	20.8%
	HVAC	100.0%
	Interior Construction	5.3%
	Interior Finishes	30.3%
	Plumbing	98.9%
	Roofing	100.0%
	Site Mechanical Utilities	100.0%
	Stairs	0.0%
	Super Structure	100.0%
BUILDING 46	**AA-1287 (id=15476)**	**45.6%**
	Electrical	99.0%
	Equipment	0.0%
	Exterior Enclosure	0.0%
	Furnishings	33.2%
	HVAC	97.6%
	Interior Construction	0.0%
	Interior Finishes	35.7%
	Plumbing	22.5%
	Roofing	100.0%
	Site Improvements	100.0%
	Super Structure	100.0%
BUILDING 41	**A-748 (id=18330)**	**47.0%**
	Electrical	100.0%
	Equipment	100.0%
	Exterior Enclosure	0.0%
	Furnishings	79.0%
	Interior Construction	18.6%
	Interior Finishes	13.7%
	Plumbing	100.0%

BUILDING FCI

		10 YR FCI
	ROOSEVELT SH	**48.0%**
	Roofing	100.0%
	Site Improvements	100.0%
BUILDING 9	**GARAGE (id=17742)**	**61.0%**
	Electrical	100.0%
	Interior Construction	0.0%
	Interior Finishes	19.7%
	Roofing	100.0%
	Super Structure	100.0%
BUILDING 26	**AA-1917 (id=22262)**	**56.7%**
	Electrical	60.0%
	Exterior Enclosure	0.0%
	Furnishings	0.0%
	HVAC	100.0%
	Interior Construction	0.0%
	Interior Finishes	78.1%
	Roofing	100.0%
BUILDING 25	**AA-2685 (id=20958)**	**39.6%**
	Electrical	22.7%
	Exterior Enclosure	0.0%
	Furnishings	0.0%
	HVAC	100.0%
	Interior Construction	0.0%
	Interior Finishes	0.0%
	Plumbing	100.0%
	Roofing	100.0%
	Super Structure	100.0%
BUILDING 24	**AA-2684 (id=20955)**	**61.7%**
	Electrical	25.3%
	Exterior Enclosure	0.0%
	Furnishings	65.9%
	HVAC	100.0%
	Interior Construction	0.0%
	Interior Finishes	34.9%
	Plumbing	100.0%
	Roofing	100.0%
	Super Structure	100.0%
BUILDING 30	**AA-2543 (id=21691)**	**28.9%**
	Electrical	22.8%
	Exterior Enclosure	0.0%
	Furnishings	56.1%
	HVAC	100.0%
	Interior Construction	0.0%
	Interior Finishes	0.0%
	Roofing	100.0%
BUILDING 31	**AA-2249 (id=21098)**	**24.6%**

BUILDING FCI

	10 YR FCI
ROOSEVELT SH	**48.0%**
Electrical	45.5%
Exterior Enclosure	0.0%
Furnishings	39.6%
HVAC	100.0%
Interior Construction	0.0%
Interior Finishes	0.0%
Roofing	93.6%
BUILDING 40 **A-690 (id=21682)**	**35.6%**
Electrical	61.7%
Exterior Enclosure	0.0%
Furnishings	94.9%
HVAC	100.0%
Interior Construction	0.0%
Interior Finishes	0.0%
Roofing	100.0%
BUILDING 35 **A-683 (id=21629)**	**67.5%**
Electrical	45.5%
Exterior Enclosure	0.0%
Furnishings	93.5%
HVAC	100.0%
Interior Finishes	71.1%
Roofing	100.0%
Super Structure	100.0%
BUILDING 7 **CLASSROOM BUILDING #2 (id=17199)**	**50.2%**
Electrical	86.6%
Equipment	100.0%
Exterior Enclosure	0.0%
Fire Protection	100.0%
Furnishings	88.7%
HVAC	100.0%
Interior Construction	16.0%
Interior Finishes	36.8%
Plumbing	93.0%
Roofing	100.0%
Stairs	0.0%
Super Structure	100.0%
BUILDING 2 **CAFETERIA BUILDING (id=15158)**	**45.7%**
Electrical	69.9%
Equipment	100.0%
Exterior Enclosure	14.6%
Fire Protection	50.0%
Furnishings	4.2%
HVAC	100.0%
Interior Construction	12.9%
Interior Finishes	32.9%

BUILDING FCI

	10 YR FCI
ROOSEVELT SH	**48.0%**
Plumbing	37.7%
Roofing	100.0%
Stairs	0.0%
Super Structure	100.0%
BUILDING 6 **INDUSTRIAL ARTS (id=24215)**	**54.4%**
Electrical	88.1%
Equipment	0.0%
Exterior Enclosure	6.6%
Fire Protection	100.0%
Furnishings	19.3%
HVAC	98.1%
Interior Construction	3.8%
Interior Finishes	49.8%
Plumbing	100.0%
Roofing	98.4%
Stairs	0.0%
Super Structure	100.0%
BUILDING 43 **PARENT CENTER (id=34750)**	**62.6%**
Electrical	100.0%
Exterior Enclosure	33.9%
Furnishings	20.3%
HVAC	100.0%
Interior Construction	49.6%
Interior Finishes	5.5%
Plumbing	100.0%
Roofing	100.0%
Site Improvements	100.0%
Super Structure	100.0%
BUILDING 5 **ADMINISTRATION AND CLASSROOM BUILDING (id=23689)**	**55.1%**
Electrical	68.1%
Equipment	100.0%
Exterior Enclosure	3.8%
Fire Protection	99.5%
Furnishings	43.6%
HVAC	100.0%
Interior Construction	8.4%
Interior Finishes	64.4%
Plumbing	74.8%
Roofing	100.0%
Stairs	0.0%
Super Structure	9.9%
BUILDING 22* **LUNCH PAVILION (id=36022)**	**56.4%**
Electrical	29.3%
Fire Protection	100.0%
Interior Finishes	0.0%

BUILDING FCI

		10 YR FCI
	ROOSEVELT SH	**48.0%**
	Roofing	100.0%
	Super Structure	100.0%
BUILDING 18	**BUILDING B (id=21628)**	**32.2%**
	Electrical	85.8%
	Exterior Enclosure	0.0%
	Fire Protection	100.0%
	Furnishings	32.9%
	HVAC	100.0%
	Interior Construction	0.0%
	Interior Finishes	0.0%
	Plumbing	100.0%
	Roofing	96.1%
	Stairs	0.0%
BUILDING 4	**MUSIC BUILDING (id=21641)**	**82.6%**
	Electrical	73.1%
	Exterior Enclosure	41.2%
	Furnishings	58.2%
	HVAC	100.0%
	Interior Construction	82.1%
	Interior Finishes	88.9%
	Plumbing	40.5%
	Roofing	100.0%
	Stairs	0.0%
	Super Structure	100.0%
BUILDING 17	**BUILDING A (id=23829)**	**41.9%**
	Electrical	100.0%
	Exterior Enclosure	0.0%
	Fire Protection	100.0%
	Furnishings	83.4%
	HVAC	100.0%
	Interior Construction	0.0%
	Interior Finishes	12.7%
	Plumbing	#DIV/0!
	Roofing	34.1%
BUILDING 20	**UTILITY (id=23892)**	**74.0%**
	Electrical	100.0%
	Exterior Enclosure	0.0%
	Fire Protection	100.0%
	Furnishings	26.8%
	HVAC	100.0%
	Interior Construction	19.6%
	Interior Finishes	86.7%
	Plumbing	100.0%
	Roofing	100.0%
	Site Improvements	73.1%

BUILDING FCI

		10 YR FCI
	ROOSEVELT SH	**48.0%**
	Super Structure	100.0%
BUILDING 13	**GAZEBO (id=18415)**	**0.0%**
	Roofing	0.0%
	Super Structure	0.0%
BUILDING 12	**FIELD EQUIPMENT STORAGE (id=25770)**	**90.2%**
	Roofing	0.0%
	Site Improvements	100.0%
	Super Structure	100.0%
Grand Total		**48.0%**

GROUND FCI

	Row Labels	10 YR FCI
	ROOSEVELT SH	**31.5%**
AREAS NEAR BUILDING 88	**INDUSTRIAL ARTS BLDG (id=931)**	**0.0%**
	Domestic Water Distribution	0.0%
	Energy Supply	0.0%
	Parking Lots	0.0%
	Pedestrian Paving	0.0%
	Site Development	0.0%
	Stair Construction	0.0%
	Water Supply	0.0%
	Sanitary Waste	0.0%
AREAS NEAR BUILDING 36	**SOUTH BUNGALOWS (id=938)**	**13.3%**
	Domestic Water Distribution	100.0%
	Energy Supply	100.0%
	Landscaping	0.0%
	Parking Lots	1.3%
	Sanitary Sewer	100.0%
	Site Development	0.0%
	Water Supply	100.0%
	Storm Sewer	100.0%
AREAS NEAR BUILDING 23	**LIBRARY ZONE (id=939)**	**19.1%**
	Domestic Water Distribution	0.0%
	Energy Supply	0.0%
	Pedestrian Paving	0.0%
	Sanitary Sewer	100.0%
	Site Development	0.0%
	Stair Construction	0.0%
	Sanitary Waste	0.0%
	Storm Sewer	100.0%
AREAS NEAR BUILDING 20	**SERVICE ROAD & UTILITY BLDG (id=928)**	**9.1%**
	Energy Supply	0.0%
	Fuel Distribution	0.0%
	Landscaping	0.0%
	Parking Lots	1.6%
	Sanitary Sewer	0.0%
	Site Development	0.0%
	Water Supply	90.9%
	Storm Sewer	100.0%
AREAS NEAR BUILDING 13	**QUAD AREA (id=934)**	**34.6%**
	Energy Supply	0.0%
	Landscaping	45.5%
	Parking Lots	100.0%
	Pedestrian Paving	0.0%
	Sanitary Sewer	100.0%
	Site Development	0.0%
	Stair Construction	0.0%
	Water Supply	0.0%

GROUND FCI

	Row Labels	10 YR FCI
	ROOSEVELT SH	**31.5%**
	Sanitary Waste	0.0%
	Storm Sewer	100.0%
	Fixed Furnishings	0.0%
UNKNOWN	**LAWN AREA (id=932)**	**22.2%**
	Domestic Water Distribution	0.0%
	Energy Supply	0.0%
	Landscaping	56.0%
	Pedestrian Paving	0.0%
	Site Development	100.0%
	Stair Construction	0.0%
AREAS NEAR BUILDING 18	**FEDERAL BLDGS (id=936)**	**10.6%**
	Domestic Water Distribution	8.5%
	Energy Supply	100.0%
	Fire Protection Specialties	100.0%
	Landscaping	55.5%
	Parking Lots	0.0%
	Pedestrian Paving	0.0%
	Site Development	0.0%
	Stair Construction	0.0%
	Water Supply	0.0%
	SECONDARY PARKING (id=930)	**2.4%**
	Parking Lots	2.4%
	Sanitary Sewer	100.0%
	Site Development	0.0%
AREAS NORTH OF BUILDING 23 AND WEST OF BUILDING 19	**BASKETBALL COURTS (id=937)**	**92.0%**
	Other Equipment	100.0%
	Sanitary Sewer	100.0%
	Site Development	90.9%
	Storm Sewer	100.0%
	LAWN & WALKWAYS (id=935)	**9.2%**
	Domestic Water Distribution	0.0%
	Landscaping	16.1%
	Parking Lots	100.0%
	Site Development	0.0%
	Stair Construction	0.0%
	CAFETERIA & KINDERGARTEN (id=933)	**0.0%**
AREAS NORTH OF BUILDING 23 AND WEST OF BUILDING 41	Domestic Water Distribution	0.0%
	Energy Supply	0.0%
	Other Equipment	0.0%
	Site Development	0.0%
	Stair Construction	0.0%
	Water Supply	0.0%
	Sanitary Waste	0.0%
	Cooling Distribution	#DIV/0!
ASSUMED STADIUM	**FOOTBALL FIELD & TENNIS COURTS (id=925)**	**74.8%**

GROUND FCI

Row Labels	10 YR FCI
ROOSEVELT SH	**31.5%**
Domestic Water Distribution	0.0%
Energy Supply	0.0%
Sanitary Sewer	0.0%
Site Development	100.0%
Sanitary Waste	0.0%
BOYLE HEIGHTS CONTINUATION (id=927)	**5.2%**
Domestic Water Distribution	0.0%
Energy Supply	0.0%
Landscaping	86.1%
Site Development	0.0%
Stair Construction	0.0%
Sanitary Waste	0.0%
Fixed Furnishings	0.0%
GRASS FIELD (id=929)	**100.0%**
Sanitary Sewer	100.0%
Site Development	100.0%
MAIN ENTRANCE-ROOSEVELT SH (id=926)	**0.7%**
Domestic Water Distribution	0.0%
Fire Protection Specialties	0.0%
Landscaping	0.0%
Parking Lots	0.0%
Pedestrian Paving	0.0%
Sanitary Sewer	0.0%
Site Development	0.0%
Stair Construction	0.0%
Water Supply	0.0%
Storm Sewer	100.0%
Grand Total	**31.5%**

AREAS NEAR BUILDING (44)

UNKNOWN

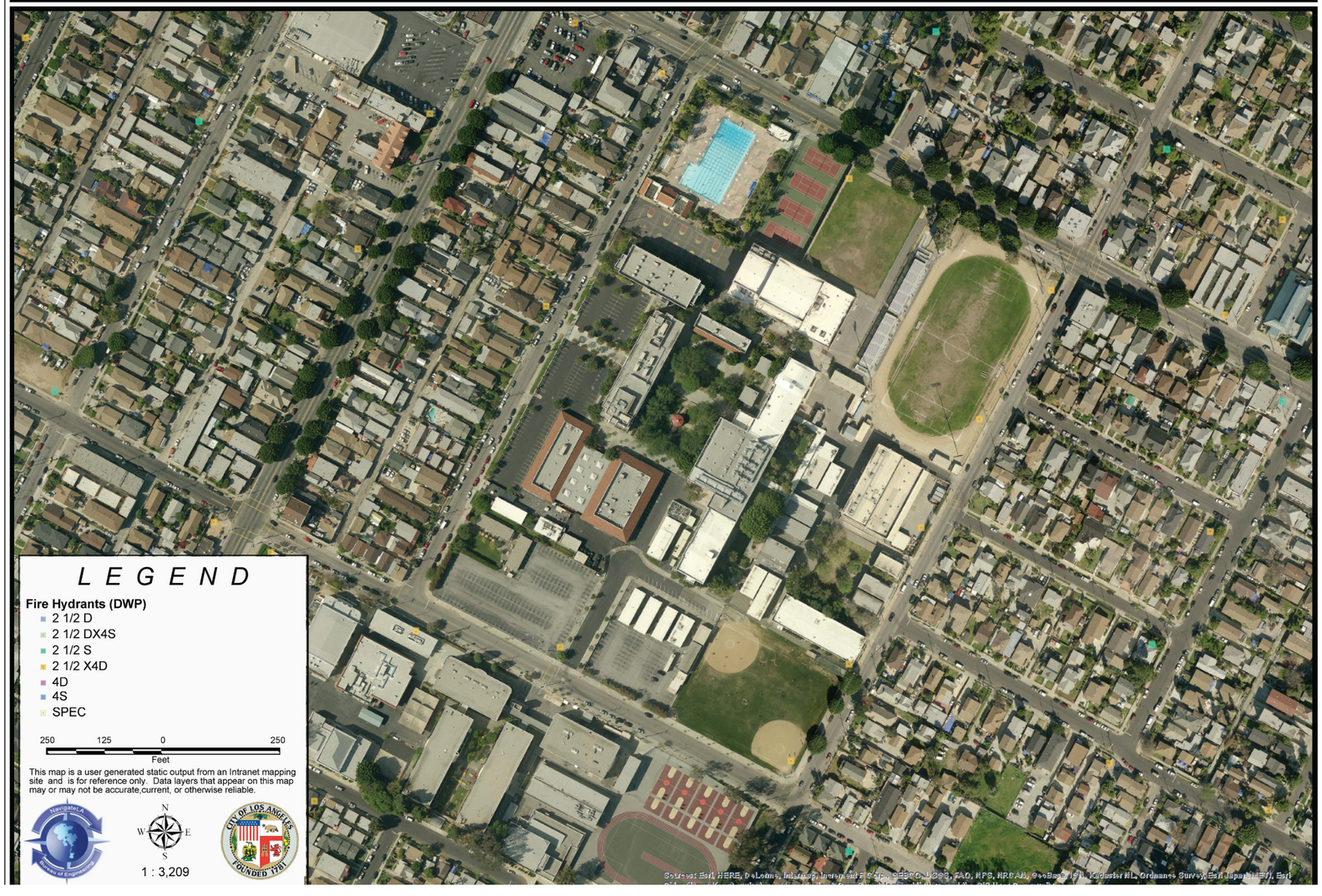
AREAS WEST OF BUILDING (5)

AB 300 SEISMIC EVALUATION

BUILDING (6)
BUILDING (19)
BUILDING (21)
BUILDING (1)

BLDGNAME	CONSTRUCTION_TYPE	YEARBUILT	CAFM_BLDG_ID
INDUSTRIAL ARTS BLDG	MASONRY OR CONCRETE-WOOD FLR,W	1968	24215
PHYSICAL EDUCATION BLDG	MASONRY OR CONCRETE-WOOD FLR,W	1968	20906
AUTO SERVICE SHED	ALL METAL	1975	15815
AUDITORIUM & CLASSROOM BLDG	MASONRY OR CONCRETE-WOOD FLR,W	1922	21585

NavigateLA Map



6.0 APPENDICES

6.1 LIST OF PARTICIPANTS

LAUSD FSD Asset Management
Julia Hawkinson
Scott Singletary
Russell McCarley
Eric Amber
Jerry Flores
Alfredo Montes

Roosevelt High School
Bruce Bivins
Crystal Powell

Roosevelt Math Science Technology Center
Jose Espinoza
Daisy Helguera

DLR Group
Brett A. Hobza
Ben Levin
Michael Ellars
Ruben Markarian
Amaranta Campos
Pankil Dave

6.2 REFERENCE DOCUMENTS (MASTER PLANNING)

Master Plan Goals

The goals for the Conceptual Master Plan for the Lincoln High School campus, as developed in the Conceptual Master Planning Process, are the following:

- Provide the correct number and type of instructional spaces for the campus in permanent buildings.
- Provide the basic facilities needed for a maximum population of approximately 4,000 students.
- Remove portables and other unnecessary facilities to streamline academic buildings.
- Construct new Administration/Library/Classroom Building, new Multi-Purpose Building and existing Administrative Building addition.
- Upgrade existing Auditorium / Classroom, Administrative, Library / Classroom, East Classroom and the Physical Education Buildings.
- Complete new track and field, associated structures and hard courts for the campus.
- Build new parking structure and remove existing surface parking lots.
- Create meaningful, un-programmed open space between buildings to reinforce a clear, safe and secure learning environment.
- Provide safe, on-campus student drop-off/ pick-up opportunities.

The following pages document: the master plan and the process through which it was developed; the projects needed to implement the master plan; and the estimated cost of these projects.

Project Team:

LAUSD Project Manager

Scott Singletary
Scott.singletary@lausd.net

Master Plan Consultant

Johnson Favaro

Jim Favaro, AIA, Principal In Charge
jfavaro@johnsonfavaro.com

Kathy Williams, Project Manager
kwilliams@johnsonfavaro.com

Process

Roosevelt High School, included as part of Group 2 of the Measure Q master planning effort, was studied within the Roosevelt High School Complex. The master plan process is documented through the following categories: Campus Pre-Planning Survey, Site Analysis, Pre Charrette, Charrette and Post Charrette as described in the following paragraphs.

Campus Pre-Planning Survey

The Campus Pre-Planning Survey was completed in December of 2010 by Johnson Favaro.
The survey found that the campus currently houses approximately 3,350 (2010-2011) students with the enrollment expected to decrease to approximately 2,700 in the year 2013. The 2-semester planning capacity is 3,600 students. The planning capacity for the campus is 4,000 students. Roosevelt High School shares the campus with Boyle Heights Continuation High School and the Roosevelt Infant/Early Education Center. Campus buildings, parking areas and open spaces are awkwardly scattered across campus with no formal street frontage at main buildings. The campus contains one high quality building situated in the middle of campus which bisects the school community. Outdoor athletics are undersized and non regulation. The cafeteria sits in an awkward location that disrupts the cohesion of the academic core of campus. The visual survey confirmed several deficiencies in core facilities.

- The school is undersized in its outdoor playground and fields.
- The Library is less than half the standard LAUSD size and is in need of modernization and expansion.
- The school enjoys an Auditorium in the center of campus but lacks a multi-purpose room.
- Food Services is half the size of the LAUSD standard and awkwardly located.
- The Gymnasium is greater than the LAUSD standard and is in need of seismic upgrades and repairs.
- Staff parking is less than the LAUSD standard, in need of consolidation and expansion.
- While Administration is adequately sized in comparison to the LAUSD standard, it requires better placement and street frontage.

The school is situated on a sloping 21.4 acre campus, adjacent to the Roosevelt pool. By taking advantage of the site's elevation, the potential for a below grade parking structure exists to free up land area for the expansion of outdoor physical education and on campus student drop-off and pick-up opportunities. The building of new permanent facilities will create greater un-programmed open space which in turn will help create a clear, safe and cohesive campus.

Site Analysis

The Site Analysis Phase was completed in December of 2010. Johnson Favaro met with Campus Administration, the Maintenance Staff and the Complex Project Manager to report the findings of the Campus Pre-Planning Survey and discuss priorities for the campus. These Campus Users had specific input for campus improvements.

- The football field is undersized and the end zones extend into the track. The track is impeded by the visiting team bleachers which sit on top. The baseball/softball field is undersized and inadequate.
- Lunchtime queuing at the cafeteria creates circulation issues.
- Storage containers and bungalows displace small learning community open space.
- Several non DSA-approved bungalows are at different levels of disrepair.
- Low hanging mechanical systems in the Auditorium/ Classroom Building have been left exposed and are susceptible to easy reach and damage.
- Accessibility issues abound across campus.
- Due to a shortage of science classrooms, Small Learning Communities (SLCs) are required to share outside of their school zones.
- Fire alarm panels are scattered across campus, rather than centralized, creating maintenance and control issues.
- The auditorium stage flooring is in disrepair, lighting is inadequate and the seating capacity is less than the student capacity.
- The Academy of Environmental and Social Policy is located off site requiring students to be bussed off campus each day.
- Parking does not meet current needs.
- Lockers are in need of an upgrade and expansion.
- Surveillance of students during the school day is an issue.

Roosevelt High School has been master planned for:

Master Planning Date:	3rd Quarter 2011
Site Capacity:	4,000 Students
Current Enrollment (2011-2012):	3,350 Students
Planning, 2-Semester Capacity:	3,600 Students

The Roosevelt High School site includes 10 Schools:

Roosevelt High School:	8829	Roosevelt MED	7748
Roosevelt Infant/Early Education Center:	9556	Roosevelt HARTS:	7746
Boyle Heights Continuation High School:	8831	Roosevelt CNMT:	7749
Roosevelt MATH/SCI/TECH:	7751	Roosevelt LAW/GOV:	7745
Roosevelt ESP:	7750	Roosevelt STEM:	7747

Master Planning Goal:

Conceptual Master Plan

The goals for the Conceptual Master Plan for the campus, as developed in the Conceptual Master Planning Process, are the following:

- Provide the correct number and type of instructional spaces for the campus in permanent buildings.
- Provide the basic facilities needed for a maximum population of approximately 4,000 students.
- Build new Administration/ Library/ Classroom Building.
- Build new Multi-Purpose Building and E. 6th Street parking structure.
- Renovate existing Auditorium / Classroom Building, Library / Classroom Building, East Classroom Building, PE Building and Auditorium / Classroom Building, which includes an addition.
- New Site Work to include 4th Street, 6th Street and Mathews Street auto court / drop-off / pick-up, south / east / central quadrangles, track & field and practice fields.
- Create meaningful, un-programmed open space between buildings to reinforce a clear, safe and secure learning environment.
- Provide safe, on-campus student drop-off/ pick-up opportunities.
- **Potential On-Site Sustainable Systems.** All of the newly proposed campus buildings and open space sites provide prime opportunities to build LEED certified projects, incorporating energy efficient and low water use systems. The new Administration/Classroom and Multi-Purpose Buildings have large rooftop areas that are able to accommodate photovoltaic panels.

The master plan was refined into 10 potential projects which cover new and existing buildings, as well as site improvements. The master plan was reviewed with the School Administration and the Local District in July of 2011.

PROJECTS

GROUP 1

1 Remove south / southwest portables and Hollenbeck Middle School parking lot. Build Administration/ Library/ Classroom Building and central quadrangle.

2 Build E. 6th Street Parking Structure, auto court, drop-off / pick-up, practice field and open space.

3 Build new Multi-Purpose Building. Remove existing cafeteria.

GROUP 2

4 Renovate Auditorium/ Classroom Building and perform seismic evaluation.

5 Remove Industrial Arts Building, Federal and Instrumental Music Buildings, central portables, and existing track and field. Complete new track and field, associated structures, hard courts, practice field and E. 4th Street drop-off / pick-up.

GROUP 3

6 Remove West Classroom Building and Mathews Street parking lots. Complete Administrative Building addition and renovation.

7 Renovate Library/ Classroom Building.

8 Complete Mathews Street drop-off, pick-up, auto court (55 spaces) and open space.

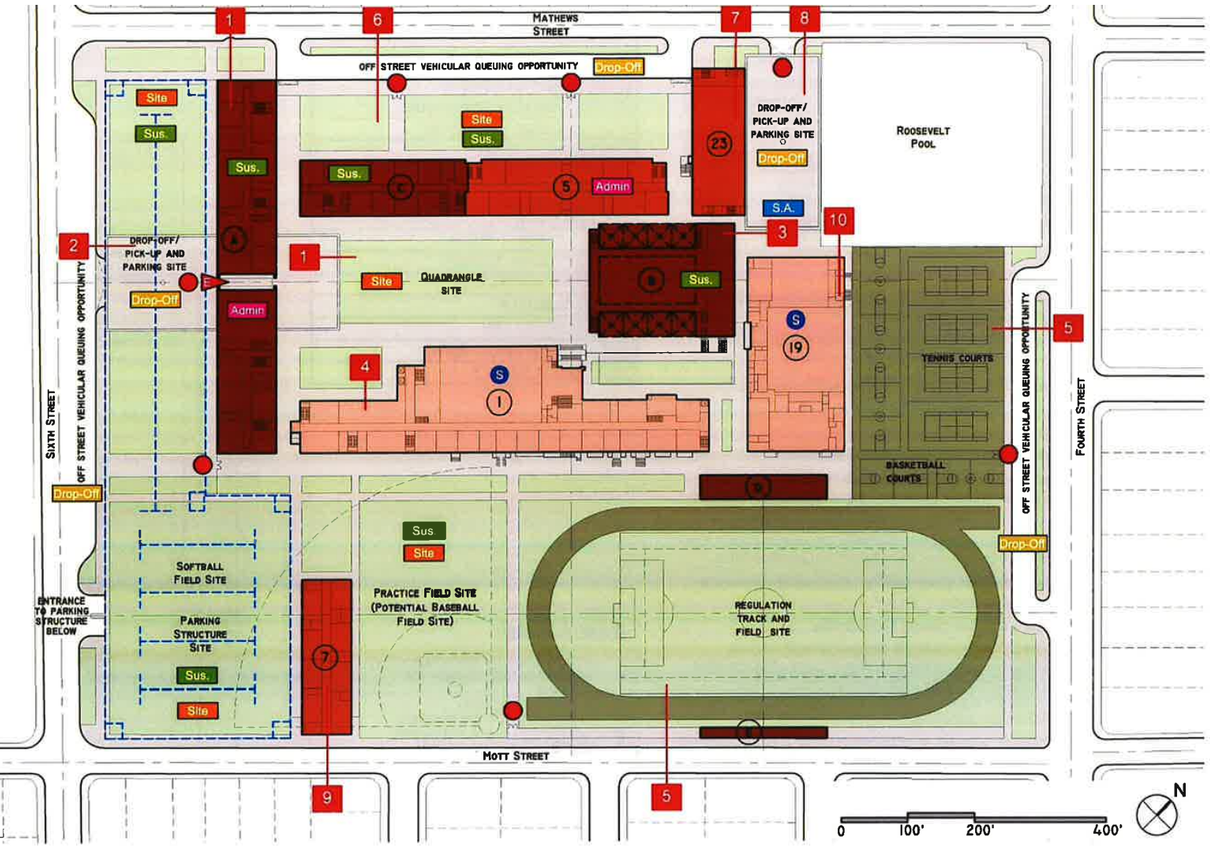
9 Renovate East Classroom Building.

10 Renovate existing Physical Education Building and perform seismic evaluation.

Conceptual Master Plan Legend	
Building Improvements	
	Demolition
	Temporary Building
	Minimum Modernization
	Medium Modernization
	Extensive Modernization
	New Construction
Site Improvements	
	Asphalt
	Concrete
	Grass
	Parking
	Play Area
	Trees
Key Locations	
E	Main Entrance
Drop-Off	Drop-Off Zone
Admin	Main Administration
S	Seismic Upgrades Required
	Security
Sus.	Sustainability
S.A.	Service Access
Site	Site Buffering / Greening
H	Historic Building
Int.	Swing Space / Interim Housing

Building Legend

1	AUDITORIUM & CLASSROOM BUILDING
5	ADMINISTRATIVE / CLASSROOM BUILDING
7	CLASSROOM BUILDING
19	PHYSICAL EDUCATION BUILDING
23	LIBRARY & CLASSROOM BUILDING
A	ADMINISTRATIVE / LIBRARY / CLASSROOM BUILDING
B	MULTI-PURPOSE BUILDING
C	CLASSROOM ADDITION
D	HOME BLEACHERS
E	AWAY BLEACHERS



Roosevelt High School Master Plan Data Chart

THIS SITE HAS BEEN MASTER PLANNED FOR: Roosevelt High School 8829				Additional Schools on Site:	Yes
First Quarter 2011:	Students:	School Type:		Boyle Heights Continuation HS: 8831	Roosevelt MED: 7748
Site Capacity:	4,000 Students	Secondary School		Roosevelt Infant/Early Ed. Center: 9556	Roosevelt HARTS: 7746
Current Enrollment:	3,350 Students			Roosevelt Math/Sci/Tech:7751	Roosevelt CNMT: 7749
Planning, 2-Semester Capacity:	3,600 Students			Roosevelt ESP:7750	Roosevelt: LAW/GOV: 7745
					Roosevelt: STEM: 7747
Total Standard Size Classrooms in MP:	176 Standard Classrooms		Total All Classrooms in MP: 182 Classrooms		
Core Facilities	Existing Square Footage	Standard Square Footage	Master Planned Square Footage**	Project Type	Occurs in Project Group
Food Service	3,887	6,600	8,800	New Building	Gr 1, Project 3
Multipurpose Building / Indoor Dining	6,184	10,800	12,000	New Building	Gr 1, Project 3
Lunch Shelter	8,495	10,800	8,000	New Building	Gr 1, Project 3
Auditorium	15,507	18,400	16,000	Modernization	Gr 2, Project 4
Library	5,819	12,000	15,000	New Building	Gr 1, Project 1
School Wide Administration	15,688	8,700	15,400	New Building	Gr 1, Project 1
Gymnasium	36,410	31,600	14,500	Modernization	Gr 3, Project 10
Playground	7.1 Acres	9 Acres	10.98 Acres	Site Improvements	Gr 1, Pr 2 & Gr 2,Pr 5 & Gr 3,Pr6 & Gr3,Pr7
Parking	268 Spaces	333 Spaces	455 Spaces	New Building	Gr 1, Project 2
Academic	Existing Classrooms	Standard Required Classrooms	Master Planned Classrooms**	Project Type	Occurs in Project Group
[illegible]					
General Classrooms	103	130	123	Modernization / New Building	Gr1,Pr1-2&Gr2,Pr4&Gr3,Pr6-7&Gr3,Pr9-10
Specialty Classrooms	19	20	29	Modernization / New Building	Gr1,Pr1-2&Gr2,Pr4&Gr3,Pr6-7&Gr3,Pr9-10
Science Classrooms	16	26	24	Modernization / New Building	Gr1,Pr1-2&Gr2,Pr4&Gr3,Pr6-7&Gr3,Pr9-10
Total	138	176	176		
[illegible]					
General Classrooms	20	No Requirement	6	Modernization	Gr 2, Pr 4 & Gr 3, Pr 7 & Gr 3, Pr 9-10
Specialty Classrooms	5	No Requirement	0	Modernization/ Removal	Gr 2, Pr 4 & Gr 3, Pr 7 & Gr 3, Pr 9-10
Science Classrooms	5	No Requirement	0	Modernization/Removal	Gr 2, Pr 4 & Gr 3, Pr 7 & Gr 3, Pr 9-10
Total	30	N/A	6		
Site	Existing Acres	Standard Acres	Master Planned Acres	Project Type	Occurs in Project Group
General Site	21.38 Acres	00 Acres	22.39 Acres	Open Space & Expanded Outdoor P.E.	Groups 1, 2 and 3

C. P. O'HALLORAN ASSOCIATES INC.
CONSTRUCTION COST MANAGEMENT

CONCEPT COST MODEL CONSTRUCTION ESTIMATE

for

Roosevelt High School
Los Angeles Unified School District

Prepared for :

DLR Group
Architecture, Engineering, Planning, Interiors
3130 Wilshire Boulevard, 6th Floor
Santa Monica, CA 90403

November 2, 2015

 # 15-2365

30423 CANWOOD STREET, SUITE 133 ·AGOURA HILLS, CA 91301-4315 ·T 805-494-3703 ·F 805-497-7721 ·WWW.CPOHALLORAN.COM

Basis of Estimate

The estimated construction cost is based on concept floor plans and building space program dated October 2015. Unit costs include average industry labor rates with competitive bid conditions. Competitive bid conditions generally occur when bids are received from a minimum of four general contractors and three subcontractors for each trade. Assumptions included for materials and specifications should be confirmed prior to completion of bid documents. The estimate includes general contractor general conditions, supervision, bonds, insurances, overhead, profit and estimating contingency. Project development soft costs, cost escalation, construction contingency, owner furnished equipment and furnishings are not included. General contractor markups and estimate contingency for site estimate are excluded at the request of LAUSD.

The estimated construction cost represents our best judgment as a professional consultant familiar with the construction industry. We have no control over the cost or supply of labor, materials and equipment, a contractor's methods of determining bid prices and market conditions. We cannot and do not warranty or represent that bids or negotiated prices will not vary from the estimated construction cost.

Construction Estimate Exclusions

Professional design, testing, inspection and management fees.
Fire and all risk insurance.
Legal and financing costs.
Building permits and fees.
Construction, project or staging contingencies.
Furnishings, loose equipment and modular workstations.
Sports equipment, scoreboards and broadcast systems.
Audio visual equipment.
Off-site improvements.
Unforeseen subsurface soils conditions and special foundations.
Utility metering.
Photovoltaic panels.
Communications wiring and equipment.
Independent commissioning.
Temporary buildings.
General contractor markups and estimate contingency for site.
Cost escalation to mid-point of construction, 5% per year recommended.

CONCEPTUAL COST ESTIMATE

Project Name: Roosevelt High School LAUSD — **Project No.** 10366732

Architect: DLR Group — **PM/DM/OAR:**

Project Description: High School Modernization — **Date:** 2-Nov-15

	Item	Area	Unit	Subtotal	Cost/SF	Total
A	**NEW CONSTRUCTION (COST ESCALATION & CONSTRUCTION CONTINGENCY EXCLUDED)**					$58,788,254
	CLASSROOM BUILDING	85,066	SF	$29,773,100	$350.00	
	GYM	40,189	SF	$15,271,820	$380.00	
	AUDITORIUM / PERFORMING ARTS	26,306	SF	$11,548,334	$439.00	
	MAINTENANCE & OPERATIONS SUITE	3,000	SF	$1,317,000	$439.00	
	CLINIC	2,000	SF	$878,000	$439.00	
B	**BUILDING RENOVATION**					$0
C	**SITE IMPROVEMENTS (DIRECT COSTS GC MARKUPS, CONTINGENCIES & ESCALATION EXCLUDED)**					
C1	DEMOLITION / EARTHWORK	598,750	SF	$2,324,809	$3.88	$2,324,809
C2	SITE STRUCTURES					$1,319,968
C2.1	New Lunch Shelter	9,000	SF	$1,215,000	$135.00	
C2.2	New Trash Enclosure			$60,007		
C2.3	New Campus Entry			$44,961		
C3	SITE PAVING / PARKING / LANDSCAPING					$5,600,207
C3.1	Path of Travel ADA Corrections	45,000	SF	$314,220	$6.98	
C3.2	Asphalt Paving, Patch and Repair	65,000	SF	$629,561	$9.69	
C3.3	Asphalt Paving , New	70,000	SF	$840,000	$12.00	
C3.4	Concrete Paving	33,750	SF	$454,496	$13.47	
C3.5	Concrete Curbs	4,750	SF	$104,241	$21.95	
C3.6	New Quad	35,000	SF	$523,699	$14.96	
C3.7	New Entry Plaza and Main Entry	23,000	SF	$344,145	$14.96	
C3.8	New Drop Off Areas	2,000	SF	$1,522,000	$761.00	
C3.9	Directional Signage, ADA Compliance			$59,851		
C3.10	Landscaping and Irrigation	45,000	SF	$807,993	$17.96	
C4	ATHLETIC FIELDS					$1,855,391
C4.1	New Baseball Field	100,000	SF	$798,018	$7.98	
C4.2	New Softball Field	50,000	SF	$399,009	$7.98	
C4.3	New Regulation Football Field and Track - Add Alternate					
C4.4	Tennis and Basket Ball Courts	60,000	SF	$658,365	$10.97	
C5	MISCELLANOUS SITE					$662,966
C5.1	Site Lighting	598,750	SF	$298,633	$0.50	
C5.2	Fences and Gates	598,750	SF	$107,508	$0.18	
C5.3	Trash Receptacles	598,750	SF	$29,863	$0.05	
C5.4	Benches	598,750	SF	$131,399	$0.22	
C5.5	Signage	598,750	SF	$95,563	$0.16	

CONCEPTUAL COST ESTIMATE

Project Name: Roosevelt High School LAUSD — **Project No.** 10366732

Architect: DLR Group — **PM/DM/OAR:**

Project Description: High School Modernization — **Date:** 2-Nov-15

	Item	Area	Unit	Subtotal	Cost/SF	Total
C	**SITE IMPROVEMENTS (DIRECT COSTS GC MARKUPS, CONTINGENCIES & ESCALATION EXCLUDED)**					
C6	UTILITIES (NEW & MODIFICATIONS)					$2,018,761
C6.1	Domestic and Fire Water	598,750	SF	$358,360	$0.60	
C6.2	Sewer	598,750	SF	$298,633	$0.50	
C6.3	Storm Drainage	598,750	SF	$328,497	$0.55	
C6.4	Gas	598,750	SF	$47,781	$0.08	
C6.5	Electrical Power	598,750	SF	$447,950	$0.75	
C6.6	Electrical Data, Communications, Low Voltage	598,750	SF	$537,540	$0.90	
	TOTAL					$72,570,356
	Alternate Additional Direct Construction Cost					
	New Regulation Football Field and Track	150,000	SF	$2,244,797	$14.97	

Meeting Minutes

Meeting Date	05/28/15
To	Russell McCarley
From	Ben Levin
Location	Roosevelt High School – Main Office
Project	Roosevelt High School - Modernization
Project No.	75-15239-00

Attendees

Julia Hawkinson/ LAUSD	Brett Hobza / DLR
Russell McCarley/ LAUSD	Ben Levin/ DLR
Scott Singletary/ LAUSD	Michael Ellars / DLR
Jerry Flores / LAUSD	Ruben Markarian/ DLR
Alfredo Montes/ LAUSD	
Bruce Bevins / RHS	
Crystal Powell/ RHS	
Jose Espinoza / MSTMA	
Daisy Helguera / MSTMA	

Purpose: User Group meeting

DLR Group
Architecture Engineering Planning Interiors

3130 Wilshire Boulevard
6th Floor
Santa Monica, CA 90403

o: 310/828-0040
f: 310/453-9432

Minutes
Action Items

Action

1. Master Plan:
   - DLR Group discussed the master plan, which was done previously by another firm. LAUSD spoke of the previous history in relations to the school and master plan. DLR Group stated that there will be options for master plan layouts.

2. Findings from Site Visits and document review:
   - DLR Group stated that based on site analysis thus far, there are 152 classrooms. 45 of these classrooms are below 800 sq. ft. 33 out of 45 are in Building 'R' (#1).
   - The District is still waiting on results from the historic assessment.
   - DLR Group stated that potentially the most significant cost impact will be recommendations from the seismic assessment.

3. Programming - Currently there are 5 separate schools operating on campus:
   - PLAS Roosevelt High School
   - Math, Science, and Technology Magnet Academy (MSTMA) at Roosevelt High School (since 2010)
   - Roosevelt STEM Education Pilot Program (new fall 2015)
   - Boyle Heights Continuing Education High School
   - Roosevelt Infant/Early Education Center

4. Math, Science, and Technology Magnet Academy at RHS
   - 23 classrooms.
     - Some are used for other functions (including B15).
     - Mostly located in 'L' building (#23) and some in bungalows (#40, #42).
     - Currently there are three science labs with no hoods. At 515 capacity there will be two biology classes, two chemistry (will need hoods) and one physics
     - Most Magnet functions are separate from RHS except the library (third floor of #23) is shared.
   - There is a preference that the Magnet is in a contiguous building.
   - The schools can have a shared entry
   - Attendance for the Magnet and RHS should be separate but administration can share some functions
   - Currently the Magnet has one principal, one coordinator, one clerk and one conference room.
   - Need Computer Labs with printers. Lab mostly for research and collaboration with no instructor. It should serve as a resource for students.
   - Currently there is a 1 to 1 chrome books program for the students
   - 2 Aspects of Learning:
     - 'Research out in community' where the goal is to impact surroundings and service learning projects (e.g. Decriminalization of youth, which include inmate interviews).
     - 'Maker space / Robotics', which should have 3D printers.
   - Service Learning Projects, which are a big aspect of the curriculum. These functions require flexible labs, GIS mapping software and large 30" screens. Printing will also be taking place.
   - Magnet will be capped at 515 students with a waiting list. Currently there are 440 students and 480 projected for next year.
   - Passport students to RHS for athletics and arts.

5. Issues for both RHS and Magnet Schools
   - Connectivity: Classrooms should be flexible to different modality of teaching. Culture building is important.
   - Flexibility for technical and physical reconfigurations.
     - Easily convertible buildings / spaces are preferred vs. "make it work" / make shift spaces.
     - Distributed vs. centralized science.
   - Need to look 15-20 years from now and plan for future technology.
   - Separation vs. connection:
     - Separate PA and bell schedule for both schools.
     - Security should be connected
     - Don't want fenced separation.

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Santa Monica, California
tel 310/828-0040 fax 310/453-9432

- Currently RHS has 1,600 to 1,700 students. The new STEM program (pilot) will have approximately 200 students next year with up to 400 students in three years, and the Magnet is currently about 480 students; it is anticipated that the total student population will be approximately 2,500.
- Vision for Administration Building (#5):
  - Revamp to become more user friendly, parent and community friendly.
  - Provide a discipline area for detention.
  - Parent center to be close to front office. Attendance / main office. Health center to be shared with Magnet.
- Shared Science classrooms would have benefits for all programs.
- Long Term Vision:
  - Departmentally driven (each department is about 400 to 600 students with 12 to 16 teachers. Usually English is largest department).
  - Non-competitive environment. (Magnet principal believes there are non-competitive programs.) Share best practices, collaboration space, professional development.
  - DLR Group spoke of flexible spaces encouraging "cross pollination" that open up to each other where students can still be supervised.
  - "Collaboration Space" – a working lab for teachers where they come together.
- Currently there are three Pathways and a ninth grade house (created by scheduling): STEM, Health & Medical, and Law & Public Service.
- California state support
- 3 year CTE course (English, Info Tech., Health/Medical field, EMT, law/public safety)
- College professors as visiting teachers
- Lecture format space like a college (college ready, all staff space)
- Create a space to bring all students together
- Arts:
  - Theater production, ceramics program, drawing and painting, digital imagery, music (orchestra, mariachi choir, marching band).
  - Note: About 10% percent of students practice music. Mariachi at RHS is a very strong program.
- Operational challenges:
  - Too much patch work on nearly every system.
  - Safety should be the highest priority, but the PAs don't work everywhere on campus.
- Day Care is part of RHS through Infant/Early Education Center.
- 'Community School': community center, heart of Boyle Heights. Serves community from birth to parenting. Pre-School to Adult School. Wellness Center.

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- Partnership with Hollenbeck Junior High School is desired:
  - Currently includes robotics and music but would like to see more connection.
  - Ideally 6th to 12th grade or "6-13" complex.
  - Only about half of Hollenbeck students go to RHS; other half go to other high schools, including Magnet.
- Buses at RHS: (12) buses, out of which (3) are for Magnet.
- There is not enough parking at the facilities. Circulation and traffic are an issue.

6. Special Programs on Campus:
   - Infant/Early Education Center: open to community students with kids (not just RHS). Separate entity. Need separate entry. Ideally no unsecured or unmonitored access to RHS.
   - Continuation School: Flexible, cross pollination of students with RHS.
   - Adult Education: not much funding so program shrunk. 9 classrooms, which are separate from RHS in relocatables (currently using the southern cluster). Office is in Administration building.
   - Wellness Center: newly renovated in 'R' building (#1). Planned Parenthood, student health and human services. Building is in wrong location on campus – not accessed from public way, users must go through campus to access. There are privacy and HIPPA issues.

cc

DLR Group
Santa Monica, California
tel 310/828-0040 fax 310/453-9432

Meeting Minutes

DLR Group
Architecture Engineering Planning Interiors

3130 Wilshire Boulevard
6th Floor
Santa Monica, CA 90403

o: 310/828-0040
f: 310/453-9432

Meeting Date	July, 10, 2015
To	LAUSD
From	DLR Group
Location	333 S. Beaudry, Floor 23 Room 23-161 Los Angeles, CA 90017 11:00 AM – 12:30 PM
Project	Roosevelt High School - Modernization
Project No.	75-15239-00
Attendees	DLR Group: Ben Levin Michael Ellars Amaranta Campos Pankil Dave LAUSD: Scott Singletary (AM), Julia Hawkinson (AM), Russell McCarley (DM), Eric Amber (DM)
Purpose	Review of Task 1 – Draft & Define Program
1.	To review DLR Group Task 1 – Draft Preliminary Site Analysis and Program Development Phase for the Roosevelt High School Comprehensive Modernization Project which includes the following: • Evaluation and analysis of the existing conditions. • Comparison of the current educational program versus proposed program of Roosevelt High School. • Findings from the campus survey & existing condition of the campus.
2.	As well to define the record programming meeting with district staff required to understand current program needs and requirements.

Minutes

1.0. EXECUTIVE SUMMARY

	Action
• Four Pathways identified: ACE, STEaM, Health & Medical Sciences and Law & Public Service.	DLR Group requires further information regarding the ACE pathway.
• LAUSD requested a portrait 8 ½ x 11 format with folded inserts of larger exhibits as a landscape 11x17 format when including site plans and diagrams.	
• DLR Group acknowledges Roosevelt High School's PILOT Program to start in Fall 2015, as a separate program from the MAGNET Roosevelt Math/Science Technology Academy.	DLR Group needs clarification from Roosevelt High School.
• LAUSD instructed DLR Group to utilize Johnson Favaro Master Planning as a reference document and place it as an Exhibit in Section 5.0.	
• DLR Group to expand section 1.3 School's Educational Vision & section1.4 Modernization Goals by listing priority items. These items will be expanded as the report moves further into completion.	
• DLR Group is required to add (3) Structural tiers which include the Gym, Auditorium & Industrial Arts Buildings.	

2.0. EXISTING SITE SURVEY & INVESTIGATION

• Section 2.1. HISTORIC AND SIGNIFICANT FEATURES: Change "historic" to "character" when referring about school's significant features.	
• Section 2.2. SITE USE: DLR Group & team require more information from the Magnet Administration regarding the use of portables.	DLR Group & team to schedule a site visit with Roosevelt High School.
• Section 2.3. BUILDING/ROOM USE: Building room use diagrams to show a clear separation of room interior walls. Calculations and legends on diagrams must be shown on each page or spread.	
• DLR Group to show more detail on site plans & diagrams (for example include classroom calculations, building index, and legends) as well to be consistent throughout all diagrams.	
• DLR Group to identify significantly substandard classrooms <760 sq ft. vs substandard classrooms between 760-800 sq ft.	
• Section 2.4. SITE CONDITION ANALYSIS: Site Accessibility Diagram to show other P.O.T to be labeled as "Pedestrian Route" in red. Vehicular Route should be labeled in a different color than red.	
• DLR Group to identify core facilities per its use by color code. The core facilities of the campus need to be indicated with its current and past program with an asterisk if required. Example, Home Economics and Physical Education.	
• Site Utilities diagrams to have neutral colors for building numbers and index, building outlines & site outlines.	
• Section 2.5 BUILDING CONDITION ANALYSIS:	

- DLR Group & team to provide building condition analysis findings for each individual building. Analysis of each building should mention its deficiencies in order to determine the condition and systems of each building for the purpose of justification.

- FCI report to be an Exhibit in section 5.0.
- LAUSD requested that photographs & figures to be keyed into the narratives as well into the diagrams.
- Section 3.0 PROGRAM & EDUCATIONAL SPECIFICATION:
- DLR Group to provide LAUSD with a completed space program spreadsheet in order to identify programmatic gaps.
- DLR Group requested to schedule an A/E meeting with M&O for Q&A.
- LAUSD to coordinate and schedule a follow-up meeting to review Task-1 Draft to be scheduled.

END OF MEETING MINUTES

cc File

DLR Group
Santa Monica, California
tel 310/828-0040 fax 310/453-9432

ROOSEVELT HIGH SCHOOL

456 S. MATHEWS STREET, LOS ANGELES CA 90033

LOS ANGELES UNIFIED SCHOOL DISTRICT



DLR Group

BUILDING 1 SEISMIC ANALYSIS PROJECT

10.19.2017

700 S. Flower Street
Twenty Second Floor
Los Angeles, CA 90017

PROJECT NUMBER
75-15239-10

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PROJECT DIRECTORY

CLIENT

LAUSD FSD Asset Management
333 South Beaudry Avenue
23rd Floor, Room 23-155-02
Los Angeles, CA 90017
T (213) 241-4130

Alix O'Brien
Asset Development Director

Julia Hawkinson
Sr. Facilities Development Manager

Tae Kim
Facilities Development Manager

Russell McCarley
Senior Design Manager

ARCHITECTURAL

DLR Group
700 South Flower Street
Twenty Second Floor
Los Angeles, CA 90017
T (213) 800-9400

Brett A. Hobza
Principal In Charge

Robi Ann Sales
Project Manager

STRUCTURAL

Saiful Bouquet
155 N. Lake Ave
Pasadena, CA 91101
T (626) 304-2616

Robert Randall
Structural Engineer

EXPERIENCE ON HISTORIC SITES & BUILDINGS

DLR Group has been involved with additions, remodeling and renovations to numerous public facilities which entail not only ADA compliance, but sensitive additions to existing facilities which respect the physical and emotional legacy of the building and place while acknowledging future uses. We believe each building should be designed with an eye toward the future while representing the diversity of the community it serves.

We have often found this to be true when renovating schools that have served several generations of families: the school embodies the heart and soul of the community, any change is to be approached with sensitivity and respect.

DLR Group projects addressing historic sensitivity:
- LAUSD, Jordan High School Redevelopment
- Beverly Hills USD, Beverly Hills High School Modernization
- Beverly Hills USD, Hawthorne School
- Chaffey JUHSD, Chaffey High School Historical Assessment
- Los Angeles Memorial Coliseum Renovation
- University of Southern California Bovard Administration Building Renovation
- UCLA Kerckhoff Hall Historic and Seismic Renovation
- Pomona College Mason Hall Historic and Seismic Renovation

Saiful Bouquet has successfully worked with public and private clients on a wide range of historic or culturally significant projects. Our office has a collaborative approach to ensure a respectful treatment to preserve the historical significance of each building/site, and to optimize the functional and aesthetic qualities of the project. By strategically pin-pointing the areas of structure requiring seismic strenthening we are able to minimize the impact to existing on-going operations and preserve the building's historic elements. Below is an overview of this experience:
- Macy's on Lake, Pasadena, CA
- University of Southern California, North Science Building
- University of Southern California, Physical Education Building
- City of Los Angeles, Van Nuys City Hall
- 733 Front Street, San Francisco, CA
- University of Southern California, Mudd Hall of Philosophy
- University of Southern California, Webb Tower
- University of California - Riverside, Rouse Building - Culver Center for the Arts

EXECUTIVE SUMMARY

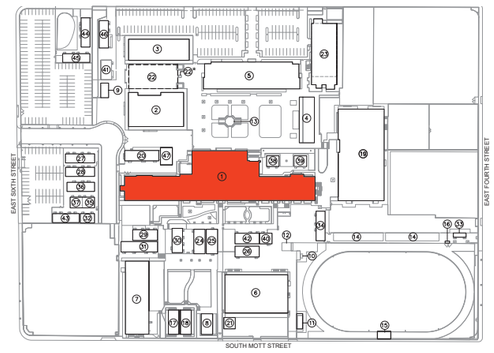
This analysis was prepared at the request of the Los Angeles Unified School District (District), to inform the development of a proposed Comprehensive Modernization project at Roosevelt High School. The analysis studies the opportunities and challenges involved in a possible seismic retrofit of Building 1 (also referred to as Building R) at Roosevelt High School in order to meet the District goal to provide a safe and healthy environment that promotes learning.

The State of California enacted Assembly Bill (AB) 300 in 1999, which required the Department of General Services to survey the State's public school buildings (Kindergarten through grade 12) for earthquake safety and to submit a report of its findings to the Legislature. AB 300 identified 269 of the LAUSD's nearly 13,000 buildings for seismic evaluation. In 2006, after further analysis by District staff, including site visits and field investigations, additional buildings were identified for seismic evaluation based upon AB 300 criteria and the District's higher standards. Building 1 at Roosevelt High School was identified as one of the buildings which required seismic evaluations due to its seismic vulnerability.

Based on the seismic analysis contained in this report, Building 1 would require major seismic retrofits to be in compliance with ASC41-13, Certificate for Non-Compliant DSA Buildings. Many of the existing building structural elements are inadequate to resist seismic forces, cannot be sufficiently strengthened and would be bypassed with the new seismic retrofit work designed to resist the majority of the seismic forces rather than supplement the existing structural system. In order to perform the seismic retrofit work, demolition of the building would be required down to concrete, wood joists and roof framing. The seismic retrofit of Building 1 would require anchoring exterior brick walls to physically connect them to gunite/concrete walls to prevent dislodging under strong ground shaking to prevent falling hazards. Weak and inadequate roof/floor diaphragms and wall anchorages would require replacement along with added structural members and steel hardware because the existing assembly does not have adequate strength and connectivity to deliver forces to the vertical resisting elements. The existing walls do not have enough strength to effectively resist a seismic event and the walls do not have adequate means of delivering the lateral forces to the foundation. New 18 inch thick concrete shear walls bonded to the interior of the existing exterior wall assembly and foundation micro-piles would be required.

The building's existing structural layout would restrict classroom proportions to an elongated and narrow shape. These restricted proportions do not support effective instruction when compared to classrooms that meet District design standards. These elongated classrooms would limit teaching wall visibility and result in reduced acoustical effectiveness due to the increased distance from the instructor to the student and limit flexible seating arrangements. The seismic retrofit work would result in an inefficient utilization of space by only yielding 21 classrooms that meet California Department of Education (CDE) standards from the existing 48 under-sized classrooms. The remaining spaces and rooms would not meet the CDE standard for classrooms and would have to be used as specialized spaces or smaller support spaces. In addition, the required new concrete shear walls for the seismic retrofit would block existing windows and compromise the amount of natural daylighting into the classroom.

At the auditorium, the required seismic retrofit work would have significant impacts to the existing configuration of the space. Demolition of a large portion of the ground floor would be required in order to install new 18 inch thick shear walls onto the new micro-piles and foundations. The work would require the removal and reconfiguration of the existing seats and would trigger Title 24 California Code of Regulations upgrades to seating, aisle widths, circulation and accessible ramps/slopes to meet current accessibility requirements. The existing balcony would require extensive demolition to provide for a new compliant floor to meet the code required load factors and to strengthen the existing diaphragm and improve the horizontal bracing connections at the walls. The existing ceilings in both the auditorium and lobby would have to be demolished down to the rafters and require seismic retrofitting to address the weak and inadequate roof diaphragms and wall anchorages. Due to the extensive seismic retrofit work, the existing stage, rigging and fly loft cannot be preserved and therefore would require demolition and replacement.



AUDITORIUM & CLASSROOM BUILDING
BUILDING: 1

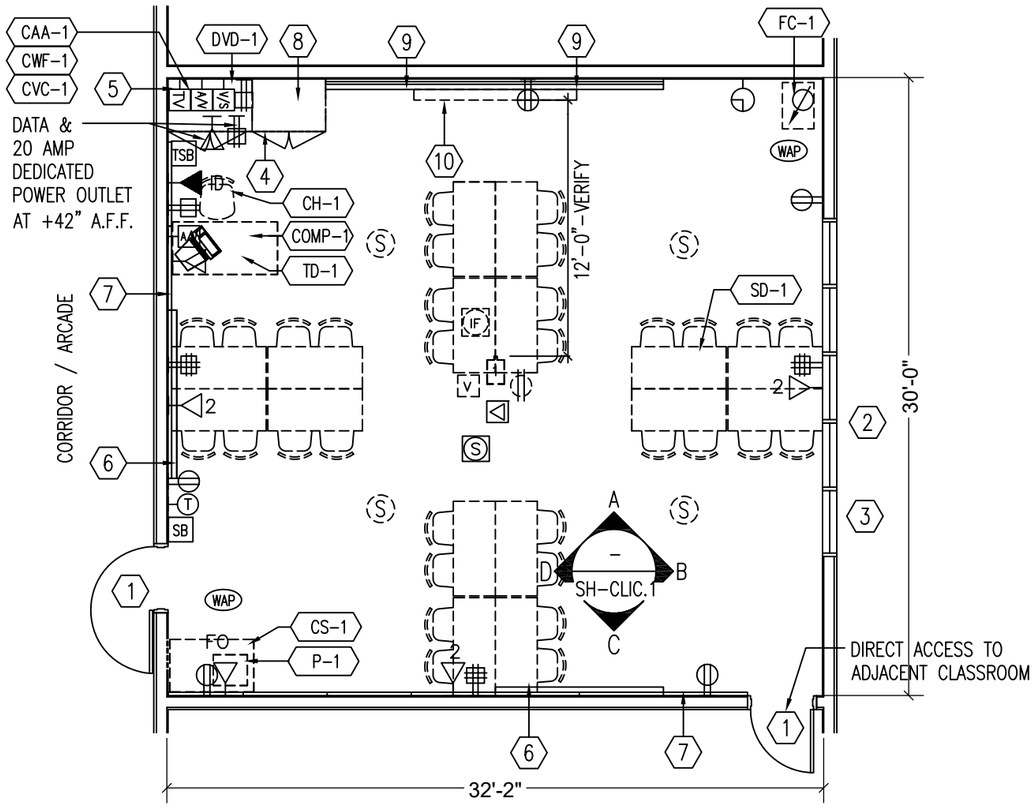
Diagrammatic Plan Changes
All existing interior walls to be removed with existing column structure and staircases to remain. General Classroom dimensions were dictated by the existing column structure with a main corridor running through the middle of the building. There is a total of twenty-one (21) classrooms; breakdown of counts is as follows: four (4) on the First Floor, eight (8) on the Second Floor and nine (9) on the Third Floor. All classrooms are 960 square feet, approximately 23'-10" x 40'-3". Remaining rooms were either dedicated to specialized spaces and/or not adequately sized for classroom instruction. Ed. Specs for General Classrooms are 960 sf with approximate dimensions of 30'-0" x 32'-0" and required ceiling height of 10'-0" A.F.F. Due to existing conditions, required ceiling heights of classrooms will not be met.

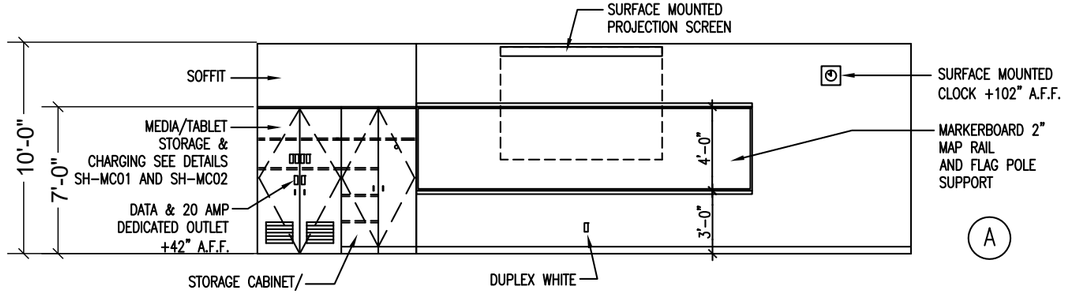
Accessibility Upgrades
Accessible paths of travel to the building will be addressed in the Campus Master Plan. Minor upgrades include new accessible handrails to replace existing non-compliant handrails. A new elevator retrofit that complies with travel distance limits has been added. New restrooms were added to each floor with consideration to accessibility and plumbing fixture count requirements.

Fire/Life/Safety Upgrades
Under the current building code, the "highest" possible classification for the existing structural system would be Type IIIA; however, the building exceeds the current maximum allowable area for Type IIIA construction, both for each floor and for the overall building. The building will require a 2-hour vertical separation to be compliant with the maximum allowable area per current building code. Fire/Life/Safety upgrades include a new fire sprinkler system and fire alarm system replacement.

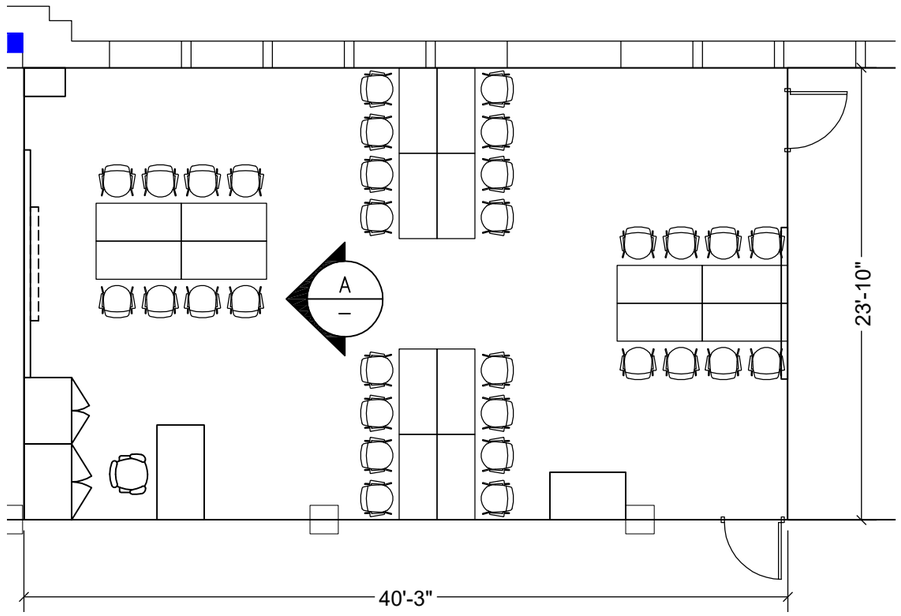
Historical Significance Impact
The 1936 and 1954 seismic strengthening projects removed almost all of the original 1922 extensive exterior design features. The exterior entrance to the lobby and some of the interior of the auditorium are the only remaining traces of the original design. New shear walls and foundations will be located on the interior side of the building to preserve the aesthetic of the exterior elevations. However, access to daylighting in several classrooms will be impacted due to the new shear walls covering up existing windows. Two shear walls are to be added to the interior side of the west perimeter wall of the Auditorium. One of those walls is located where the Balcony occurs.

LAUSD DESIGN GUIDE - EDUCATIONAL SPECIFICATION: GENERAL CLASSROOM (960 SQ. FT.)



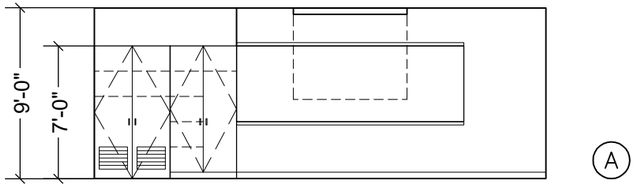


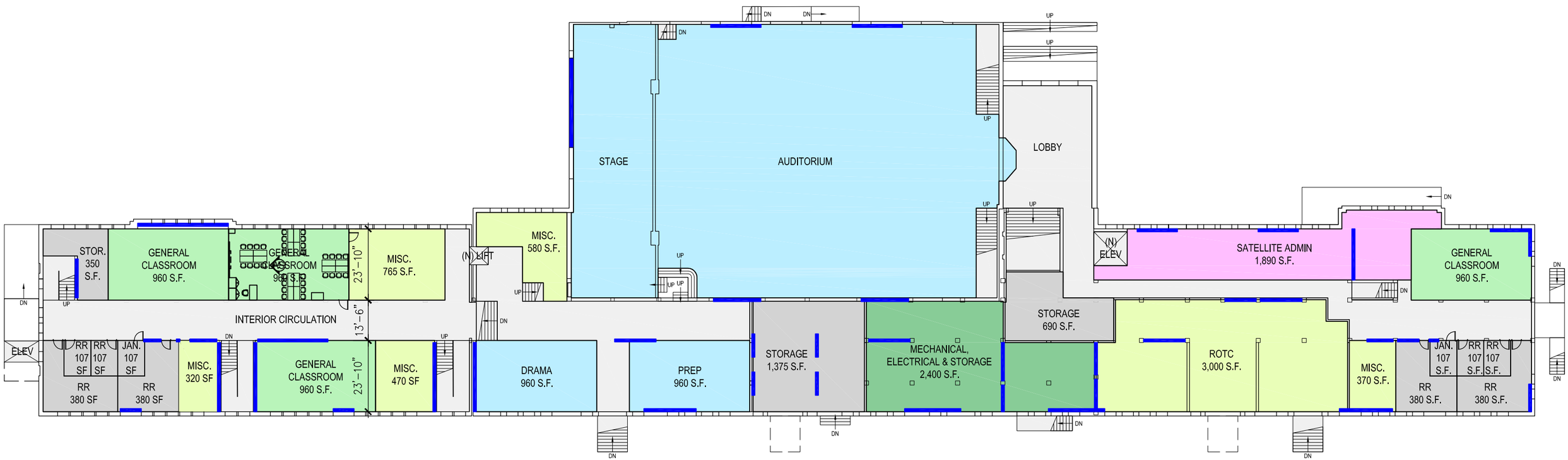
TYPICAL GENERAL CLASSROOM LAYOUT AFTER BUILDING RETROFIT (960 SQ. FT.)



Negative Limitations to Typical General Classroom Layout After Building Retrofit:

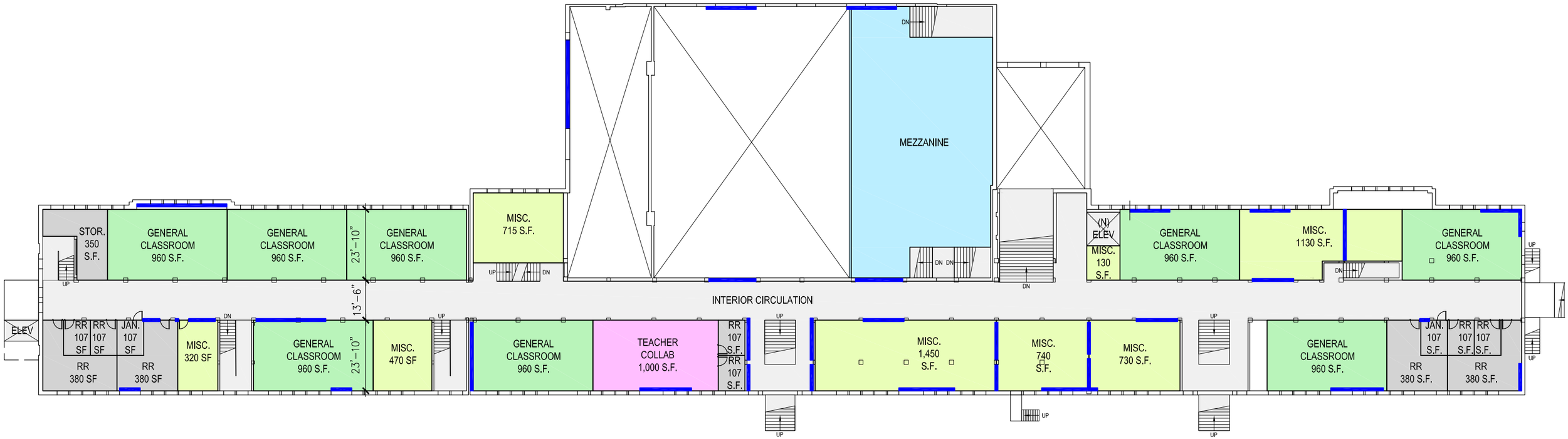
- Existing column structure limits classroom dimensions on either side of the corridor to approx. 23'-10"W x 40'-3"L. This results in increased distance from instructor to students.
- Limited teaching wall visibility and sight lines due to the elongated and narrow room dimensions.
- Limited utilization and flexibility for active learning seating arrangements.
- Acoustics and listening conditions will be also impacted due to the elongated room dimension. Students seated towards the back of the classroom will not have equal accessibility to speech communication.
- Some classrooms will have compromised access to daylighting due to the new proposed shear walls





LEGEND	FIRST FLOOR PROGRAM SUMMARY
NEW SHEAR WALL	
ADMINSTRATIVE OFFICES	4.3%
GENERAL CLASSROOM	8.7%
FACILITIES & OPERATIONS	5.4%
INTERIOR CIRCULATION	24.8%
MISC.	12.5%
PERFORMING ARTS	33.9%
SUPPORT SERVICES	10.4%

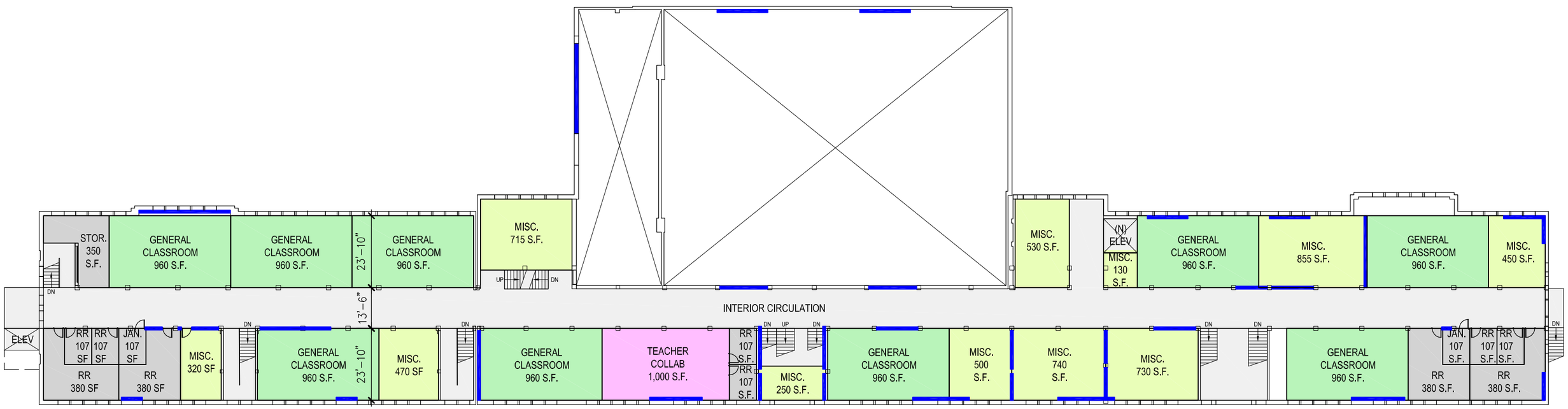
FIRST FLOOR
1/32" = 1'-0"



LEGEND	SECOND FLOOR PROGRAM SUMMARY
NEW SHEAR WALL	
ADMINSTRATIVE OFFICES	2.2%
GENERAL CLASSROOM	17.5%
FACILITIES & OPERATIONS	0.0%
INTERIOR CIRCULATION	27.6%
MISC.	12.6%
PERFORMING ARTS	33.9%
SUPPORT SERVICES	6.2%

SECOND FLOOR

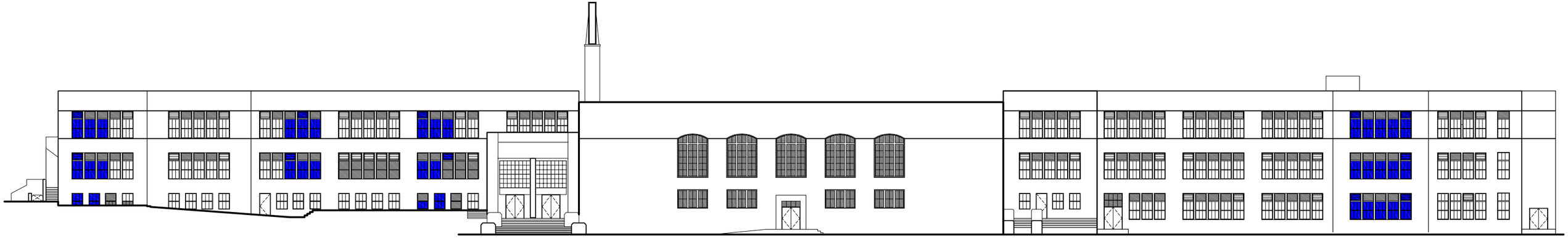
1/32" = 1'-0"



LEGEND	THIRD FLOOR PROGRAM SUMMARY
NEW SHEAR WALL	
ADMINSTRATIVE OFFICES	2.2%
GENERAL CLASSROOM	19.6%
FACILITIES & OPERATIONS	0.0%
INTERIOR CIRCULATION	25.2%
MISC.	12.9%
PERFORMING ARTS	33.9%
SUPPORT SERVICES	6.2%

THIRD FLOOR

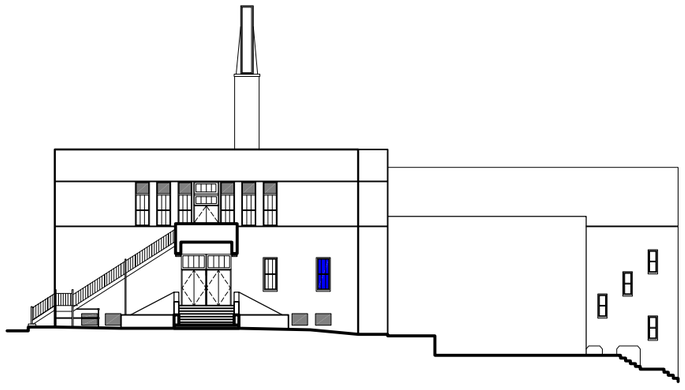
1/32" = 1'-0"



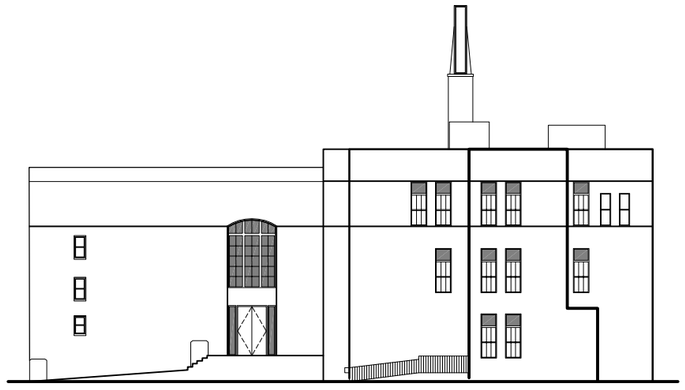
WEST ELEVATION



EAST ELEVATION



NORTH ELEVATION



SOUTH ELEVATION

EXISTING WINDOWS CURRENTLY BLOCKED

EXISTING WINDOWS TO BE BLOCKED BY NEW PROPOSED SHEAR WALLS

EXTERIOR ELEVATIONS

1/32" = 1'-0"

RHS BUILDING R: AUDITORIUM & CLASSROOM
PROPOSED MANDATORY SEISMIC UPGRADE NARRATIVE

PRELIMINARY STRUCTURAL EVALUATION NARRATIVE FOR MANDATORY SEISMIC UPGRADE

In December 2015, *DLR* and *SBI* issued an evaluation report for many of the existing camps buildings at the Roosevelt High School. The report, *ASCE 41-13 Tier 2 Deficiency-Based Evaluation and Retrofit*, summarized the team's findings of the Tier 2 evaluation on three existing campus buildings, Building 1 (Auditorium and Classroom), Building 6 (Industrial Arts) and Building 19 (Gymnasium). The evaluation criterion was based on a 250-year earthquake event. The findings concluded that the buildings are candidates for voluntary seismic upgrade based on the discovered deficiencies.

Since the issuance of the noted report, LAUSD has requested that *SBI* provide a professional opinion as to the structural requirements for implementing a mandatory seismic upgrade on Building 1 (R), that would be in conformance with Part 10 of the 2016CAC. A scope of work was developed that utilizes the prior knowledge and expands on the previous evaluation to determine a conceptual seismic upgrade scheme that is based on the criteria of a mandatory seismic upgrade as defined by DSA and contained in Part 10 of 2016CAC. The seismic upgrade scheme would also incorporate the required renovation and modifications to the existing structure as determined by *DLR*.

Based on the findings from the 2015 study, it was determined that many of the buildings' existing lateral resisting element did not meet the Tier 2, life-safety criteria contained in ASCE41-13 and stipulated by LAUSD. Building on this knowledge, a conceptual seismic strengthening scheme was developed considering that a *mandatory seismic upgrade* would need to take into account the enhanced performance objective of ASCE41-13 and CBC2016, which generally yields higher design forces, limitations on material strengths, detailing requirements on select elements and further defined load path and mechanism behaviors. Also noting that the 2015 study utilized a lower earthquake event (250-year) than that of the required design earthquake of CBC2016 (475-year), thus yielding higher seismic forces. It is important to also note that many of the existing building structural elements are inadequate to effectively contribute to the seismic resisting systems, and as a result they are being bypassed and not relied upon with the majority of the proposed upgrade work resisting 100% of the seismic forces rather than supplementing the existing systems.

As noted earlier above, the following improvements made herein are considering the *mandatory* seismic upgrade rather than *voluntary*. It is important to note the difference between *voluntary* versus *mandatory*. According to 2016CAC, *voluntary* modifications are acceptable to DSA as long as they do **not** adversely affect the structure and create a new unsafe condition (reduce lateral elements or increase the seismic mass – make building worse) when the cost exceeds $25,000, but not 50% of the replacement value (if costs exceed 50% the replacement value, then retrofit to "current code" is required). Therefore, mandated seismic upgrades, for a building will be required to be strengthened to meet minimum seismic design performance levels in accordance with Part 10 of 2016CBC – construed as "current code".

The following summarizes the findings of the study based on the aforementioned approach. Included are retrofit scope work items with supporting sketches that can be used for cost estimating. This current effort utilized our extensive knowledge of evaluating and retrofitting similar buildings as well as the knowledge gained from our previous studies. A geotechnical report specific to the proposed retrofit work scope was not available for reference; therefore, estimation of foundations was not feasible at this time.

Findings with Recommendations:

1. Exterior Brick Anchorage: The existing exterior brick walls were original to the building and later reinforced with gunite/concrete. There does not appear to be a physical connection of the masonry units to the gunite/concrete walls, the units may become dislodged under strong ground shaking that would be deemed a non-structural, falling hazard by DSA.

   Recommendation: It is recommended that the masonry units be anchored to gunite/concrete walls/piers with masonry veneer type anchorage at mortar joints from the exterior. This would entail the removal and replacement of mortar joints.

2. Inadequate In-Plane Shear Resistance: The existing gunite/concrete shear walls do not have enough strength to effectively resist the anticipated seismic forces and maintain vertical carrying capabilities within proper deformation limitations.

   Recommendation: Install new concrete shear walls along with new foundations.

3. Wall Anchorage System: Inadequate out-of-plane wall resistance at wood roof/floor to masonry/concrete walls.

   Recommendation: Install out-of-plane wall anchorage system with installation of steel hardware from walls to floor/roof levels plus strengthening of floor and ceiling framing elements as needed.

4. Weak and Inadequate Roof/Floor Diaphragms: The existing wood sheathing does not have adequate strength to deliver forces to the vertical resisting elements – in conjunction with wall anchorage forces in item #3.

   Recommendation: Remove and replace 2nd floor and roof sheathing along with strengthening of framing elements, as needed. Provide diaphragm chord and shear transfer elements.

5. Incomplete/Inadequate Lateral Load Path (Delivery) at Floor/Roof Diaphragms to Shear Walls. The horizontal diaphragm connectivity to the vertical shear walls is lacking. In addition, the chord reinforcing at diaphragm boundaries is insufficient.

   Recommendation: Provide proper connectivity of horizontal to vertical lateral bracing elements via use of new shear transfer connections, drags, chords, in conjunction with above items.

6. Lack of Dowels from Shear Walls to Foundations: The existing shear walls do not have adequate dowels to deliver lateral forces to the footings.

   Recommendation: Install new shear walls and foundations as noted above to bypass use of existing system elements.

7. Incomplete/Disconnected Vertical Load Path at Roof to Shear Walls: The roof diaphragm ratio exceeds the maximum allowed and should be reduced by cross shear walls that can be naturally connected to the existing interior shear walls.

   Recommendation: Provide complete load path to connect roof diaphragms to tops of existing shear walls with wood framed cripple walls sheathed with plywood along with proper hardware. At existing cripple walls, provide plywood sheathing and hardware.

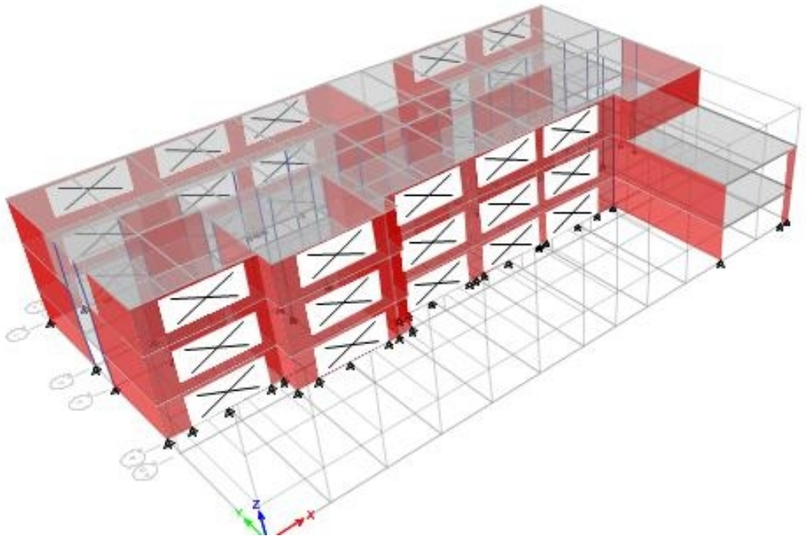
Additional Non-Structural Code Upgrade Requirements:

With any mandatory Code upgrade to an existing building, all the systems are to be upgraded to be compliant with “current Code”. This relates to non-structural systems and elements such as MEP anchorage, support and bracing, ceiling framing and bracing, partition walls, etc.

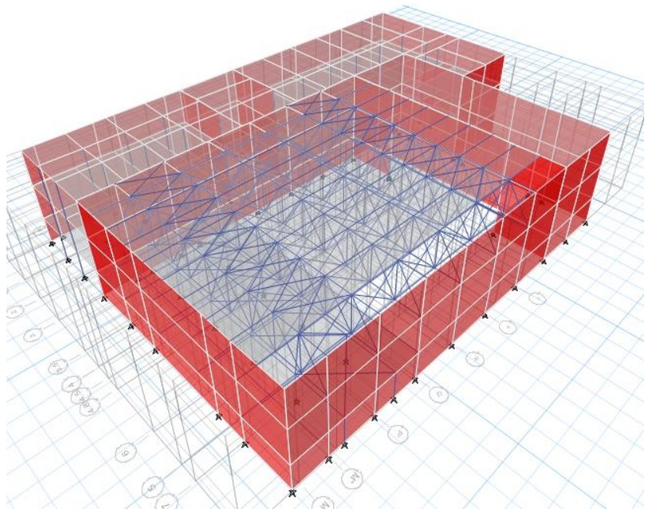
As part of the proposed renovation work, the majority of the interior systems will be removed and replaced with updated items designed and installed in conformance with current Code. This is true for all the ceiling systems as they are non-compliant and would be required to be replaced in order to perform the structural work. This is also true of the existing auditorium ceiling system as the ceiling is not considered compliant with current Code and the retrofit work to be done on the roof framing will impact the ceiling.

IMAGES OF COMPUTER MODELING

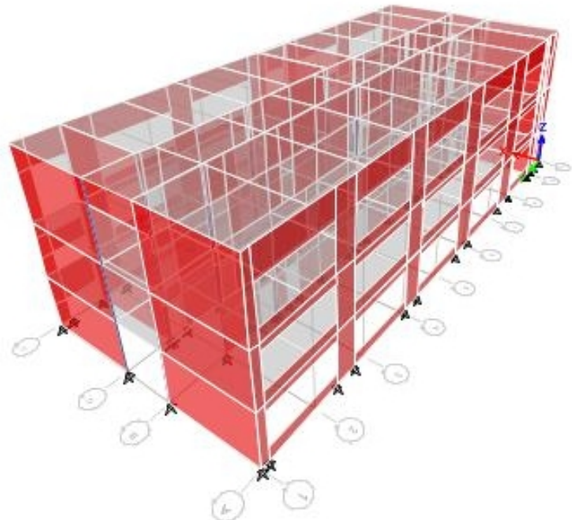
As part of the 2015 study, 3-D linear dynamic computer modeling was performed of the buildings' structural lateral resisting elements. Seismic forces generated in the lateral elements were used to check against the element capacities to determine adequacy.



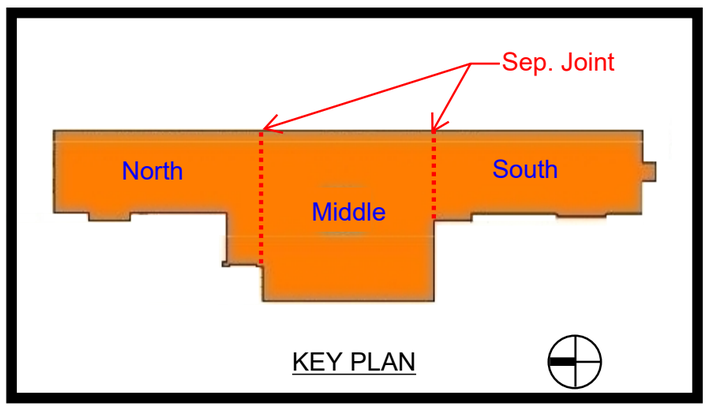
3D-Dynamic Computer Model – North



3D-Dynamic Computer Model – Middle



3D-Dynamic Computer Model – South



RHS BUILDING R – AUDITORIUM & CLASSROOM
PROPOSED STRUCTURAL SCOPE OF WORK
MANDATORY SEISMIC UPGRADE

The following scope items are for the structural work, only. Any and all non-structural work items that would be required for installation/implementation of structural items are to also be considered.

Prepare cost estimate based on the following scope of work and in addition carry a 25% design contingency of the construction costs.

A geotechnical report was not provide for pile or micro-pile design capacities, thus size of foundations cannot be determined at this stage. Assume 8" diameter micro-piles embedded 50ft into certified/competent soil.

General - Where Applicable:

- Tie/anchor **all** existing exterior brick/tile walls to existing concrete/gunite walls using veneer type anchor screw ties or epoxy dowels (remove mortar and set anchors).

NORTH END:

Key Note	Scope Description	Ref. Sketch
Basement/Foundation Level:		
1	Tie/anchor all existing exterior brick/tile walls to existing concrete/gunite walls using veneer type anchor screw ties or epoxy dowels (remove mortar and set anchors). – Apply to full height of all building exterior.	SK-1 SK-A SK-D
2	Enlarge existing foundations at new shotcrete walls (drill and epoxy dowels). Remove and replace existing slab-on-grade for foundation work.	
7	Anchor base of all exterior wall piers with steel angles epoxy bolted to wall and slab/stem wall.	
14	New 18" thick reinforced concrete shear walls with CIDH or micro-pile foundations. Remove existing brick exterior at walls. Drill and epoxy dowel to existing gunite/concrete walls.	
First & Second Floor Level:		
3	Install out-of-plane wall anchor system at brick/concrete walls comprised of bolted holdowns (or steel plates screwed to joists), epoxy anchor bolts, straps, blocking, etc. Develop anchor system into floor framing.	SK-2 SK-B SK-C
4	Remove and replace existing floor sheathing with new plywood (top & bottom), fully blocked. Strengthen (sister) existing joists with new wood members at panel edges. *Allow for repair/replacement of 30% existing wood framing members.*	
9	Provide diaphragm shear transfer connections at brick/concrete walls with new steel angle bolted to wall with expansion/epoxy bolts and epoxy bolts to slab. Install continuous steel angle with epoxy anchor bolts to act as diaphragm chord reinforcing and drag/collector to new shear walls.	
11	New drag/collector element (steel or concrete), bolted to shear walls.	
15	New 18" thick reinforced concrete shear walls. Remove existing brick exterior at walls – see Key Note #14. Provide new steel drag collectors along existing wall with epoxy anchors.	
Second Floor Ceiling Level:		
3	Install out-of-plane wall anchor system at brick/concrete walls comprised of bolted holdowns (or steel plates screwed to joists), epoxy anchor bolts, straps, blocking, etc. Develop anchor system into floor framing.	SK-3 SK-B SK-C
11	New drag/collector element (steel or concrete), bolted to shear walls.	
15	New 18" thick reinforced concrete shear walls. Remove existing brick exterior at walls – see Key Note #14.	
16	Remove and reconstruct existing ceiling joist framing with new wood frame diaphragm consisting of wood joists and plywood sheathing, fully blocked. *Allow for repair/replacement of 30% existing wood framing members.*	
17	Provide ceiling diaphragm shear transfer connections at brick/concrete walls with new wood blocking/ledger bolted to wall with expansion/epoxy bolts. Install continuous steel angle with epoxy anchor bolts to act as diaphragm chord reinforcing and drag/collector to new shear walls.	
Roof Level:		
3	Install out-of-plane wall anchor system at brick/concrete walls comprised of bolted holdowns (or steel plates screwed to joists), epoxy anchor bolts, straps, blocking, etc. Develop anchor system into floor framing.	SK-3 SK-B SK-C
4	Remove and replace existing roof sheathing with new plywood, fully blocked. Strengthen (sister) existing joists with new wood members at panel edges. *Allow for repair/replacement of 30% existing wood framing members.*	
9	Provide diaphragm shear transfer connections at brick/concrete walls with new steel angle bolted to wall with expansion/epoxy bolts and epoxy bolts to slab. Install continuous steel angle with epoxy anchor bolts to act as diaphragm chord reinforcing and drag/collector to new shear walls.	
18	Create new wood stud cripple walls sheathed with plywood at tops of existing concrete walls. Connect to concrete walls and to roof sheathing.	
Interior/Exterior Walls:		
2	Enlarge existing foundations at new shotcrete walls (drill and epoxy dowels). Remove and replace existing slab-on-grade for foundation work.	SK-4 SK-5 SK-D
14	New 18" thick reinforced concrete shear walls with CIDH or micro-pile foundations. Remove existing brick exterior at walls. Drill and epoxy dowel to existing gunite/concrete walls.	

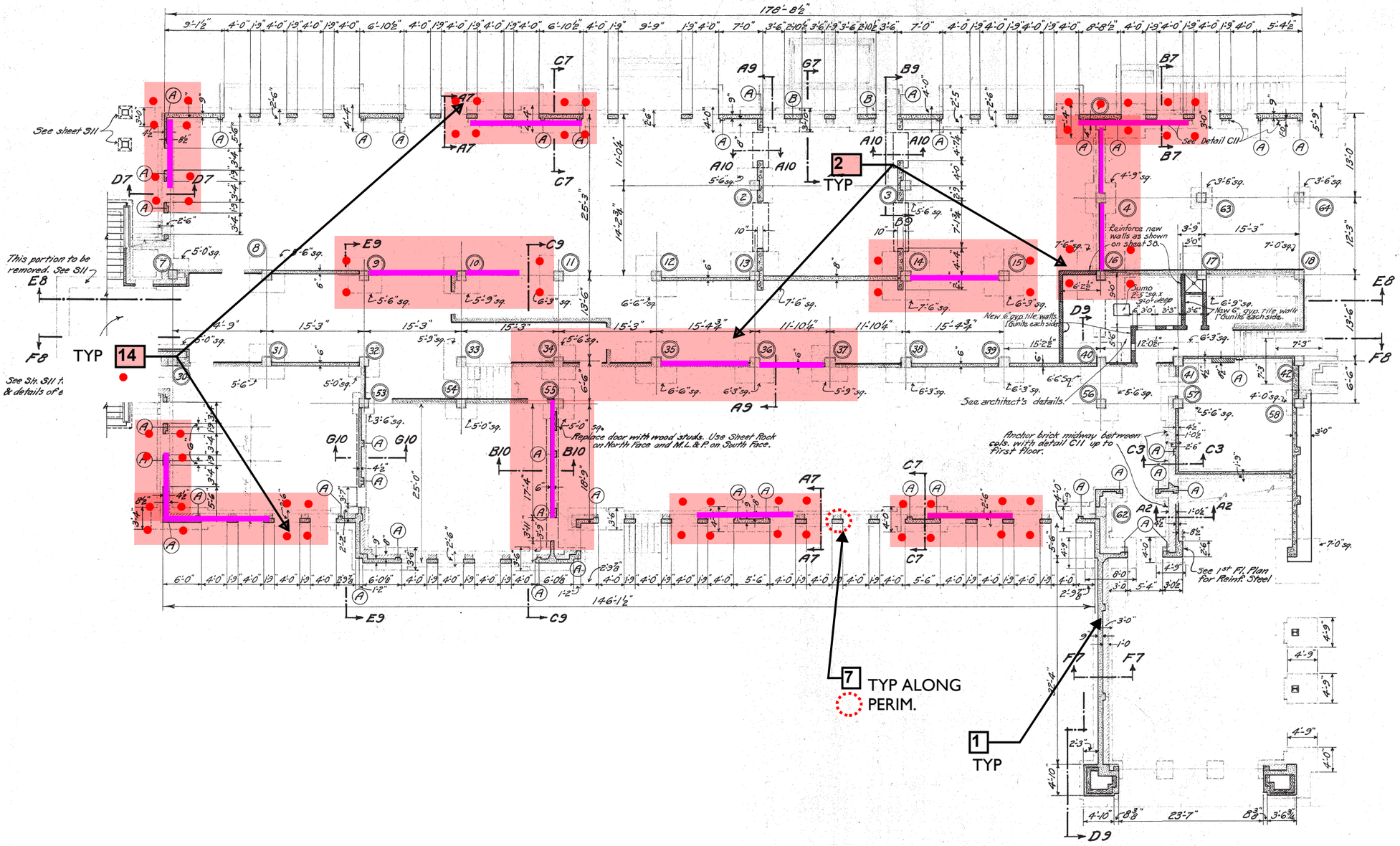
MIDDLE (Auditorium / Classroom):

Key Note	Scope Description	Ref. Sketch
Basement/Foundation Level:		
1	Tie/anchor all existing exterior brick/tile walls to existing concrete/gunite walls using veneer type anchor screw ties or epoxy dowels (remove mortar and set anchors). – Apply to full height of all building exterior.	SK-6 SK-A SK-D
2	Enlarge existing foundations at new shotcrete walls (drill and epoxy dowels). Remove and replace existing slab-on-grade for foundation work.	
7	Anchor base of all exterior wall piers with steel angles epoxy bolted to wall and slab/stem wall.	
8	Wrap (2 layers) existing brick wall with Fiber Reinforced Polymer (FRP) for full height of wall.	
14	New 12" thick reinforced concrete shear walls with CIDH or micro-pile foundations. Remove existing brick exterior at walls. Drill and epoxy dowel to existing gunite/concrete walls.	
First / Balcony Floor Level:		
3	Install out-of-plane wall anchor system at brick/concrete walls comprised of bolted holdowns (or steel plates screwed to joists), epoxy anchor bolts, straps, blocking, etc. Develop anchor system into floor framing.	SK-7 SK-A SK-B SK-C
4	Strengthen existing balcony diaphragm **Option 1:** Remove and replace with new plywood (top & bottom), fully blocked. Strengthen (sister) existing joists with new wood members at panel edges (top & bottom). *Allow for repair/replacement of 30% existing wood framing members.* **Option 2:** Install new horizontal steel bracing	
5	Remove and replace existing floor sheathing with new plywood, fully blocked. Strengthen (sister) existing joists with new wood members at panel edges. *Allow for repair/replacement of 30% existing wood framing members.*	
6	Strengthen horizontal bracing connection at tapered girder and wall locations	
8	Wrap (2 layers) existing brick wall with Fiber Reinforced Polymer (FRP) for full height of wall.	
9	Provide diaphragm shear transfer connections at brick/concrete walls with new steel angle bolted to wall with expansion/epoxy bolts and epoxy bolts to slab. Install continuous steel angle with epoxy anchor bolts to act as diaphragm chord reinforcing and drag/collector to new shear walls.	
11	New drag/collector element (steel or concrete), bolted to shear walls.	
15	New 18" thick reinforced concrete shear walls. Remove existing brick exterior at walls – see Key Note #14	

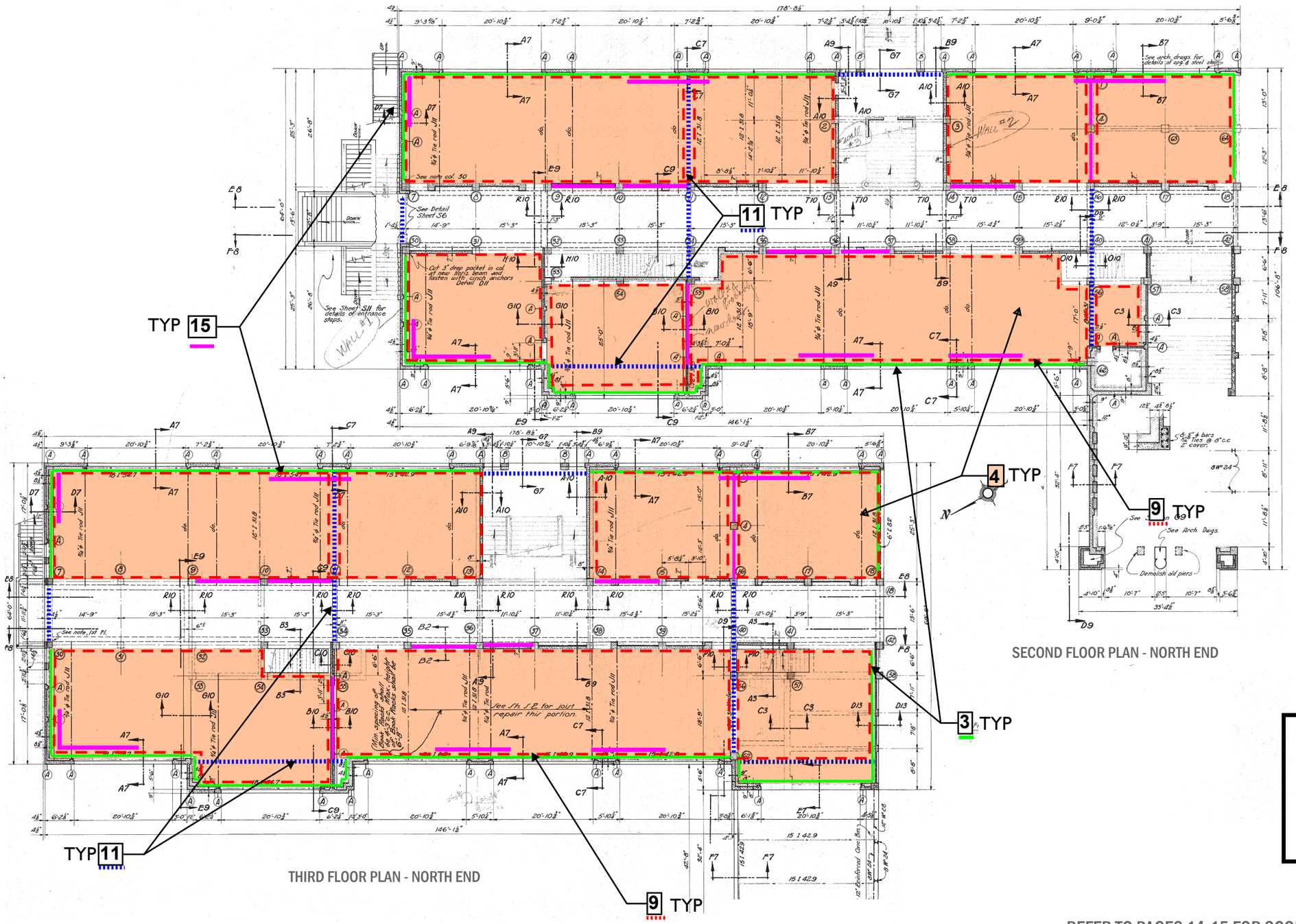
Second Floor / Balcony Level:		
3	Install out-of-plane wall anchor system at brick/concrete walls comprised of bolted holdowns (or steel plates screwed to joists), epoxy anchor bolts, straps, blocking, etc. Develop anchor system into floor framing.	SK-8 SK-A SK-B SK-C
4	See note #4 – **First / Balcony Floor Level**	
5	Remove and replace existing floor sheathing with new plywood (top & bottom), fully blocked. Strengthen (sister) existing joists with new wood members at panel edges. *Allow for repair/replacement of 30% existing wood framing members.*	
8	Wrap (2 layers) existing brick wall with Fiber Reinforced Polymer (FRP) for full height of wall.	
9	Provide diaphragm shear transfer connections at brick/concrete walls with new steel angle bolted to wall with expansion/epoxy bolts and epoxy bolts to slab. Install continuous steel angle with epoxy anchor bolts to act as diaphragm chord reinforcing and drag/collector to new shear walls.	
11	New drag/collector element (steel or concrete), bolted to shear walls.	
15	New 18" thick reinforced concrete shear walls. Remove existing brick exterior at walls – see Key Note #14	
16	Remove and reconstruct existing ceiling joist framing with new wood frame diaphragm consisting of wood joists and plywood sheathing, fully blocked.	
17	Provide ceiling diaphragm shear transfer connections at brick/concrete walls with new wood blocking/ledger bolted to wall with expansion/epoxy bolts. Install continuous steel angle with epoxy anchor bolts to act as diaphragm chord reinforcing and drag/collector to new shear walls.	
Roof Level:		
3	Install out-of-plane wall anchor system at brick/concrete walls comprised of bolted holdowns (or steel plates screwed to joists), epoxy anchor bolts, straps, blocking, etc. Develop anchor system into roof framing.	SK-9 SK-10 SK-B SK-C
4	Remove and replace existing roof sheathing with new plywood (top & bottom), fully blocked. Strengthen (sister) existing joists with new wood members at panel edges (top & bottom). *Allow for repair/replacement of 30% existing wood framing members.*	
9	Provide diaphragm shear transfer connections at brick/concrete walls with new steel angle bolted to wall with expansion/epoxy bolts and epoxy bolts to slab. Install continuous steel angle with epoxy anchor bolts to act as diaphragm chord reinforcing and drag/collector to new shear walls.	
11	New drag/collector element (steel or concrete), bolted to shear walls.	
15	New 18" thick reinforced concrete shear walls. Remove existing brick exterior at walls – see Key Note #14	
18	Create new wood stud cripple walls sheathed with plywood at tops of existing concrete walls. Connect to concrete walls and to roof sheathing.	
Exterior Walls:		
14	New 18" thick reinforced concrete shear walls with CIDH or micro-pile foundations. Remove existing brick exterior at walls. Drill and epoxy dowel to existing gunite/concrete walls.	SK-11

SOUTH END:

Key Note	Scope Description	Ref. Sketch
Basement / Foundation Level:		
1	Tie/anchor all existing exterior brick/tile walls to existing concrete/gunite walls using veneer type anchor screw ties or epoxy dowels (remove mortar and set anchors). – Apply to full height of <u>all</u> building exterior.	SK-12 SK-A SK-D
2	Enlarge existing foundations at new shotcrete walls (drill and epoxy dowels). Remove and replace existing slab-on-grade for foundation work.	
7	Anchor base of all exterior wall piers with steel angles epoxy bolted to wall and slab/stem wall.	
8	Wrap (2 layers) existing brick wall with Fiber Reinforced Polymer (FRP) for full height of wall.	
9	Remove existing tile/gunite walls and install new 18" thick reinforced concrete shear walls with enlarged foundations.	
14	New 18" thick reinforced concrete shear walls with CIDH or micro-pile foundations. Remove existing brick exterior at walls. Drill and epoxy dowel to existing gunite/concrete walls.	
First Floor / Second Floor Level:		
3	Install out-of-plane wall anchor system at brick/concrete walls comprised of bolted holdowns (or steel plates screwed to joists), epoxy anchor bolts, straps, blocking, etc. Develop anchor system into floor framing.	SK-12 SK-A SK-B SK-C
4	Remove and replace existing floor sheathing with new plywood (top), fully blocked. Strengthen (sister) existing joists with new wood members at panel edges. *Allow for repair/replacement of 30% existing wood framing members.*	
8	Wrap (2 layers) existing brick wall with Fiber Reinforced Polymer (FRP) for full height of wall.	
9	Provide diaphragm shear transfer connections at brick/concrete walls with new steel angle bolted to wall with expansion/epoxy bolts and epoxy bolts to slab. Install continuous steel angle with epoxy anchor bolts to act as diaphragm chord reinforcing and drag/collector to new shear walls.	
11	New drag/collector element (steel or concrete), bolted to shear walls.	
15	New 18" thick reinforced concrete shear walls. Remove existing brick exterior at walls. Drill and epoxy dowel to existing gunite/concrete walls.	
Third Floor / Roof Level:		
3	Install out-of-plane wall anchor system at brick/concrete walls comprised of bolted holdowns (or steel plates screwed to joists), epoxy anchor bolts, straps, blocking, etc. Develop anchor system into floor framing.	SK-13 SK-B SK-C
4	Remove and replace existing floor sheathing with new plywood (top & bottom), fully blocked. Strengthen (sister) existing joists with new wood members at panel edges. *Allow for repair/replacement of 30% existing wood framing members.*	
5	Remove and replace existing floor sheathing with new plywood (top), fully blocked. Strengthen (sister) existing joists with new wood members at panel edges. *Allow for repair/replacement of 30% existing wood framing members.*	
6	Strengthen horizontal bracing connection at tapered girder and wall locations	
9	Provide diaphragm shear transfer connections at brick/concrete walls with new steel angle bolted to wall with expansion/epoxy bolts and epoxy bolts to slab. Install continuous steel angle with epoxy anchor bolts to act as diaphragm chord reinforcing and drag/collector to new shear walls.	
11	New drag/collector element (steel or concrete), bolted to shear walls.	
15	New 18" thick reinforced concrete shear walls. Remove existing brick exterior at walls. Drill and epoxy dowel to existing gunite/concrete walls.	
16	Remove and reconstruct existing ceiling joist framing with new wood frame diaphragm consisting of wood joists and plywood sheathing, fully blocked.	
17	Provide ceiling diaphragm shear transfer connections at brick/concrete walls with new wood blocking/ledger bolted to wall with expansion/epoxy bolts.	
Exterior Walls:		
2	See keynote #2 - **Foundation / First Floor Level**	SK-14 & SK-15
8	See keynote #8 - **Foundation / First Floor Level**	
14	See keynote #14 - **Foundation / First Floor Level**	



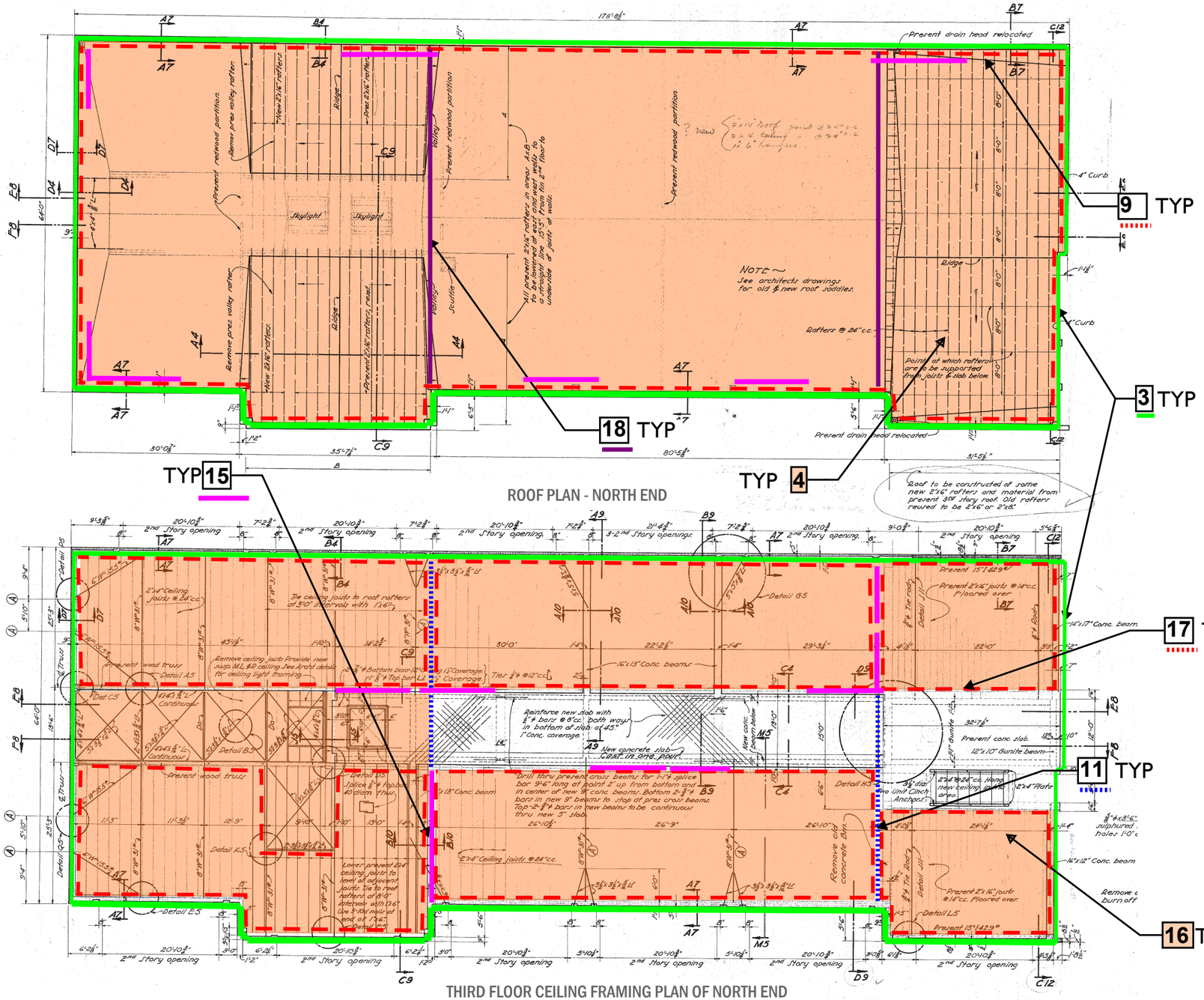
REFER TO PAGES 14-15 FOR SCOPE DESCRIPTION LIST OF KEY NOTES



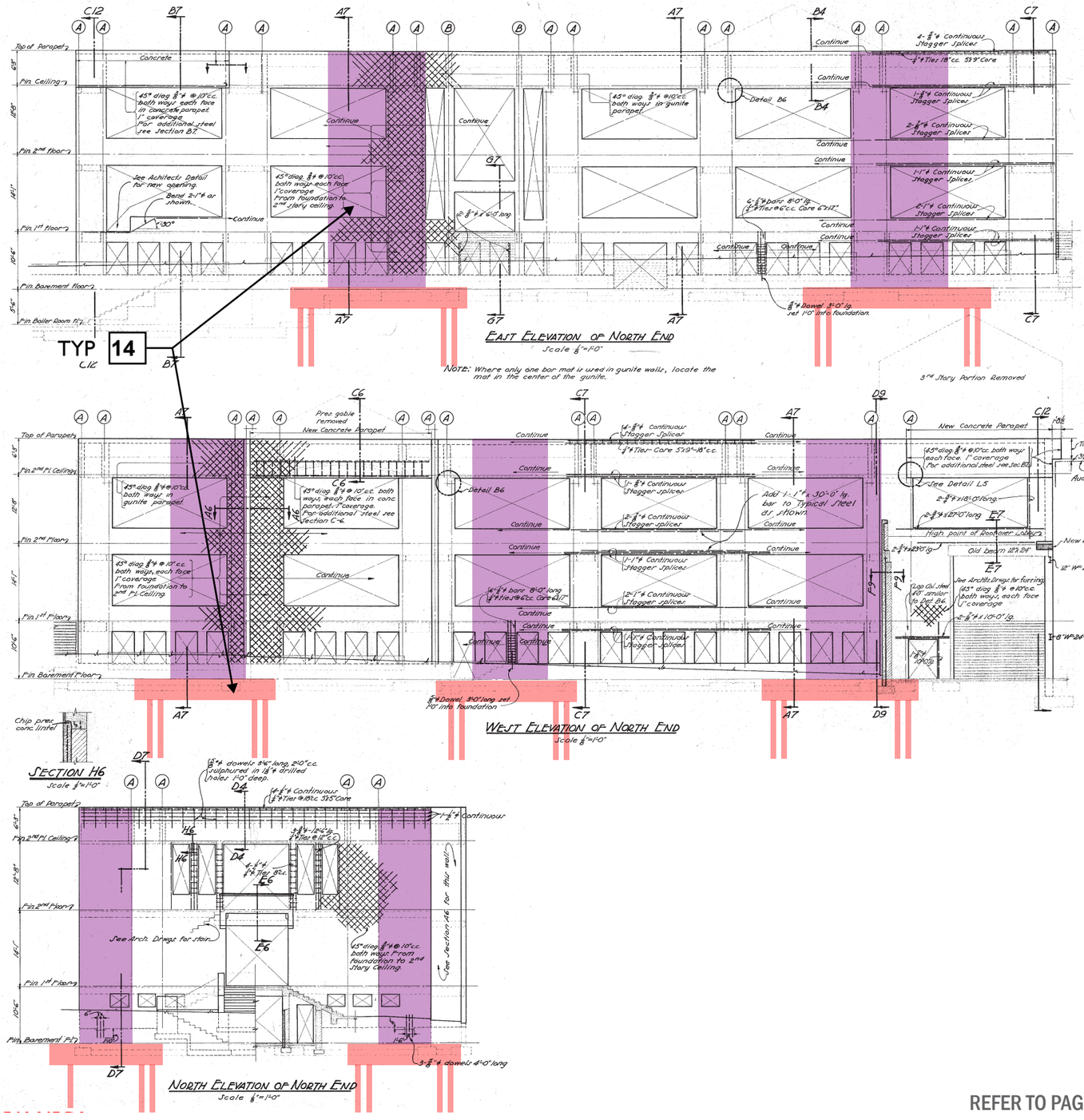
THIRD FLOOR PLAN - NORTH END

SECOND FLOOR PLAN - NORTH END

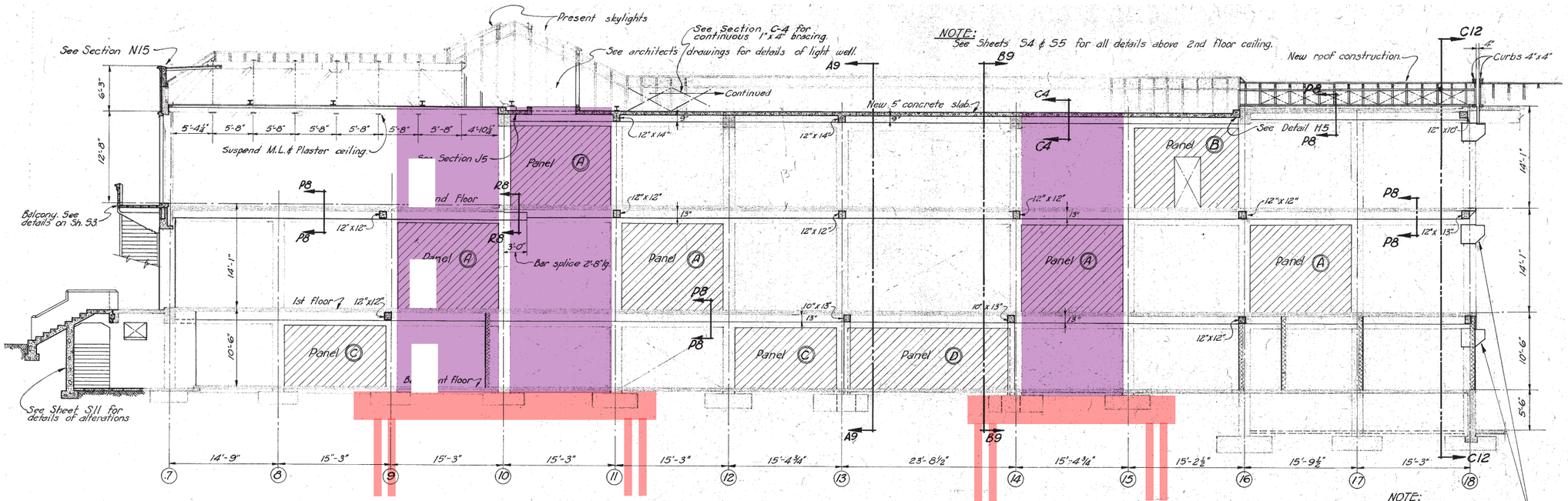
REFER TO PAGES 14-15 FOR SCOPE DESCRIPTION LIST OF KEY NOTES



REFER TO PAGES 14-15 FOR SCOPE DESCRIPTION LIST OF KEY NOTES

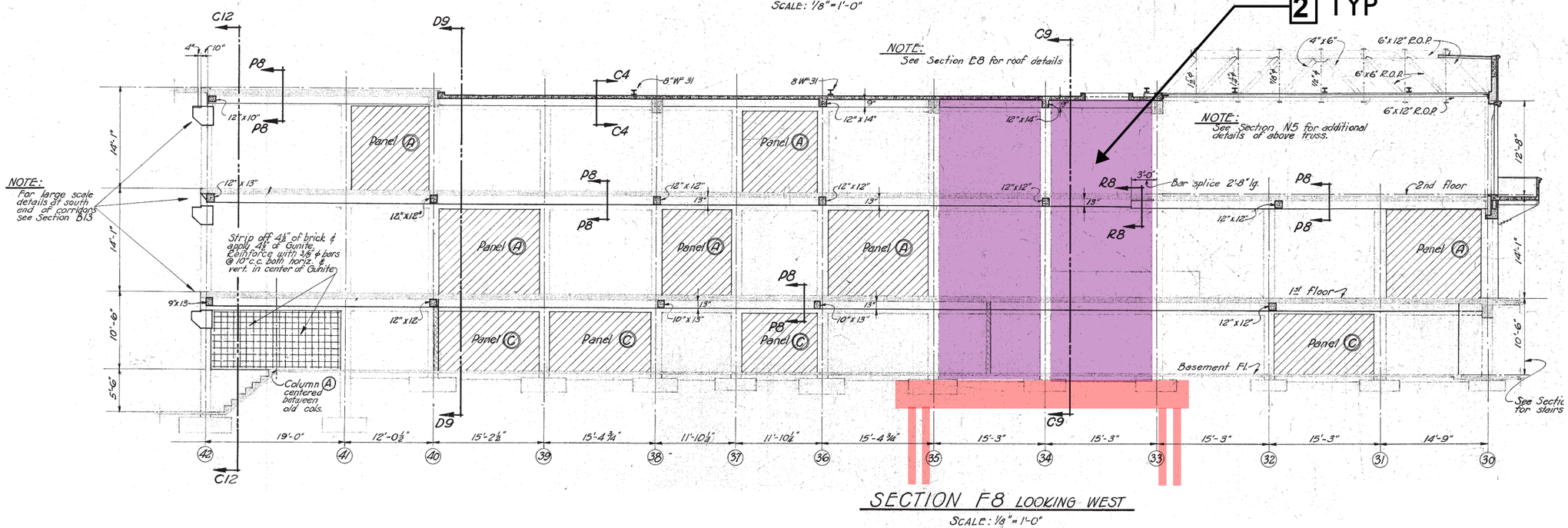


REFER TO PAGES 14-15 FOR SCOPE DESCRIPTION LIST OF KEY NOTES



SECTION E8 LOOKING EAST

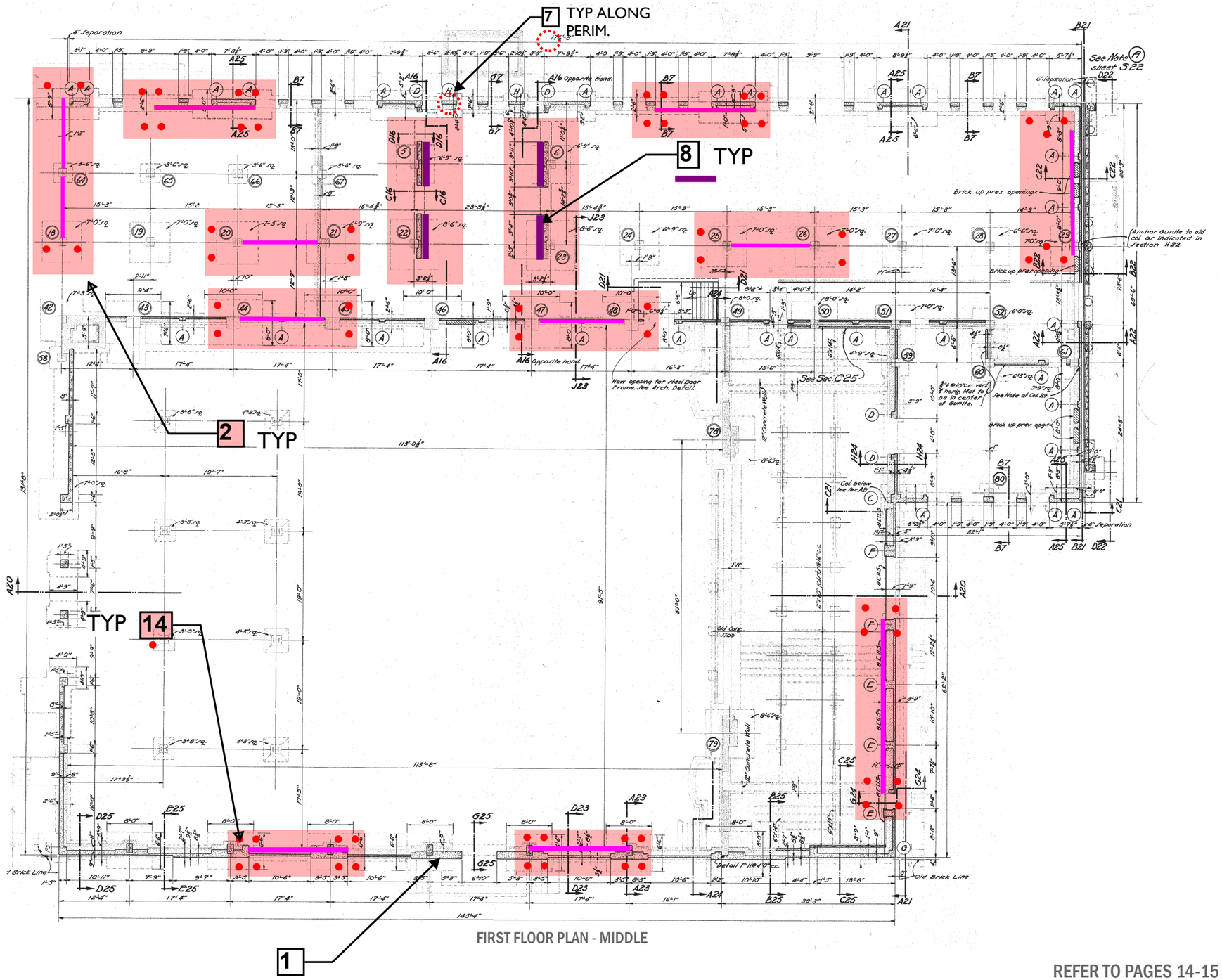
SCALE: 1/8"=1'-0"



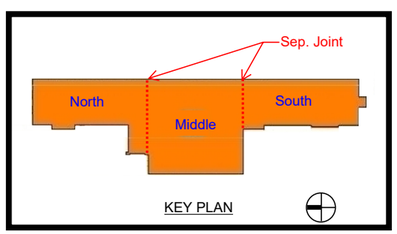
SECTION F8 LOOKING WEST

SCALE: 1/8"=1'-0"

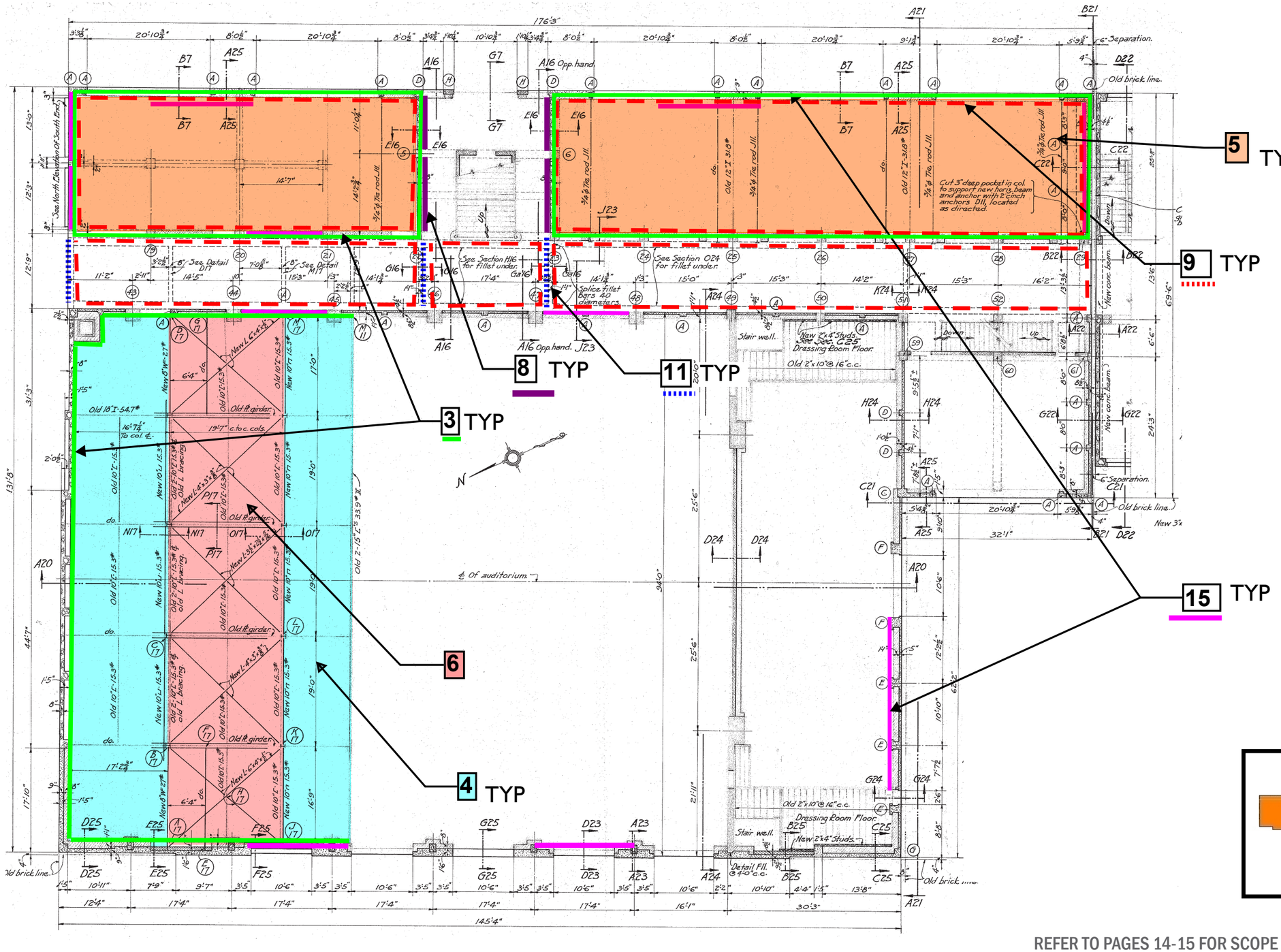
REFER TO PAGES 14-15 FOR SCOPE DESCRIPTION LIST OF KEY NOTES

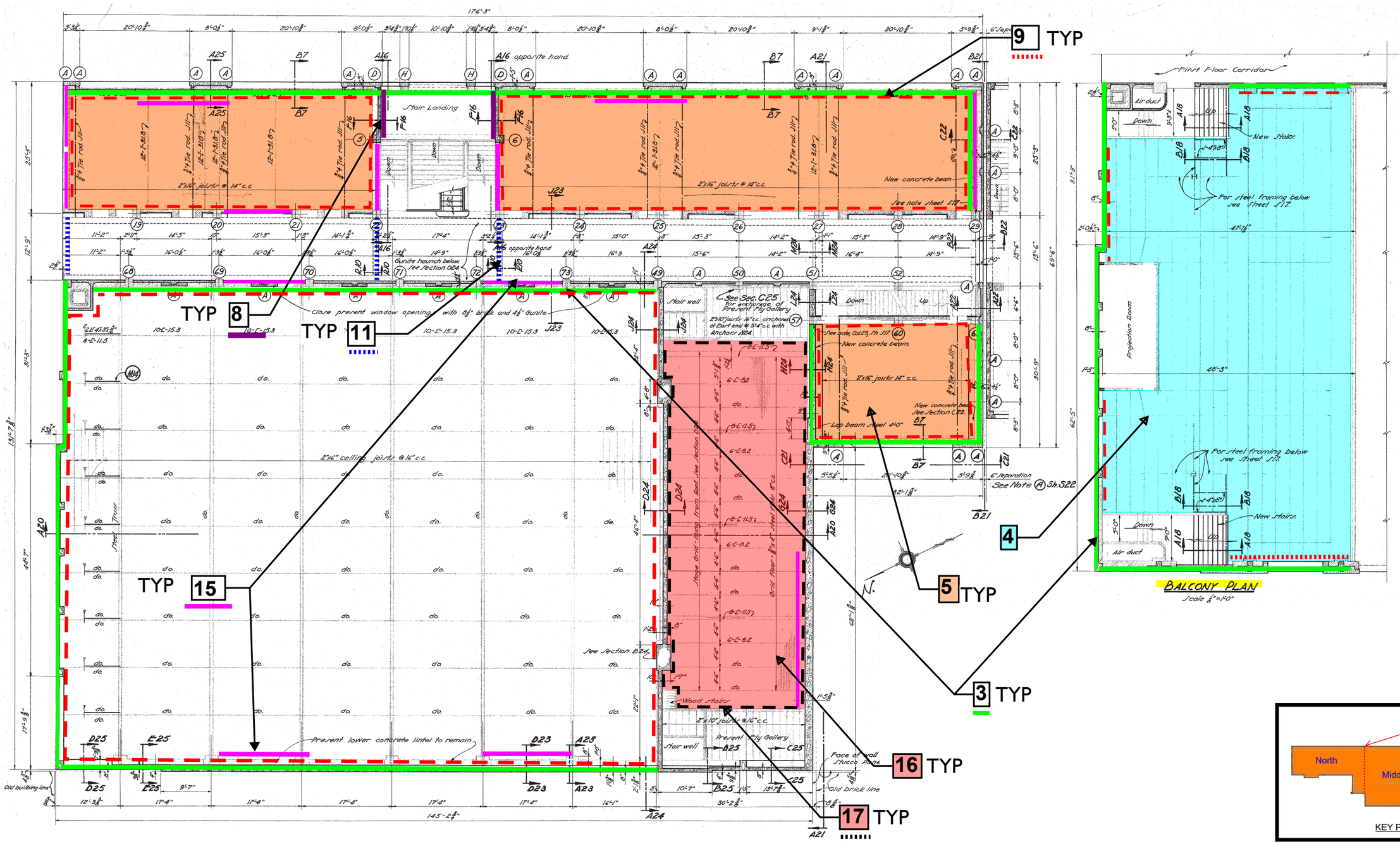


FIRST FLOOR PLAN - MIDDLE

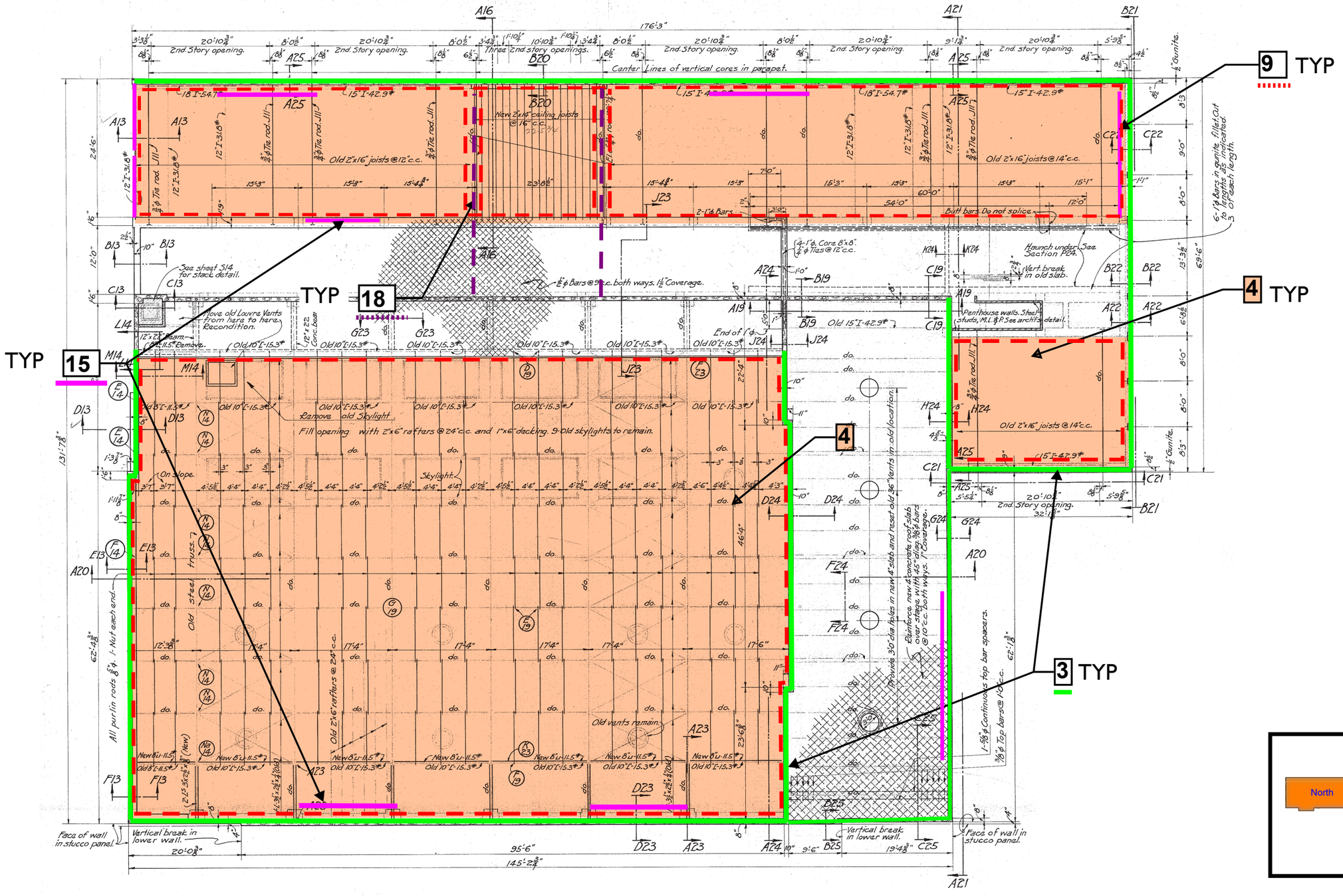


REFER TO PAGES 14-15 FOR SCOPE DESCRIPTION LIST OF KEY NOTES

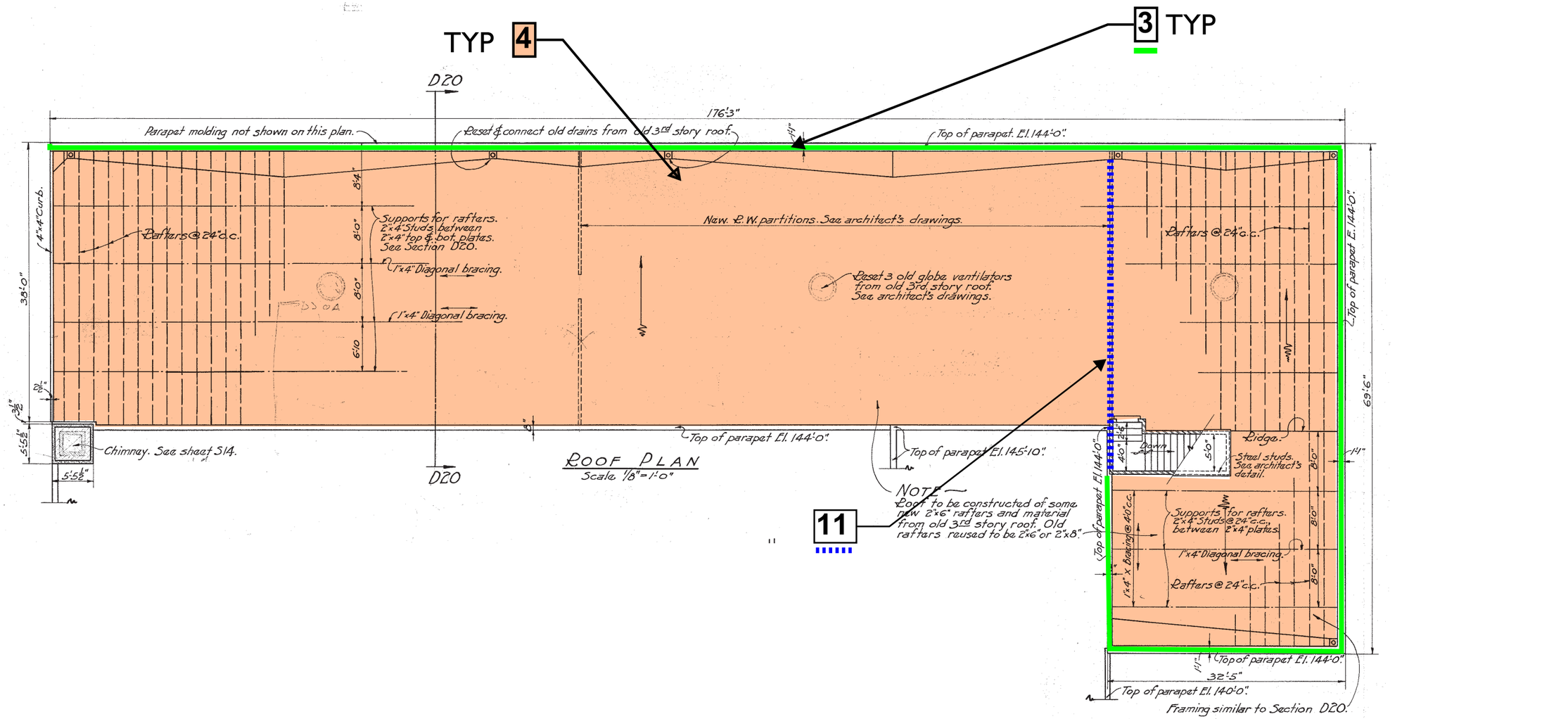

5 TYP
9 TYP
15 TYP
8 TYP
11 TYP
3 TYP
6
4 TYP
Cut 3" deep pocket in col. to support new horiz. beam and anchor with 2 inch anchors DII, located as directed.
Stair wall.
New 2"x4" Studs See Sec. C25
Drassing Room Floor.
Old 2"x10"@ 16"c.c.
Splice fillet bars 40 diameters
See Section H16 for fillet under.
See Section O24 for fillet under.
Old brick line.
New conc. beam.
New 3"x
℄ of auditorium
Old 18"I-54.7#
Old 12"I-31.8#
Old 12"I-31.8#
Old 12"I-31.8

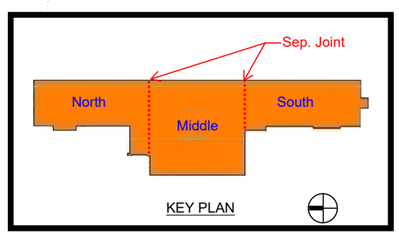


REFER TO PAGES 14-15 FOR SCOPE DESCRIPTION LIST OF KEY NOTES

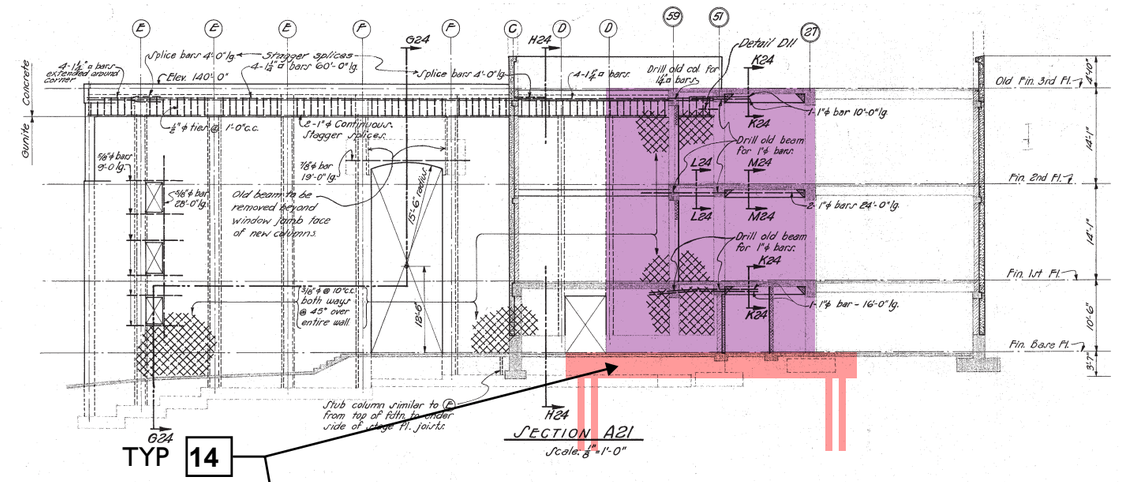


REFER TO PAGES 14-15 FOR SCOPE DESCRIPTION LIST OF KEY NOTES

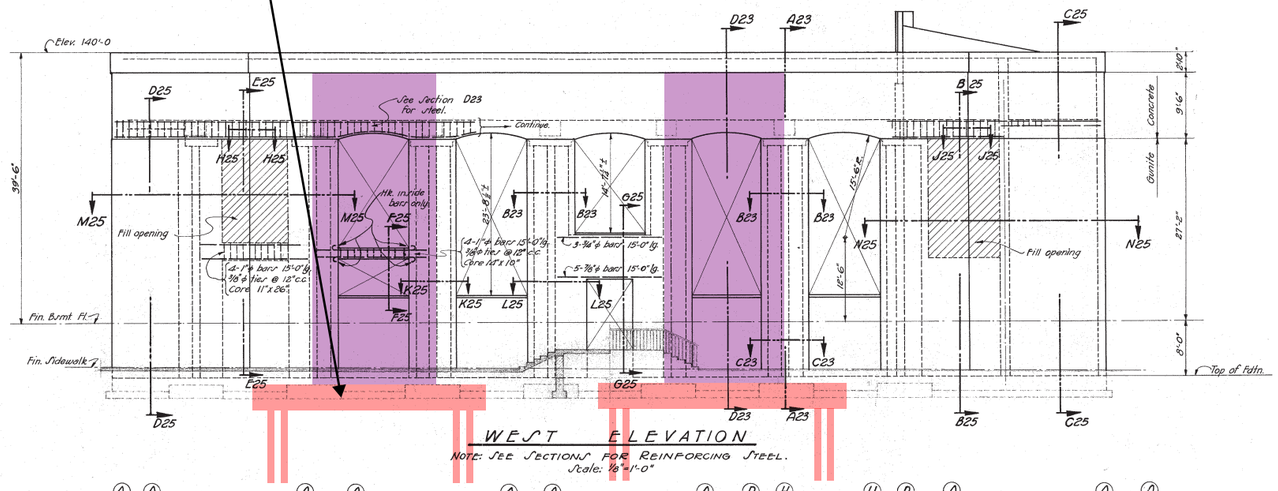


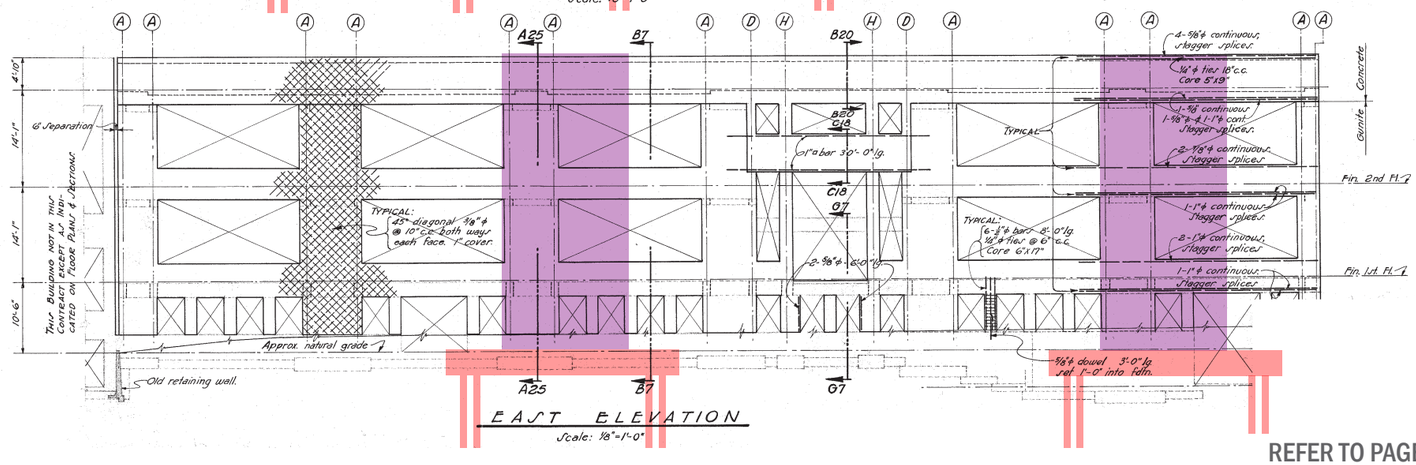


REFER TO PAGES 14-15 FOR SCOPE DESCRIPTION LIST OF KEY NOTES

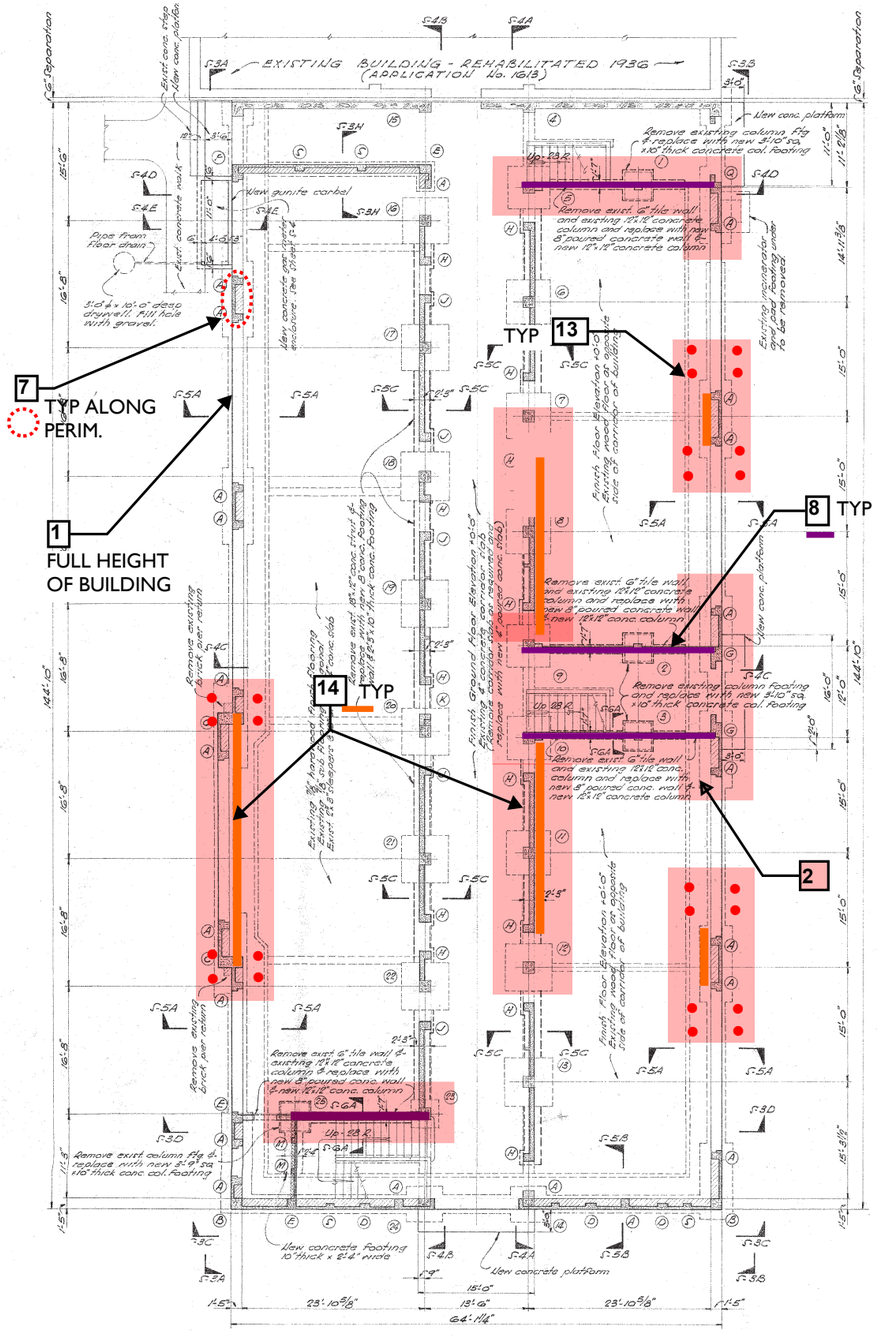


TYP **14**

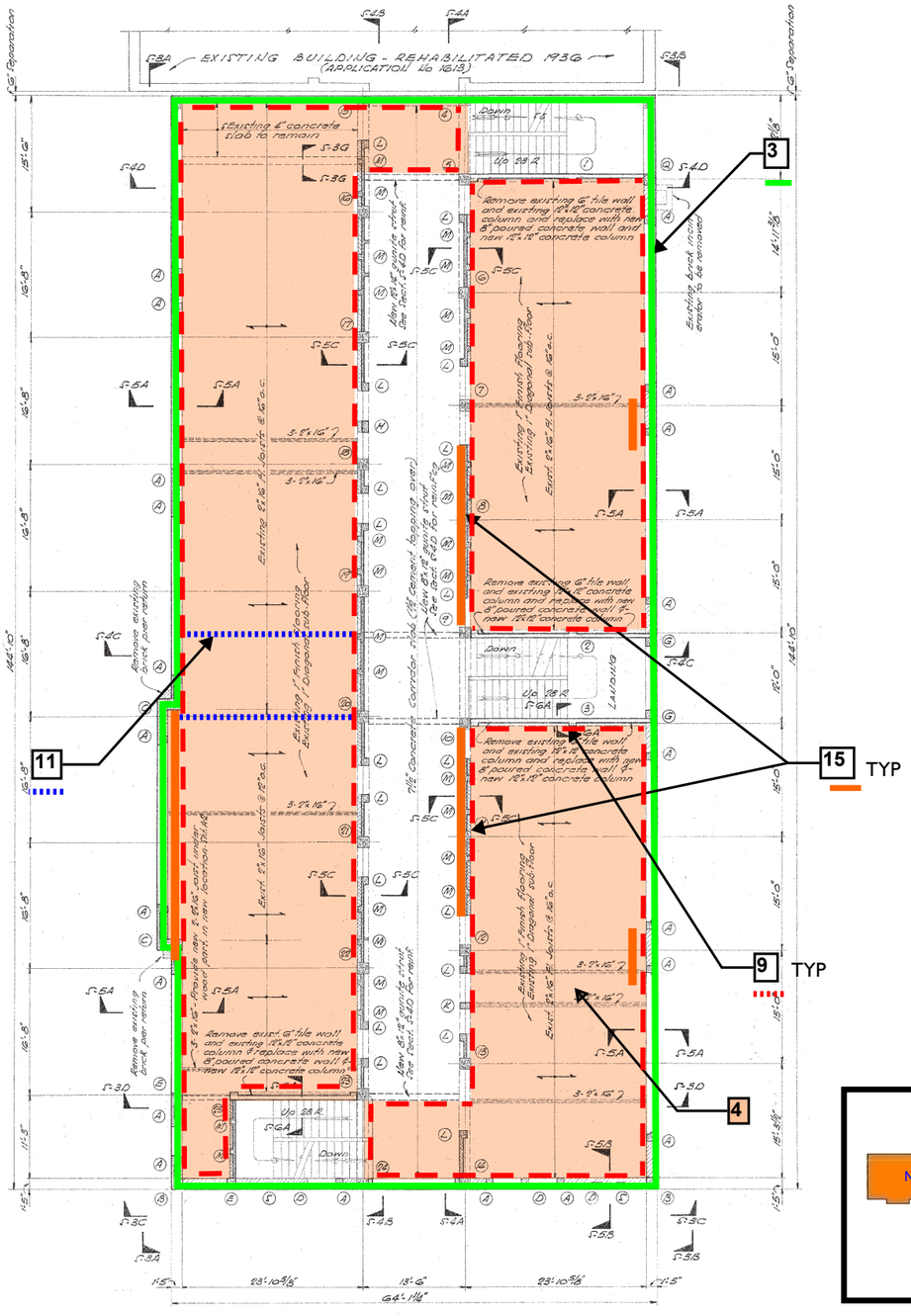




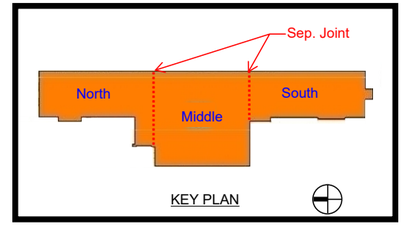
REFER TO PAGES 14-15 FOR SCOPE DESCRIPTION LIST OF KEY NOTES



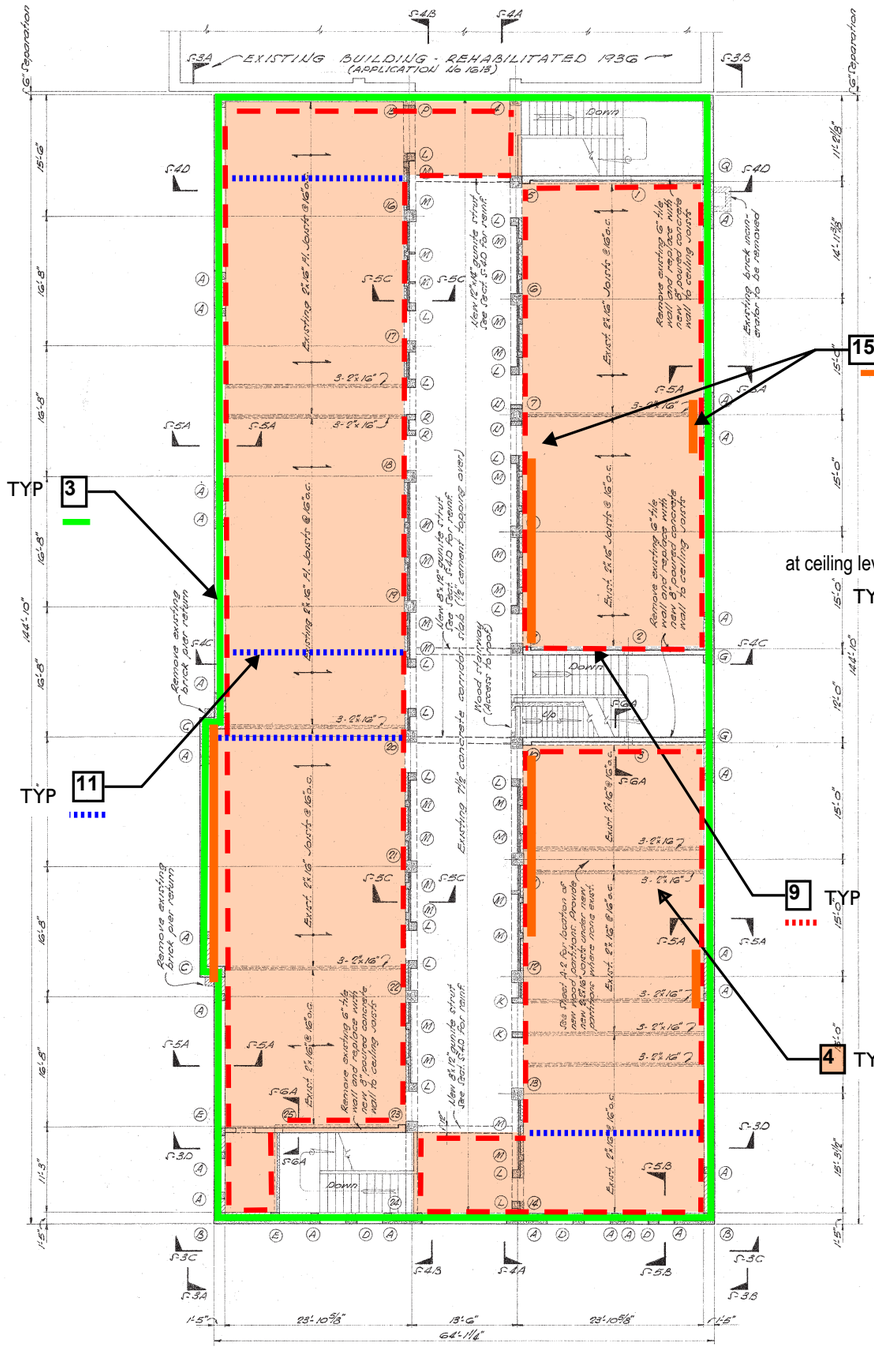
FIRST FLOOR & FOOTING PLAN



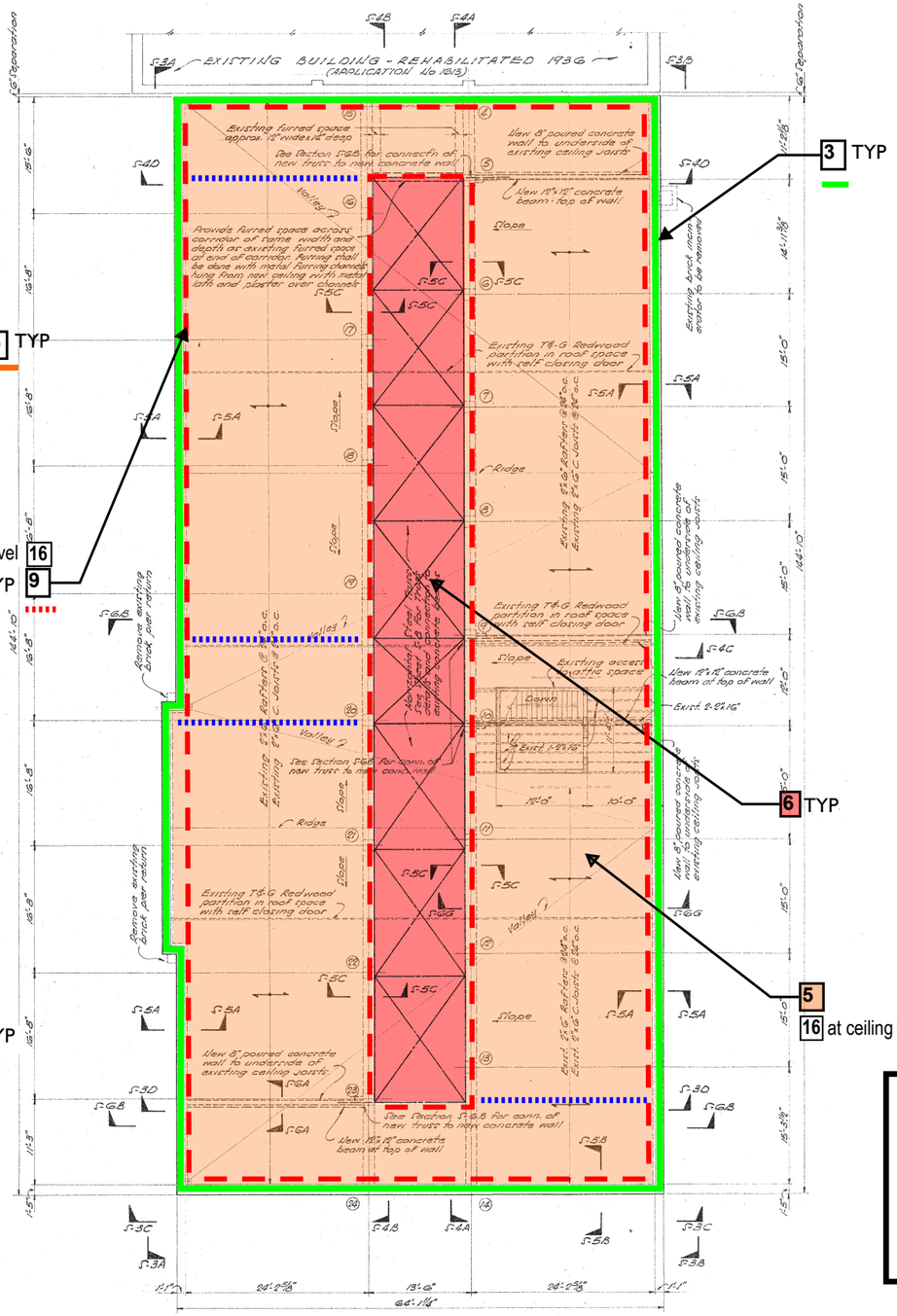
SECOND FLOOR FRAMING PLAN



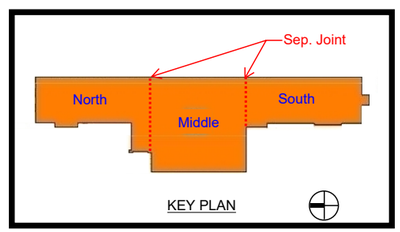
REFER TO PAGES 14-15 FOR SCOPE DESCRIPTION LIST OF KEY NOTES



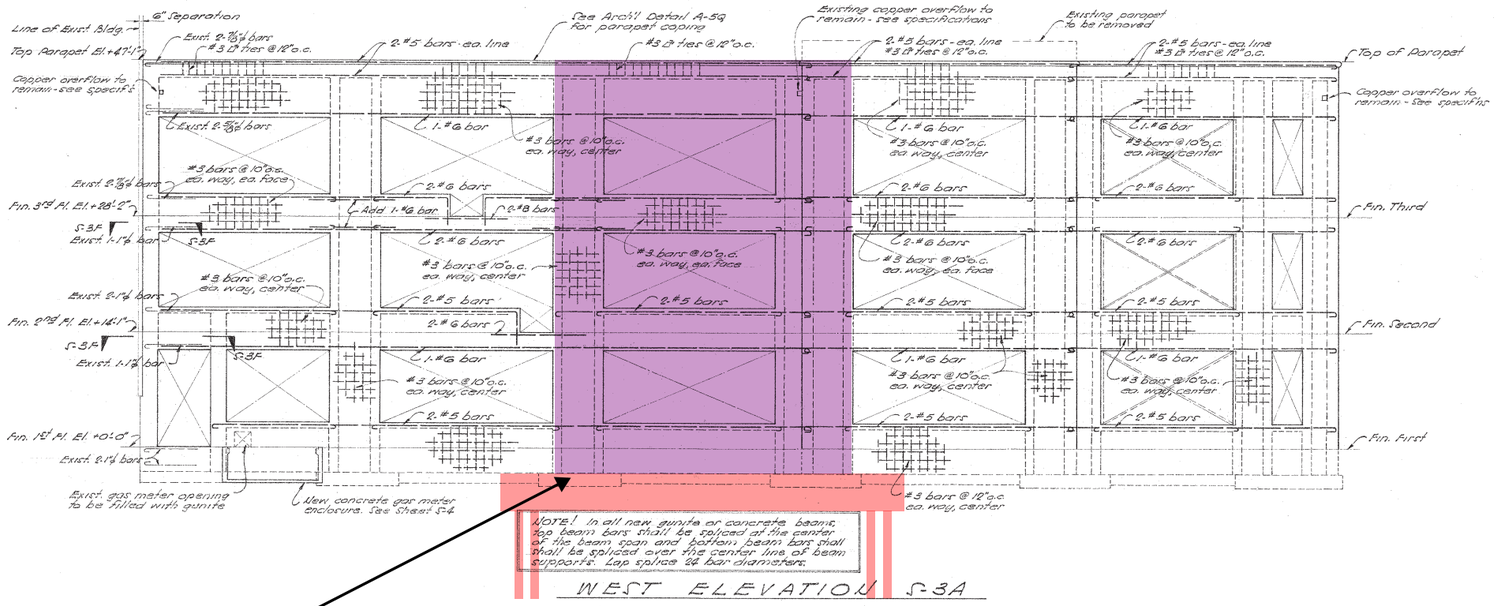
THIRD FLOOR FRAMING PLAN



ROOF FRAMING PLAN

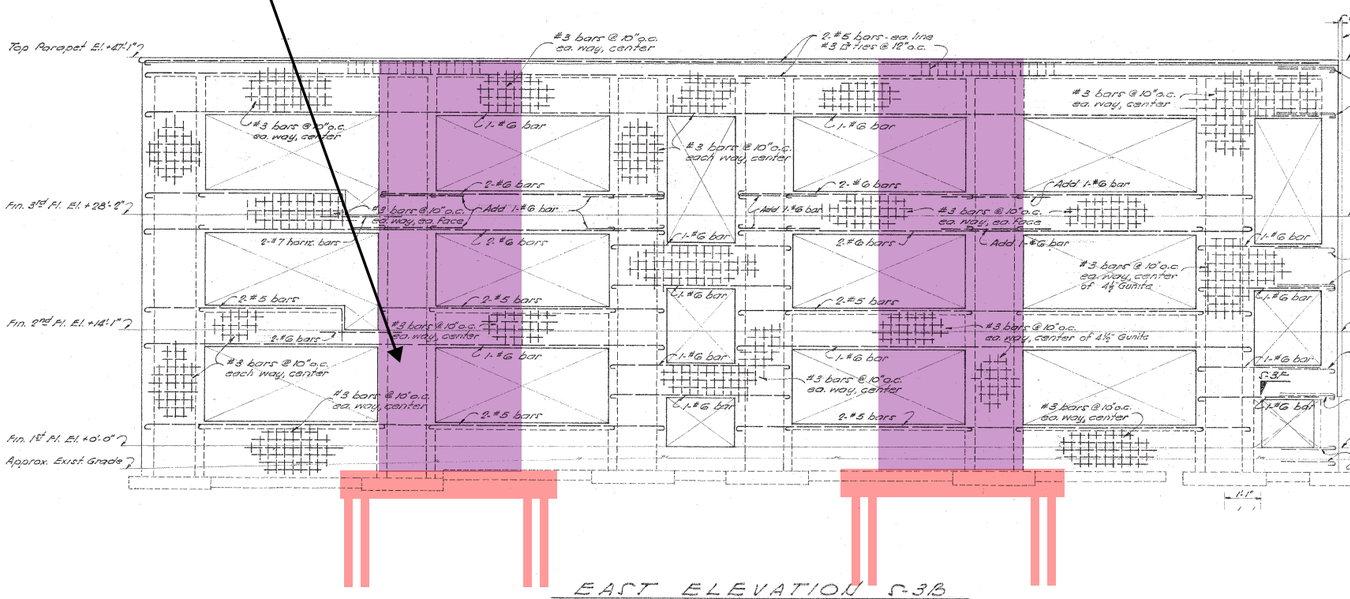


REFER TO PAGE XX FOR SCOPE DESCRIPTION LIST OF KEY NOTES



WEST ELEVATION S-3A

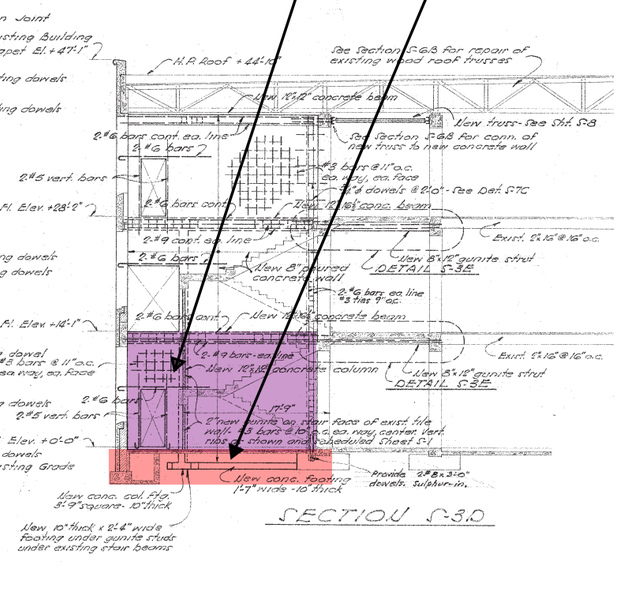
14 TYP



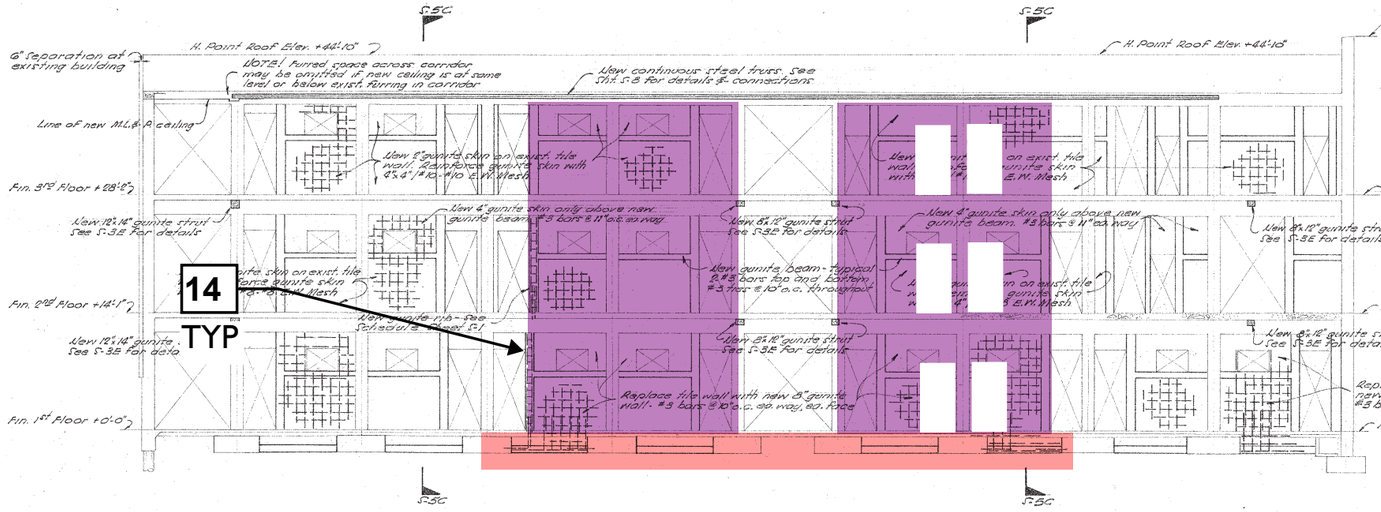
EAST ELEVATION S-3B

8 TYP

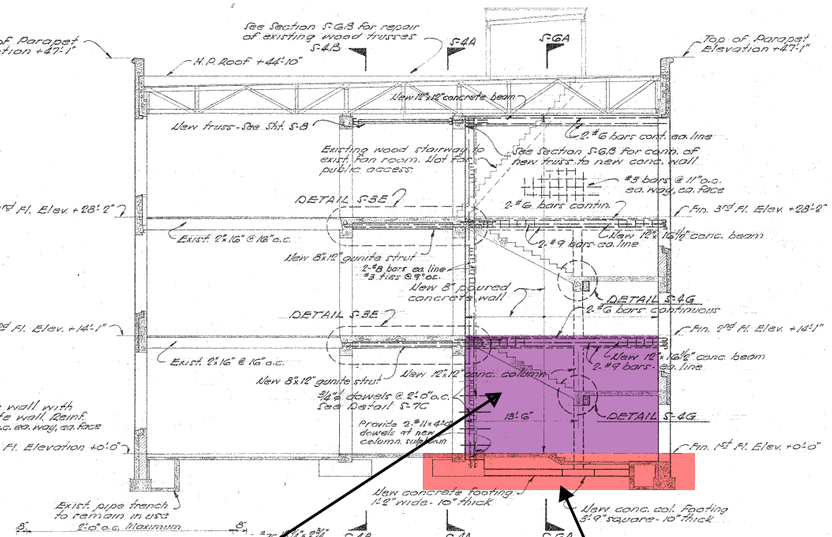
2



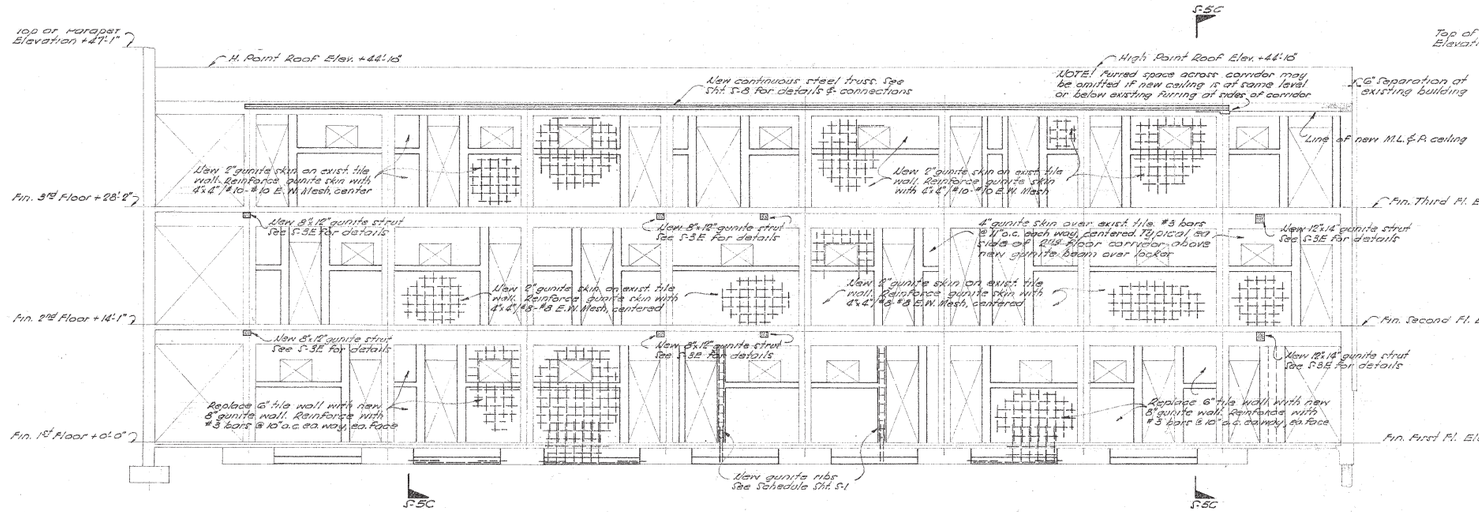
SECTION S-3.0



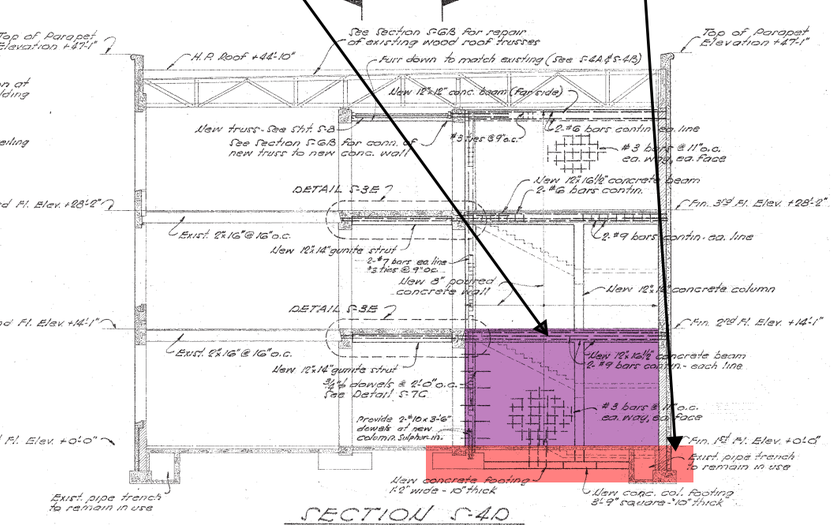
EAST CORRIDOR ELEVATION S-4A



SECTION S-4C



WEST CORRIDOR ELEVATION S-4B



SECTION S-4D

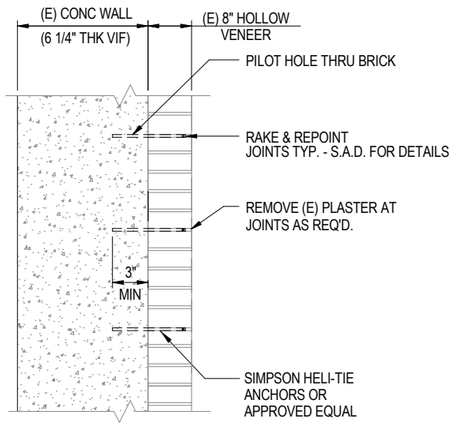
REFER TO PAGE XX FOR SCOPE DESCRIPTION LIST OF KEY NOTES

ANCHOR SPECIFICATIONS

Helical restoration anchors shall be 3/8 inch (9 mm) in diameter by 8 inches in length and manufactured of Type 304 stainless steel, such as Heli-Tie helical wall ties, as manufactured by the Simpson Strong-Tie Company (Model No. HELI37800A). Pre-drilled holes required to permit helical anchor installation shall be drilled using a rotary hammer drill set in rotation plus hammer mode and with 7/32 inch diameter carbide drill bits conforming to ANSI Standard B212.15, unless otherwise permitted or directed, in writing, by the Design Professional in responsible charge of the project. Heli-Ties shall be driven into pre-drilled holes using Heli-Tie fastener installation tool (Model No. HELITOOL37A) placed in a rotary hammer drill set in rotation plus hammer mode.

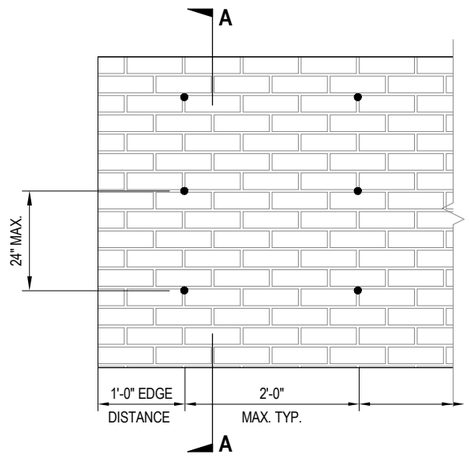
IN- SITU TESTING

1. UNDER THE SUPERVISION OF THE IOR, THE FOLLOWING ANCHOR TESTING IS TO BE PERFORMED, DOCUMENTED AND SUBMTITED TO DSA FOR ACCEPTANCE PRIOR TO THE INSTALLATION OF THE ANCHORS ON THE BUILDINGS.
2. A REPRESENTATIVE FROM THE ANCHOR MANUFACTURE IS TO OBSERVE THE INSTALLATION AND TESTING PROCEDURE.
3. CONTRACTOR TO PREPARE MOCK-UP TESTING AT PORTION OF EXISTING BUILDING WALL ACCEPTABLE BY THE STRUCTURAL ENGINEER AND ARCHITECT.
4. IN-SITU TESTING TO BE PERFORMED ON WALL ANCHORS TO REPRESENT PROPOSED INSTALLATION USING A MIMUM OF 8FTx8FT WALL.
5. INSTALL FOUR (4) ANCHORS IN A SQUARE PATTERN AS INDICATED IN THE BELOW ELEVATION. INSTALL ANCHORS PER MANUFACTURE RECOMMENDATIONS.
6. ANCHORS TO BE TENSION TESTED USING SIMPSON TESNSION TESTER MODEL HELITEST37A. ANCHORS TO BE TENSION TESTED TO A LOAD OF 410LBS. WITH A MAXIMUM DISPLACEMENT OF 0.157".
7. ACCEPTANCE CRTIERIA: NO FAILURE IN ANCHOR OR SUBSTRATE (CONCRETE).
8. IOR TO DOCUMENT AND REPORT FINDINGS OF TESTING TO DSA.



NOTE: PILOT HOLE DEPTH SHOULD BE GREATER THAN ANCHOR LENGTH BY 1" MIN.

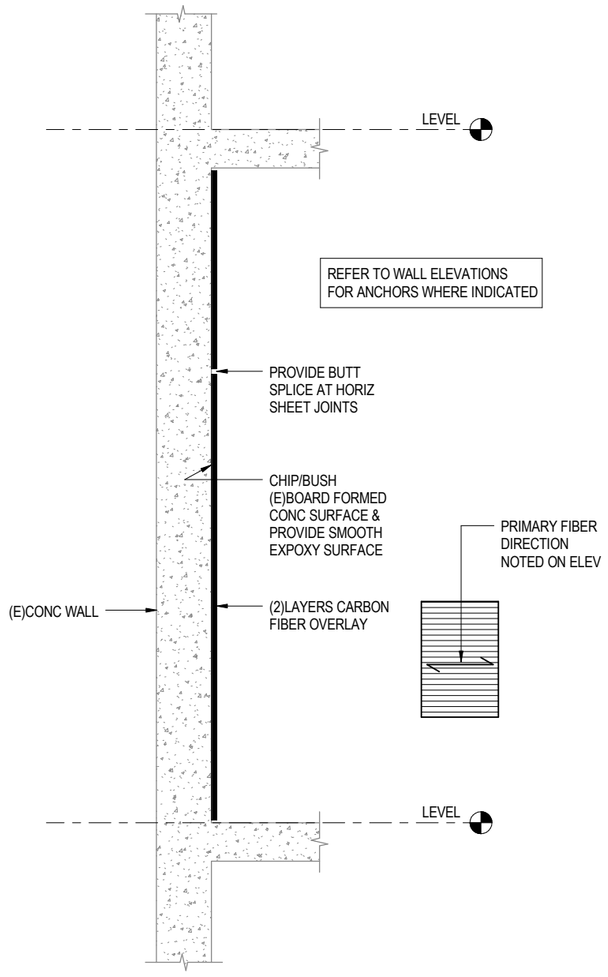
SECTION A-A



ELEVATION

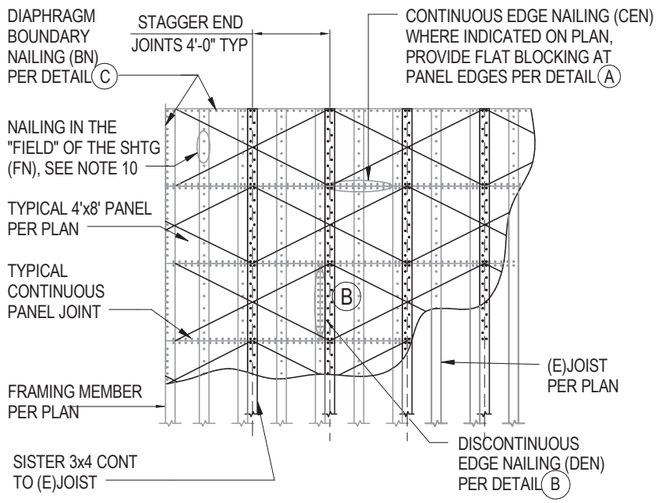
TYPICAL ANCHOR DETAIL OF (E) BRICK TILE WALLS

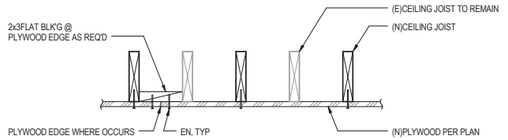
SCALE: NTS



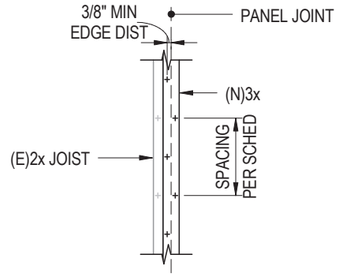
TYPICAL FIBER WRAP WALL SECTION

SCALE: NTS

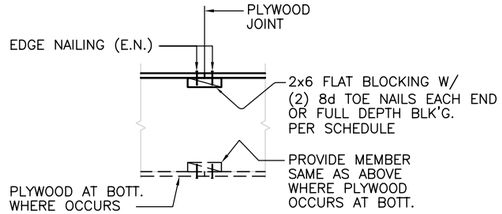




TYPICAL (N)CEILING JOIST AT (E)CEILING JOIST DETAIL

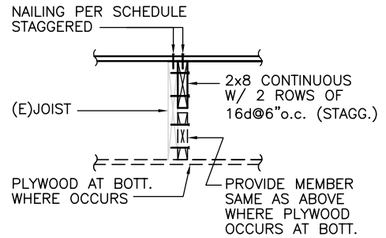


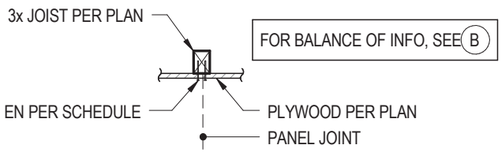
PLAN VIEW



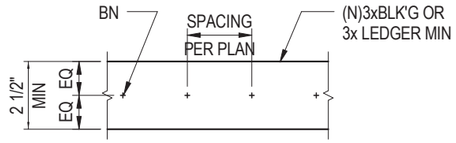
SECTION

AT ADJOINING PANEL EDGES (B)





AT ADJOINING PANEL EDGES (D)



AT BOUNDARY EDGE (C)

BLOCKED DIAPHRAGM (A)

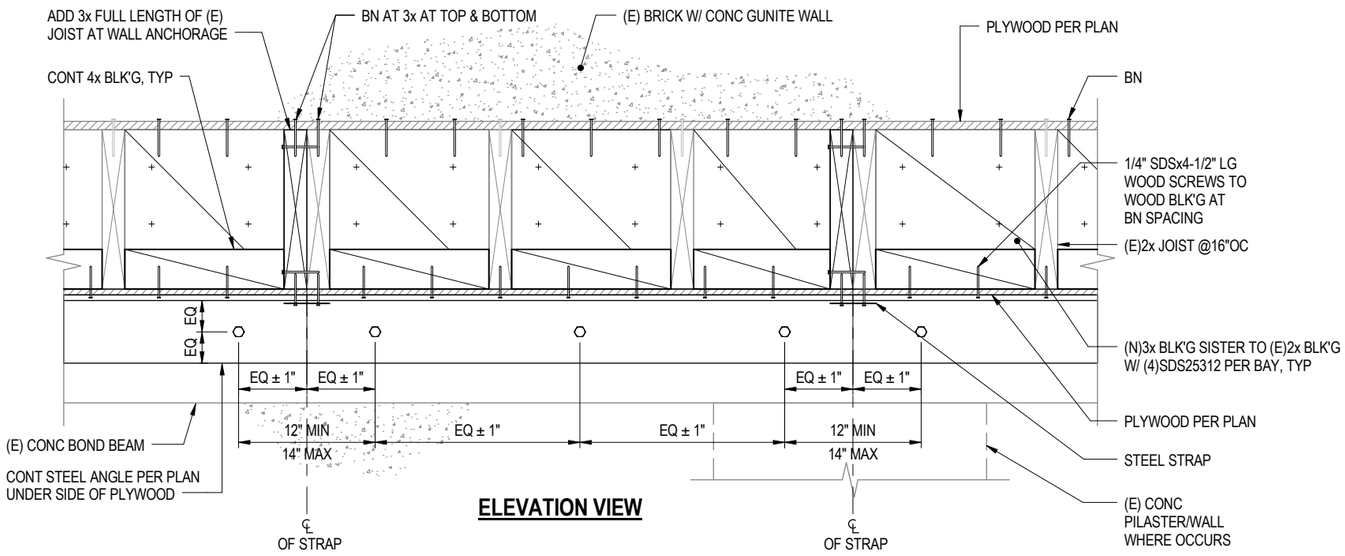
WOOD STRUCTURAL PANEL (WSP)

1. RUN LONG DIMENSION OF WSP PERPENDICULAR TO FRAMING MEMBERS.
2. NAILING SIZE AND SPACING AS NOTED ON PLAN.
3. NAILS SHALL HAVE A MINIMUM 3/8" EDGE DISTANCE.
4. LAY OUT JOISTS IN A 4 FOOT MODULE TO COINCIDE WITH WSP PATTERN.
5. USE FULLY BLOCK ALL PANEL EDGES PER DETAIL (A).
6. USE BOUNDARY NAILING AT FRAME & DRAG BEAMS.
7. PROVIDE EDGE NAILING TO INTERIOR BRACING SUPPORT.
8. WSP SHALL BE GRADE PER NIST PS1-07 AND SHALL BE INTERIOR TYPE SHEATHING C-D GRADE (STRUCT. I) WITH EXTERIOR GLUE.
9. EACH SHEET SHALL HAVE A MINIMUM AREA OF 8 SQUARE FEET WITH A
10. MINIMUM DIMENSION OF 2 FEET. PROVIDE FN AT (N)3x AT SISTERED JOIST
11. WHERE (E)2x OCCURS ONLY, (N)FN SHALL BE 3" CLEAR FROM (E) NAILING.
12. FASTENER PENETRATION IN FRAMING OR BLOCKING SHALL BE 1-1/2" MIN.

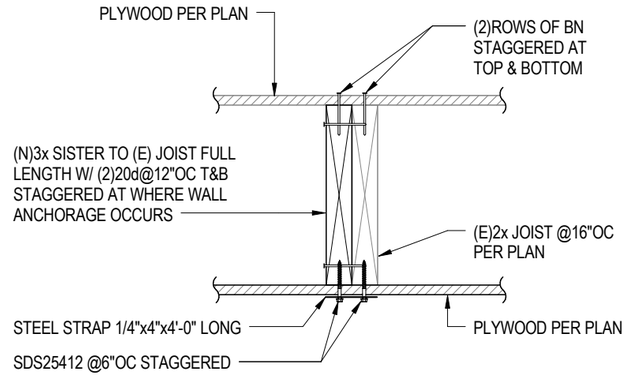
PLYWOOD DIAPHRAGM SCHEDULE

MARK (SEE KEY PLAN)	SHEAR CAPACITY (LB/FT)	WOOD PANEL THICKNESS	MIN NOMINAL WIDTH OF FRAMING MEMBER AT ADJOINING PANEL EDGES AND BOUNDARIES	LINES OF FASTENERS	NAILING (10d COMMON NAILS UNO)			REMARKS
					BN	EN	FN	
(1)	2624	15/32"	3x	1	2	3	12	REMOVE & REPLACE (E)FLOOR SHEATHING W/ (N)PLYWOOD T&B
(2)	1312	15/32"	3x	1	2	3	12	UNDERSIDE FLOOR CEILING JOIST
-								
-								

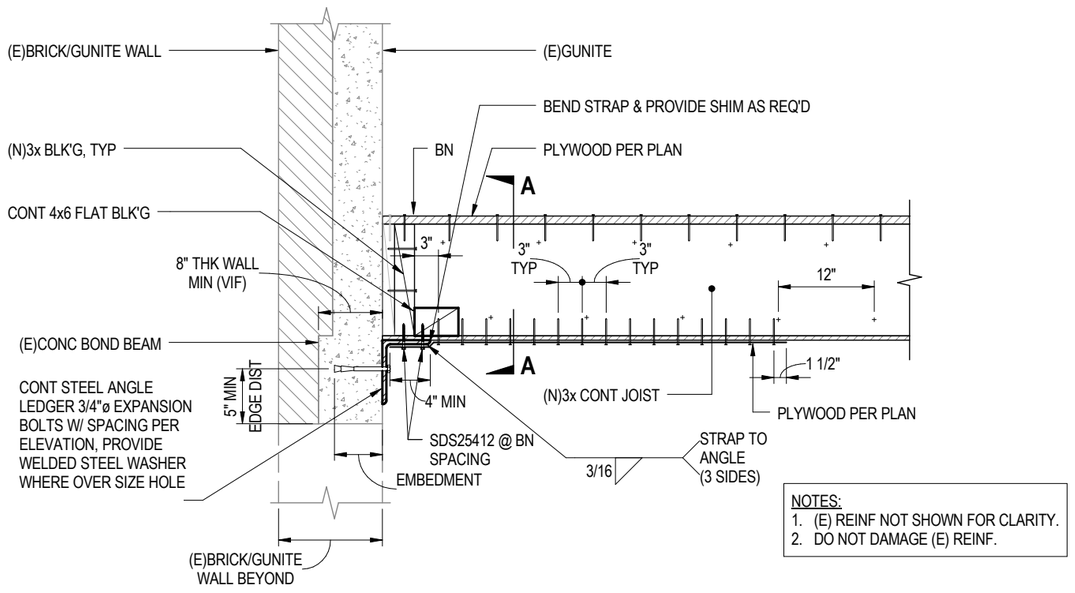
TYPICAL PLYWOOD DIAPHRAGM CONSTRUCTION DETAILS



ELEVATION VIEW

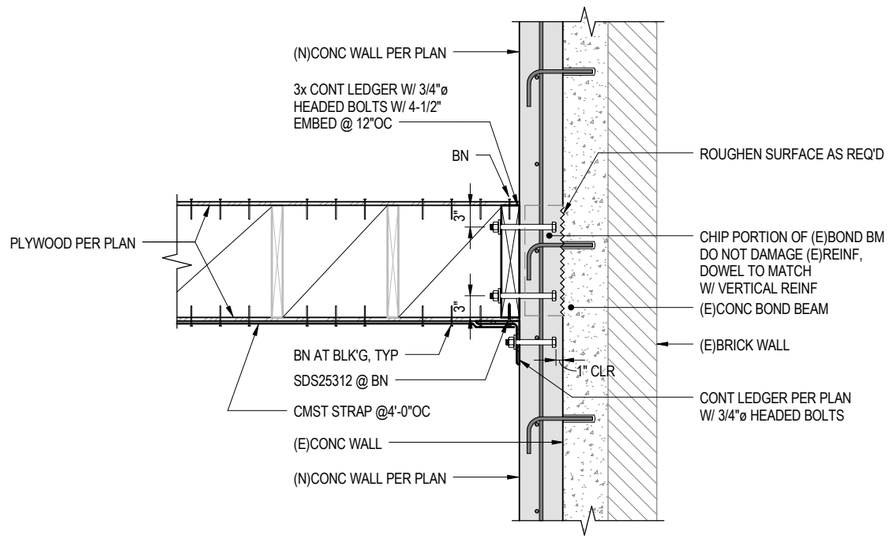


SECTION A-A

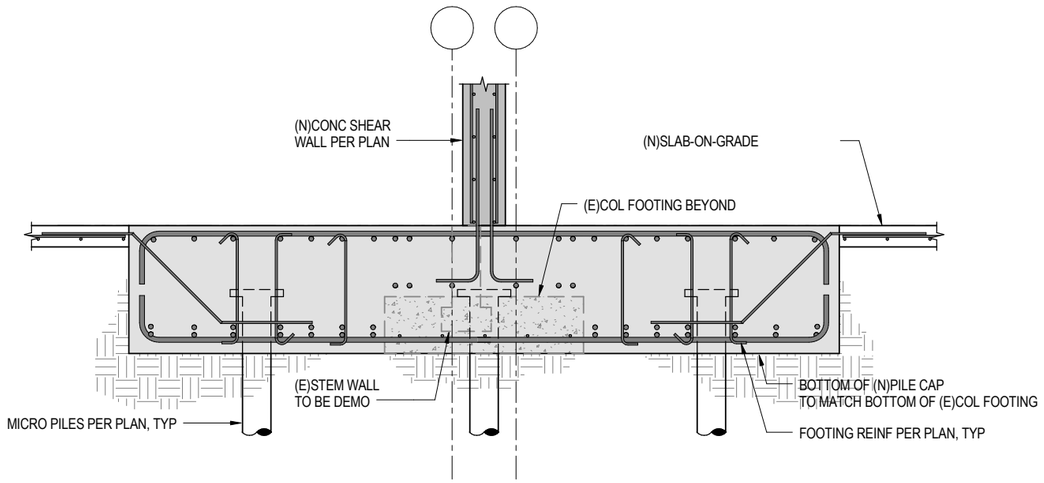


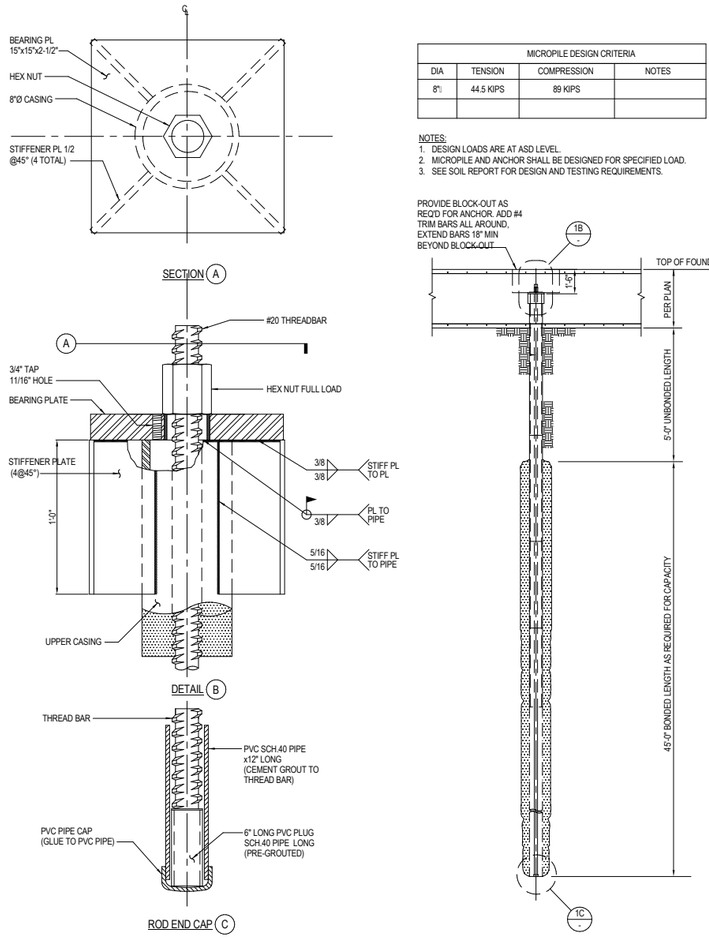
NOTES:
1. (E) REINF NOT SHOWN FOR CLARITY.
2. DO NOT DAMAGE (E) REINF.

JOIST PERPENDICULAR TO WALL ANCHORAGE RETROFIT DETAIL



JOIST PARALLEL TO WALL ANCHORAGE RETROFIT DETAIL





MICROPILE DESIGN CRITERIA			
DIA	TENSION	COMPRESSION	NOTES
8"	44.5 KIPS	89 KIPS	

NOTES:
1. DESIGN LOADS ARE AT ASD LEVEL.
2. MICROPILE AND ANCHOR SHALL BE DESIGNED FOR SPECIFIED LOAD.
3. SEE SOIL REPORT FOR DESIGN AND TESTING REQUIREMENTS.

TYPICAL ENLARGED FOUNDATION WITH MICRO-PILE

SCALE: NTS


DANGER

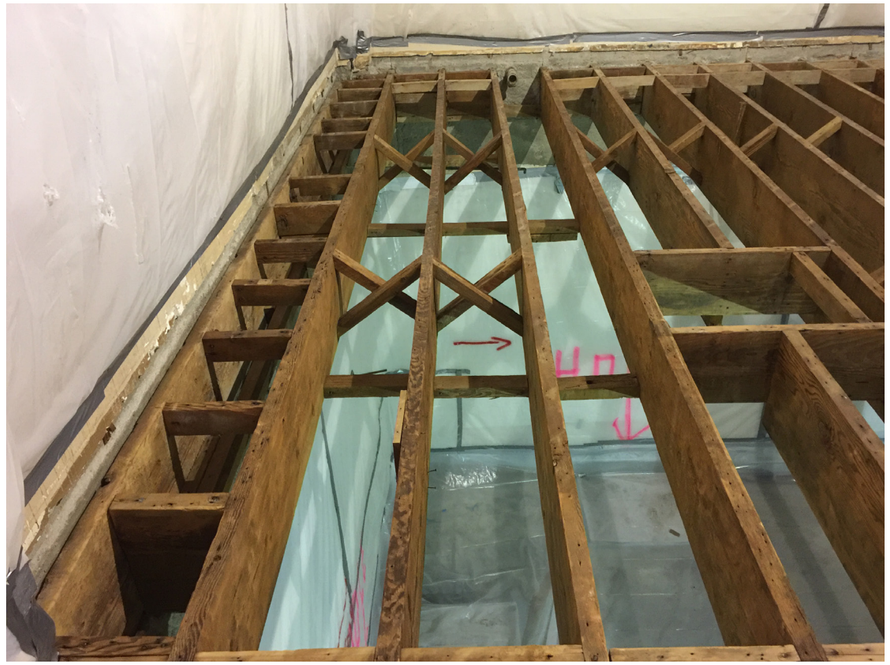





NO TOUCH







APPENDIX 6.0

Native American Heritage Commission Correspondence

NATIVE AMERICAN HERITAGE COMMISSION
Environmental and Cultural Department
1550 Harbor Blvd., Suite 100
West Sacramento, CA 95691
(916) 373-3710

July 28, 2017

Edward Paek
Los Angeles Unified School District

Sent by E-mail: Edward.paek@lausd.net

RE: Proposed Theodore Roosevelt Senior High School Comprehensive Modernization Project, Community of Boyle Heights; Los Angeles USGS Quadrangle, Los Angeles County, California

Dear Mr. Paek:

Attached is a consultation list of tribes with traditional lands or cultural places located within the boundaries of the above referenced counties. Please note that the intent of the reference codes below is to avoid or mitigate impacts to tribal cultural resources, as defined, for California Environmental Quality Act (CEQA) projects under AB-52.

As of July 1, 2015, Public Resources Code Sections 21080.3.1 and 21080.3.2 **require public agencies** to consult with California Native American tribes identified by the Native American Heritage Commission (NAHC) for the purpose mitigating impacts to tribal cultural resources:

> **Within 14 days** of determining that an application for a project is complete or a decision by a public agency to undertake a project, the lead agency shall provide formal notification to the designated contact of, or a tribal representative of, traditionally and culturally affiliated California Native American tribes that have requested notice, which shall be accomplished by means of at least one written notification that includes a brief description of the proposed project and its location, the lead agency contact information, and a notification that the California Native American tribe has 30 days to request consultation pursuant to this section. (Public Resources Code Section 21080.3.1(d))

The law does not preclude agencies from initiating consultation with the tribes that are culturally and traditionally affiliated with their jurisdictions. The NAHC believes that in fact that this is the best practice to ensure that tribes are consulted commensurate with the intent of the law.

In accordance with Public Resources Code Section 21080.3.1(d), formal notification must include a brief description of the proposed project and its location, the lead agency contact information, and a notification that the California Native American tribe has 30 days to request consultation. The NAHC believes that agencies should also include with their notification letters information regarding any cultural resources assessment that has been completed on the APE, such as:

1. The results of any record search that may have been conducted at an Information Center of the California Historical Resources Information System (CHRIS), including, but not limited to:

   - A listing of any and all known cultural resources have already been recorded on or adjacent to the APE;
   - Copies of any and all cultural resource records and study reports that may have been provided by the Information Center as part of the records search response;
   - If the probability is low, moderate, or high that cultural resources are located in the APE.
   - Whether the records search indicates a low, moderate or high probability that unrecorded cultural resources are located in the potential APE; and
   - If a survey is recommended by the Information Center to determine whether previously unrecorded cultural resources are present.

2. The results of any archaeological inventory survey that was conducted, including:

   - Any report that may contain site forms, site significance, and suggested mitigation measurers.

     All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum, and not be made available for pubic disclosure in accordance with Government Code Section 6254.10.

3. The results of any Sacred Lands File (SFL) check conducted through Native American Heritage Commission. A search of the SFL was completed for the project with negative results however the area is sensitive for potential tribal cultural resources.

4. Any ethnographic studies conducted for any area including all or part of the potential APE; and

5. Any geotechnical reports regarding all or part of the potential APE.

Lead agencies should be aware that records maintained by the NAHC and CHRIS is not exhaustive, and a negative response to these searches does not preclude the existence of a cultural place. A tribe may be the only source of information regarding the existence of a tribal cultural resource.

This information will aid tribes in determining whether to request formal consultation. In the case that they do, having the information beforehand well help to facilitate the consultation process.

If you receive notification of change of addresses and phone numbers from tribes, please notify me. With your assistance we are able to assure that our consultation list contains current information.

If you have any questions, please contact me at my email address: gayle.totton@nahc.ca.gov.

Sincerely,

Gayle Totton, M.A., PhD.
Associate Governmental Program Analyst

Native American Heritage Commission
Tribal Consultation List
Los Angeles County
7/28/2017

Gabrieleno Band of Mission Indians - Kizh Nation
Andrew Salas, Chariperson
P.O. Box 393 Gabrieleno
Covina, CA, 91723
Phone: (626) 926 - 4131
gabrielenoindians@yahoo.com

Gabrieleno/Tongva San Gabriel Band of Mission Indians
Anthony Morales, Chairperson
P.O. Box 693 Gabrieleno
San Gabriel, CA, 91778
Phone: (626) 483 - 3564
Fax: (626) 286-1262
GTTribalcouncil@aol.com

Gabrielino /Tongva Nation
Sandonne Goad, Chairperson
106 1/2 Judge John Aiso St., Gabrielino
#231
Los Angeles, CA, 90012
Phone: (951) 807 - 0479
sgoad@gabrielino-tongva.com

Gabrielino Tongva Indians of California Tribal Council
Robert Dorame, Chairperson
P.O. Box 490 Gabrielino
Bellflower, CA, 90707
Phone: (562) 761 - 6417
Fax: (562) 761-6417
gtongva@gmail.com

Gabrielino-Tongva Tribe
Charles Alvarez,
23454 Vanowen Street Gabrielino
West Hills, CA, 91307
Phone: (310) 403 - 6048
roadkingcharles@aol.com

This list is current only as of the date of this document. Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 6097.98 of the Public Resources Code and section 5097.98 of the Public Resources Code.

This list is only applicable for consultation with Native American tribes under Public Resources Code Sections 21080.3.1 for the proposed Theodore Roosevelt Senior High School Project, Los Angeles County.