Los Angeles Unified School District
FACILITIES SERVICES DIVISION
Together We Change the Face of L.A.

Facilities School Maintenance and Operations Repair & Construction Safety Standards

LAUSD FACILITIES SERVICES DIVISION SAFETY POLICY STATEMENT

Safety is the Los Angeles Unified School District's (LAUSD) first priority for all contractors, vendors, staff, employees and the public when performing construction, maintenance and operations, and related support activities at all LAUSD sites.

Every person is entitled to a safe and healthful place in which to work. Establishment and maintenance of safe environments are the shared responsibility between the District, contractors, staff, and vendors at all levels of the program. Reasonable efforts will be made in achieving the goal of zero incidents preserving the health and welfare of people and the environment.

LAUSD promotes safety and health as an integral part of the District's sustainability initiatives and strives to include all entities with an active interest in the success of education and community services for each city, township and neighborhood that LAUSD serves.

As an employer, educator and business partner, LAUSD provides opportunities for contractors, vendors, and the public to actively participate in the LAUSD safety and health training activities through multiple venues including: the We-Build programs; various forums including conferences, meetings, trainings and presentations. LAUSD encourages all interested parties to participate in safety by supporting the efforts to build modern schools and facilities designed to educate and inspire future generations.

The Los Angeles Unified School District leadership understands that the success of the safety at LAUSD Facilities Services Division, Maintenance and Operations, and Construction Safety is dependent on the partnerships with our contractors, employees, and the local communities. It is the expectation of LAUSD that our partners share our values for providing a safe and healthful working environment which includes: promoting regulatory compliance with regard to Safety, Health and the Environment; (SHE); identifying and prioritizing risks; and implementing proactive controls and Best Management Practices (BMPs) to reduce risk to lowest level reasonably achievable.

LAUSD believes that all incidents and accidents are preventable. Safety is the responsibility of everyone while on LAUSD sites and accountability lies with line management.

Safety is a line management function and line management shall ensure that the tenets of the LAUSD Facilities Services Division Safety and Health program are effectively implemented.

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1. LAUSD SAFETY PHILOSOPHY

'All Incidents and Injuries are Preventable"

LAUSD is dedicated to the principle that all Construction, Maintenance and Operations, and related activities may be performed safely without incidents through proper planning, engineering, education, training, and proper supervision.

Once the need for Construction or Maintenance and Operation (M &O) activities has been identified, LAUSD will plan the nature and scope of the work based on best available information including, the various mechanisms established through Federal, State, Local and regulatory agencies as well as National Consensus Standards and identified and agreed upon Best Management Practices (BMPs). Safety will be integrated into all planning activities including: site conception and design; construction activities; and maintenance and operations.

Safety program integration of all stakeholders including LAUSD employees', contractors, Construction Management firms, Vendors, the public, LAUSD officials and labor unions is imperative to ensure all personnel may have input into the LAUSD-Facilities Service Division (LAUSD-FSD) safety program to ensure the program's sustainability...

In the design process, the main goal should be to turnover a site that is regulatory compliant and can be safely maintained by LAUSD maintenance and operations personnel once the work is completed.

LAUSD has the responsibility for implementing processes to ensure sites are completed in a manner that strives to prevent accidents. These processes include ensuring that only qualified CM firms, Contractors, and Vendors are utilized for work-related activities. Depending upon the size and scope of the site, the oversight for each site may include: a CM firm; General Contractor (GC), subcontractors, vendors, consultants and staff to implement safety at each site. LAUSD or its contracted representative has responsibility for safety at the site project to include: initiating, maintaining, supervising and enforcing all safety precautions and programs in connection with the performance of the contract. In addition, all Contractor employees are expected to work safely and to contribute to the safety of others. This is a critical responsibility for everyone working on LAUSD School Modernization and Repair, New Construction, and M and O Sites.

Accident/incident prevention is viewed as an integral component of the construction process along with productivity and quality, all of which will have a positive impact on reducing site costs. The community also benefits directly from accident prevention efforts when potential damage to the environment, property or injuries to members of the community is effectively mitigated.

All incidents can be prevented in part by eliminating hazards and unsafe behaviors. But where this is not practical, safety engineering controls, administrative controls, proper training,, safe operating procedures and personal protective equipment can be used to safeguard against the hazards,

PROGRAM OBJECTIVES

The Safety Standards contained in this document were developed as minimum guidelines to eliminate or reduce hazards and risk associated with maintenance and construction activities within LAUSD. These

standards shall not conflict with any negotiated governing document such as the General Conditions or PSA agreement provided the agreements do not pose a negative impact to safety or the environment.

However, LAUSD, its authorized representatives, and the OCIP Administrator and Insurer will neither assume nor relieve any entity of their direct responsibility for the safety and health of their employees, the protection of students, faculty, visitors and the public and the protection of equipment, property and the environment.

LAUSD, their authorized representatives and the construction management teams will monitor these Safety Standards and review the efforts of all contractors', subcontractors', and staff in the performance of the following:

- Ensuring a safe and healthy environment for LAUSD students, faculty and the public during construction and maintenance activities;
- Minimizing conflict, by communication with the Owner Authorized Representative (OAR), LAUSD Safety and Construction Management to coordinate work and keep school administration informed about all construction schedules;
- Implementing and including safety planning/pre-planning protocol in all site management and Contractor progress and/or safety meetings. The Job Safety Analysis/Job Hazard Analysis (JSA/JHA) format shall be utilized to assist with safety pre-planning;
- Provide safety audits/inspections to *identify, prioritize, and correct* non-compliance conditions;
- Protect public and private property adjacent to all construction site work zones;
- Provide a safe work environment for all workers by implementing and enforcing compliance with the following training protocol:
    1) New hire safety orientations
        i. Mandatory LAUSD New Hire Orientation Checklist must be maintained for each employee on site.
        ii. In addition, the OCIP manual requires the MPN letter be signed by the employee upon hire and retained on site;
    2) Toolbox/tailgate safety meetings;
    3) Safety training, i.e., hazard communication, fall protection, equipment operations, trenching, shoring, confined space entry, etc;
    4) Mandatory personal protective equipment (PPE) use and enforcement.
    5) Mandatory employee compliance with the Contractors' and LAUSD Safety Standards.
- Injury reporting and record keeping maintaining up-to-date accident experience and trend analysis;
- Using accident investigation and safety inspection information to correct unsafe acts and conditions identified in order to eliminate or reduce the probability of additional losses;

- Informing the OAR and/or the LAUSD Safety staff of any visit from a regulatory agency such as Cal-OSHA, OSHA, EPA, AQMD or other regulatory agency.
- Conflicts shall be brought to the attention of the OAR and/or LAUSD Safety. The OAR and/or LAUSD Safety reserve the right to issue a final determination for conflicts.
- **During the competitive and/or negotiated bid process, Contractors shall incorporate the most protective safety requirements as found in Federal, State, Local regulatory, and National Consensus standards such as ANSI/ASSE, NFPA, NSF, CGA, NIST, ADA or other relevant and applicable standards. It is the bidder's responsibility to be knowledgeable of all EHS regulatory and National Consensus Standards.**
- **No change order for safety purposes shall be approved without the review and recommendation of the construction safety director in conjunction with the site management team.**

2. REGULATORY COMPLIANCE

2.1 CONFLICTS BETWEEN SAFETY CODES AND STANDARDS

Unless otherwise specified in the LAUSD School Repair and Construction Site Safety Standards and/or the Contractors' Safety Standards, Contractors shall comply with all applicable provisions of Federal, State, and local laws, ordinances, codes, regulations and other contract document criteria pertaining to or affecting safety and health, including but not limited to the Cal/OSHA Safety Orders (California Code of Regulations, Title 8 and Title 29 Code of Federal Regulations (29 CFR)) and National Consensus Standards whether or not incorporated by reference in this manual.

In all cases the most protective safety rules, policies, procedures and/or standards will apply regardless of source. LAUSD Safety in conjunction with LAUSD-FSD management reserves the right to impose more stringent requirements as may be necessary depending upon the nature of the hazards and the associated risk to the district, employees, the public and the environment.

2.2 DEFINITIONS

The following titles may not reflect the actual titles in use by all entities on LAUSD sites and therefore do not have any force or effect beyond the LAUSD Safety Standards. Due to such differences in nomenclature between LAUSD and contractors, the following are used throughout the LAUSD Safety Standards to establish the functional framework for compliance with LAUSD job site safety protocol.

Authorized Person: (In reference to an employee's assignment) Selected by the Contractor for that purpose.

Competent Person: One who is qualified to identify existing and predictable hazards in the surroundings or working conditions which are unsanitary, hazardous, or dangerous to employees, and who has the authorization to take prompt corrective measures to eliminate them?

Contractor: The entity with which LAUSD enters into this contract.

Contractor/Company Safety Plan (C/CSP): The Contractors/Company Safety Plan prepared in accordance with the requirements of this document and any other applicable LAUSD contract documents. The C/CSP will include the Site Specific Safety Plan and IIPP.

Contractor's Site Manager (CPM): The senior management person for the Contractor with responsibility for execution of the contract, including compliance with the LAUSD Safety Standards. The CPM is responsible and accountable for the development, implementation and monitoring compliance with the Contractor's Site-Specific Safety Program.

Contractor's Site Superintendent (CPS): The senior on-site Superintendent for the Contractor with responsibility for execution of the contract, including compliance with the LAUSD Safety Standards. In some cases, the actual on-site representative may be an Assistant Superintendent or a Foreman. In such cases, this is the applicable person when the CPS is referenced. The CPS is responsible and accountable for project implementation and enforcement of the Contractor's Site-Specific Safety Program and the LAUSD Safety Standards.

Contractor's Safety Manager (CSM): Qualified Contractor safety management representative assigned responsibility for drafting and monitoring compliance with the Contractor's Site-Specific Safety Program and the LAUSD Safety Standards, including ongoing identification and correction of hazards.

Contractor's Safety Representative (CSR): Qualified on-site Contractor employee assigned the responsibility of implementing and monitoring compliance with the Contractor's Site-Specific Safety Program and the LAUSD Safety Standards, including ongoing identification and correction of hazards.

Employee: Person employed by a Contractor as defined by this section.

Employer: Firm or entity that has employees working on site. The term employer includes the contractor and subcontractors of all tiers. For the purposes of the safety standards, vendors, suppliers, and service providers on the site for the furtherance of the site are covered by this definition and are subject to the provisions of the LAUSD Safety Standards even though they are not covered by the OCIP.

IIPP (Injury Illness Prevention Program): In California every employer has a legal obligation to provide and maintain a safe and healthful workplace for employees, according to the California Occupational Safety and Health Act. An Injury and Illness Prevention Program (IIPP), is required for every California employer, employers with 10 or more employees must have a written IIPP. The Injury and Illness Prevention Program must be a plan that includes procedures and is put into practice. These elements are required:

- Management commitment/assignment of responsibilities;
- Safety communications system with employees;
- System for assuring employee compliance with safe work practices;
- Scheduled inspections/evaluation system;
- Accident investigation;
- Procedures for correcting unsafe/unhealthy conditions;
- Safety and health training and instruction; and
- Recordkeeping and documentation

Insurance Carrier (IC): Principle companies providing the coverage for Workers' Compensation, General Liability, Excess Liability, and any other insurance coverage.

LAUSD Safety Engineer: LAUSD Safety Engineer(s) responsible for monitoring, coordinating and auditing the Contractor's compliance with all applicable safety, health, and environmental standards defined in the contract documents.

Loss Control Consultant (LCC): Insurance Administrator or Insurance Carrier Safety representative(s) providing technical construction safety expertise, conducting loss control safety audits, and performing other pertinent construction safety tasks on behalf of LAUSD.

Los Angeles Unified School District (LAUSD): The Owner.

OCIP Administrator: The party responsible for brokering and administering the OCIP Insurance Program.

OEHS: Office of Environmental Health and Safety – has primary responsibility for the safety and health of all employees, including Facilities Maintenance and Operations, LAUSD structures, property and grounds not covered by the construction Owner Controlled Insurance program (OCIP).

OSHA: OSHA as used in the context of these Safety Standards refers to the State or Federal agency with jurisdiction over workplace occupational safety and health at the site.

Owner: Los Angeles Unified School District (LAUSD).

Owner's Authorized Representative (OAR): The Owner's Employee or agent with overall responsibility for the site.

Owner Controlled Insurance Program (OCIP): Owner's (LAUSD) wrap-up insurance program which provides insurance coverage for eligible and enrolled Contractors, and Subcontractors of any tier, working on LAUSD construction site(s). The Owner identifies OCIP participants.

Qualified Person, Attendant or Operator: A person designated by the Contractor who by possession of a recognized degree, certificate, or professional stands, or who, by extensive knowledge, training and experience, has successfully demonstrated their ability to solve or resolve problems relating to the subject matter, the work, or the site.

Site-Specific Safety Program (SSSP) [IIPP which will apply or be referenced in the Standards]: The Contractor's Site-Specific Safety Program prepared in accordance with the requirements of this document and the Contracts.

Subcontractor: Firm or other entity awarded work by a Contractor on a particular construction site. Subcontractor as used herein shall apply to all tiers of Subcontractors, as well as vendors and service providers performing work for the benefit of the Contractor. For the purposes of the LAUSD Safety Standards, vendors, suppliers, and service providers on the site for the furtherance of the site are covered by this definition and are subject to the provisions of the Safety Standards even though they are not covered or may not be enrolled in the OCIP.

Subcontractor's Site Manager (SPM): The senior management person for the Subcontractor with responsibility for execution of the contract, including compliance with the LAUSD Safety Standards. The SPM is responsible and accountable for development, implementation and monitoring compliance with the Subcontractor's Site-Specific Safety Program and LAUSD Safety Standards.

Subcontractor's Site Superintendent (SPS): The senior on-site management person for the Subcontractor with responsibility for execution of the contract, including compliance with the LAUSD Safety Standards. In some cases, the actual on-site representative may be an Assistant Superintendent or a Foreman. In such cases, this is the applicable person when the SPS is referenced. The SPS is responsible and accountable for site project implementation and enforcement of the Subcontractor's Site-Specific Safety Program and LAUSD Safety Standards.

3. EMERGENCY PROCEDURES

3.1 JOB SITE EMERGENCIES (FIRE, ACCIDENTS/INCIDENTS, & MEDICAL EMERGENCIES)

All job site emergencies must be reported immediately to the *LAUSD OAR,* the Contractor (if applicable) and LAUSD Safety. M and O personnel must use the procedures outlined by the LAUSD Office of Environmental Health and Safety (OEHS) most current reporting system for all emergencies.

Job Site Emergency Telephone Numbers shall be posted on the job site bulletin board and, where applicable, in every Contractor's job site office trailer.

A local street map clearly identifying the site and active entrances/exits shall be maintained and posted on the job site bulletin board next to the Emergency Telephone Numbers.

All first line supervisors and construction management personnel (foremen and above) shall be trained in First Aid, CPR and use of an Auto External Defibrillator (AED). AEDs shall be maintained on site for all construction sites that will exceed 25 personnel at anytime during the project with a projected 911 paramedic response time of more than 4 minutes.

In the event that there are no hard-wire ("land line") telephones available at the site, the contractor shall identify and post an alternate phone number (in addition to 911) to be used to contact emergency service providers via cell phone. This policy is necessary since dialing 911 on a cell phone does not always provide a direct connection to local Emergency Services.

3.2 FIRE

Call 911 or the Local Fire Department

- At minimum, provide the street address and location (floor/area) of the fire.

In case of fire in any building:

- Evacuate the immediate area,
- Activate the fire alarm system (if available), and
- Call the Fire Department
- Call/notify the OAR and/or LAUSD Safety

For fire outside of buildings:

- Evacuate the immediate area, and
- Call the Fire Department.
- Call/notify the OAR and/or LAUSD Safety

3.3 MEDICAL EMERGENCY

Render first aid promptly to the injured employee. Call 911 or the local Emergency Medical Services. Call or report the job site medical emergency immediately to the Contractor. A medical emergency includes,

but is not limited to: unconsciousness; chest pain; difficulty breathing; excessive bleeding; acute trauma related to neck and/or spine and any other illness or injury deemed to require paramedic or emergency response medical professionals. WHEN IN DOUBT, CALL 911 OR OTHERWISE INITIATE THE EMERGENCY RESPONSE PROTOCOLS.

The preferred provider for serious traumatic injuries is: Consult the Job Site Postings Notice, also reference the LAUSD Insurance Manual and Accident Reporting and Investigation Procedures in the LAUSD Safety Standards.

The designated provider for non-life threatening or minor injuries requiring medical treatment is: Consult the Job Site Posting Notice, also reference the LAUSD Insurance Manual and Accident Reporting and Investigation Procedures in these Safety Standards. Call/notify the OAR and LAUSD Safety.

3.4 EMERGENCY CONTACT LIST

Each Contractor shall provide LAUSD, OAR and LAUSD Safety with an Emergency Contact List.

- This list shall include 24-hour contact information for key site personnel.
- The Contractor shall maintain this list throughout the duration of the contract, and provide a revised copy to all parties when made necessary by changes to personnel or their contact information.

3.5 EMERGENCY ACTION/EVACUATION PROCEDURES

Construction activities which could interfere/compromise LAUSD emergency action/response protocol to include emergency evacuation procedures and routes will require coordination between all Contractors involved, LAUSD representatives, school administration and emergency response personnel to determine if alternate emergency evacuation protocol will be required.

Contractor shall know the location of school evacuation routes, exits, gates and assembly areas utilized by school/personnel, students and the public and shall ensure that during construction work activities all evacuation routes, exits, gates and assembly areas are always accessible, open and clear.

When required or warranted, Contractors will post signage on temporary fencing used during construction to identify evacuation routes to ensure LAUSD Staff, Students and the public know the correct routes.

LAUSD school emergency action/evacuation procedures (when required) will be integrated with the Contractor's emergency action plan.

Contractors will know the location of and will not block access to the school's emergency supplies/equipment (first-aid kits, fire extinguishers, etc.).

In the event of an emergency scenario, Contractors will provide, inspect and maintain on site first-aid, fire extinguishers, etc. Contractors will, if partial, avoid the use of LAUSD emergency supplies/equipment. If an emergency situation arises which warrants the use of LAUSD emergency supplies, equipment the Contractor will expedite the used supplies/equipment so it is available if needed by LAUSD representatives.

Contractors will know the location of utility shut-offs.

The General/Prime Contractor is responsible for the development of a site-wide Emergency Action Plan that shall take into account all potential emergency situations.

- Each Contractor shall develop a written job-specific Emergency Action Plan that will take into consideration all potential emergency situations specific to their scope of work.
- This Emergency Action Plan shall be shared and coordinated with all Contractors and LAUSD representatives on site. Job site personnel will be trained in the emergency procedures incorporated in the Emergency Action Plan.
- The Emergency Action Plan shall be revised throughout the course of the project to reflect changed conditions.

The Emergency Action Plan shall be maintained at the site, and available for review upon request.

At minimum, the Emergency Action Plan shall contain:

- Site map
- Street map of immediate area showing Site location that clearly identifies one-way and dead-end streets.
- Building Plan, including a plan for each floor
- Emergency notification list
- Emergency notification procedures
- Evacuation procedures
- Evacuation route(s)
- Evacuation refuge area
- How Employees will be trained on the contents of this plan
- Intervals for refresher training

4. EMPLOYEE CONDUCT

All employees on the site must maintain professional behavior at all times. Horseplay, fighting, any type of harassment or discrimination, possession or use of alcohol and/or unauthorized drugs, possession of firearms and gambling are not allowed and will result in immediate removal of the Contractor employee(s) from the site.

Schools are not like other job sites! Control noise, eliminate profanity and use proper refuse disposal. TOBACCO USE IS PROHIBITED ON ALL LAUSD PROPERTY! LAUSD PROPERTIES ARE DRUG FREE WORKPLACES!

School restroom facilities are off limits to Contractor personnel.

4.1 NEWS MEDIA AND COMMUNICATION

The Contractor shall refer questions from news media personnel (radio, television, newspaper) to the *LAUSD Public Relations Spokesperson*.

The Contractor and its employees must refer all inquiries from the news media (radio, television, newspaper) pertaining to job site incidents/accidents to the LAUSD *Public Relations Spokesperson* or their designated representative.

4.2 CONSTRUCTION VEHICLE PARKING

Contractors must park in authorized areas only. Do not block or obstruct intersections, traffic or fire lanes, fire hydrants, driveways or parking lot entrances. Do not park in red, yellow or green zones marked on curbs. Offending vehicles may be towed without notice at the vehicle owner's expense.

Private vehicles are not permitted on the job site except in authorized/designated areas.

4.3 IDENTIFICATION

All Contractors and Subcontractor employees must have a company photo ID listing their name, company, site identification, ID issue date and tracking number.

All Contractor employees will wear shirts or hard hats which display the Contractor's name and/or logo.

Contractor equipment and vehicles entering and/or working at the site must have the Company name/identification clearly displayed on the vehicle.

4.4 ASSIGNED WORK AREA(S)

Contractors and Subcontractors are confined to their assigned work areas. Wandering throughout the job site is strictly prohibited.

5. LAUSD SCHOOL CONSTRUCTION AND RENOVATION PUBLIC SAFETY REQUIREMENTS

The protection of LAUSD staff, students and the public is a priority and will be an integral and required component of every Contractors Site-Specific Safety Plan. Contractors will implement and enforce "best practices" safety guidelines that are specific to potential public exposure hazards affiliated with their scope of work. In addition to the requirements in this section, ANSI A10.34 (MANDATORY) shall be followed.

Both new school construction and existing school renovation job sites are closely monitored by parents, LAUSD staff and the community therefore Contractor compliance with all applicable safety criteria defined in these Safety Standards, Federal, State and local and National Consensus standards, regulations, ordnances and laws, is mandatory.

LAUSD CONSTRUCTION PUBLIC SAFETY REQUIREMENTS

Be aware of your work environment:

- Determine Lead and Asbestos content of building materials PRIOR to any construction/demolition activities.
- It is the Contractor's responsibility to review both the Asbestos Survey/Inspection Report and the Lead Survey/Inspection Report prior to commencement of work and take the necessary steps to ensure the safety of students, faculty/staff, the public and Contractor employees.
- Contractors are responsible for hazardous waste disposal per contract specifications.
- Schedule dusty, noisy or odorous activities with School Administration and the OAR/IOR in order to avoid disrupting normal school activities.
- Install barricades when needed to protect students and faculty/staff from construction activities.
- Keep equipment and extension cords away from students. [Equipment and extension cords should not be stored or utilized in areas where students/faculty is present.]
- All exits, emergency exits, must be clear, free and unobstructed. Panic hardware must remain unobstructed, functional and intact.
- All alarm systems must remain operable unless approval has been granted by the designated/authorized LAUSD representative and Authority Having Jurisdiction (AHJ).
- Fire watches must be maintained at all times during hot work activities.
- Escort deliveries onto the school site or make deliveries when students and faculty/staff are not present.
- MSDS sheets for all chemicals must be available on the job site. Hazardous materials must be stored in designated/approved secured area(s) a minimum of 50 ft. from school buildings and 50 feet from adjacent neighboring properties and stored in a locked

properly designed hazardous storage facility or containment. For roofing jobs block off air intakes or shut off air conditioners to prevent fumes from entering buildings.

- Any construction activities that impact neighbors adjacent properties such as fence removal or installation of fencing on neighboring properties, excavation or undermining of sidewalks, or any other activity that may pose a direct impact to the property or occupants of the neighbors shall be reviewed by the construction safety department authorized representative.

In order to ensure that the above safety protocol is implemented and followed, public safety pre-planning will be incorporated into all construction site management meetings.

Additional public safety requirements are summarized in the applicable sections throughout these Safety Standards.

5.1 PEDESTRIAN HAZARDS

At the construction site, areas for public pedestrian traffic will be clearly marked at all times.

Public pedestrian traffic areas will be maintained so that slipping, tripping and falling hazards are reduced.

Non-level surfaces will be delineated with high-visibility markings, signs or notices.

Stairs or ramps will have handrails on both sides.

Elevated areas will have standard guardrails.

Building exits, sidewalks and areas accessible to pedestrian traffic which are adjacent to overhead construction work areas shall be provided with falling object protection and/or barricaded/fenced a minimum of 10 feet from the falling object exposure.

The Contractor will monitor public ingress and egress routes to make sure that construction operations do not block stairways, doors, entrances, and exits, paths of travel, and gates or hallways.

When construction activities may require closing or blocking any stairways, doors, exits, entrances, gates, paths of travel or hallways the Contractor will notify LAUSD school administration and the OAR in advance so alternate access/egress routes which comply with all applicable safety standards, codes, ordinances and regulations can be identified.

Contractors shall know the location of school evacuation routes, exits and assembly areas utilized by school personnel, students, and the public and shall ensure that before, during and after construction work activities all evacuation routes, exits, gates and assembly areas are accessible, open and clear.

When required or warranted Contractors will post signage on temporary fencing used during construction to identify evacuation routes to ensure LAUSD staff, students, and the public will know the correct paths of travel.

Special attention will be given to the emergency evacuation of buildings, structures and jobsites and how the construction may affect this evacuation.

5.2 LIGHTING

Lighting and welding flash on the jobsite that may project or illuminate areas offsite will be directed or shielded so that they do not create a public hazard.

Walking surfaces and other public areas affected by the construction site will be adequately illuminated.

5.3 RADIATION

Operations that may produce public radiation exposure hazards will be controlled and shielded.

The area must be barricaded to prohibit public access.

Signage that designates what type of radiation exposure may cause public harm or injury will be clearly displayed.

Ionizing and non-ionizing radiation hazards, including, x-ray, laser, microwaves, ultraviolet and infrared radiation, welding rays or high-radiant heat sources and exposure, will be considered. If the site is located near a nuclear power facility, additional coordination for the evacuation must be considered.

5.4 EQUIPMENT/MACHINERY/VEHICLES

All equipment or devices, machinery and vehicles shall be inspected, tested and maintained in accordance with manufacturer's guidelines/criteria and all applicable regulatory standards.

Sufficient barricades, shields, guards, alarms, signs, markings and safety systems will be provided or installed on all equipment.

If any machinery or vehicles require special licenses, permits or operator training before they are used, the Contractor should secure or provide these before working with that equipment.

Areas with mobile equipment that is accessible to the public will be barricaded/fenced or guarded before and during the operation of the equipment. Warning signs, fencing, barricading or personnel should be placed at a sufficient distance from the areas to prevent the public from entering the areas by mistake.

If loads are hoisted or if other overhead hazards exist, a clear area below, which is sufficient to prevent public hazards, will be barricaded or fenced to prevent inadvertent public access. The area will be monitored during overhead work to ensure that it remains clear.

If noise makes it difficult to hear warnings or signals from mobile equipment, the decibels will be increased so that the warnings or signals can be heard. If this cannot be done, visual signals should be established to protect the public. Visual or radio contact will be maintained between the equipment operators and those who will provide the signals.

5.5 FALLING AND WINDBORNE OBJECTS

To prevent construction objects or debris from creating a public hazard, barriers, fencing, catch platforms, enclosures, perimeter or vertical debris netting or other required administrative or engineering controls must be employed.

Public areas adjacent to the jobsite will be protected by fencing, sheds, overhangs, perimeter netting systems, platforms, scaffolding or similar structures to protect pedestrians from falling objects or debris.

Construction material, tools, debris, waste, equipment, or other items will be contained, secured, tied-off, removed, braced, enclosed or restrained so that they do not fall, blow away or enter public areas.

5.6 SECURITY

Measures will be established to restrict public access to the jobsite.

If access control is not possible, items that may create a hazard will be locked, barricaded or removed.

Security systems or personnel may be employed during or after work hours to ensure that the public cannot gain access to the jobsite.

Authorities and security personnel should receive a list of those individuals who are authorized to access the jobsite during non-work hours.

Local enforcement authorities will be made aware of all security plans, and they will receive a list of personnel who will assist them.

5.7 VIBRATIONS AND SUBSIDENCE

Construction operations that produce ground or air vibration will be analyzed to prevent damage or subsidence of adjacent land or structures.

A pre-construction survey of the surrounding area, structures and accessories will be required and conducted before any construction activity begins. Any weaknesses or deterioration found during the survey should be reported to the presiding authority before construction

The Contractor will provide data that show the maximum limits of expected vibrations or subsidence. These limits must not exceed those specified by the presiding authority. Seismographic recordings will be made if required.

If warranted during the pre-construction survey, structural and geological investigation maybe conducted.

Adjacent roadways, waterways, airways, sidewalks, buildings and utilities will be monitored periodically during construction operations.

All excavations, cuts and trenches in public areas will be backfilled with approved material and then tamped and compacted as soon as possible.

Any public areas or structures that are disturbed, cracked or broken during construction operations will be inspected, repaired or replaced.

6. LAUSD CONTRACTOR SAFETY PRE-QUALIFICATION REQUIREMENTS

The **Contractor Safety Prequalification Questionnaire** has been developed to evaluate each contractor's overall past safety performance. Note: Not applicable to LAUSD M and O. The OEHS department shall follow existing LAUSD policy for M and O.

All Contractors seeking to bid on, or receive award of, LAUSD Sites must have an active Safety Prequalification. Verification of prequalification of subcontractors may be performed at the sites during construction safety audits.

The Safety Prequalification Questionnaire is no longer included in the Safety Standards. Current Safety Prequalification Questionnaires must be obtained from the following sources:

To obtain a current Prequalification Questionnaire for both Formal and Informal Contracts contact the:

- Facilities Construction Contracts Prequalification Unit:

To download current forms and information, go to the LAUSD Facilities Contracts Administration website,

http://www.laschools.org/new-site/

A copy of the Safety Prequalification Questionnaire is also included in the addendum.

General/Prime Contractors are contractually required to prequalify all their Subcontractors of all tiers using the LAUSD Contractor Safety Prequalification Questionnaire prior to executing a contract with the Subcontractor. Instructions for evaluating and scoring Subcontractors Safety Prequalification Questionnaires are contained in the Questionnaire.

The General/Prime Contractor shall not permit any Subcontractors to perform work on a LAUSD site without a current approved safety prequalification. Failure to safety prequalify all Subcontractors utilizing the most current revision of the Safety Prequalification Questionnaire may adversely affect the Contractors' prequalification status. Use of Subcontractors that do not meet the minimum LAUSD safety prequalification requirements may also adversely affect the General/Prime Contractors prequalification status. Note: Labor compliance issues will be handled by the Labor Compliance Department.

LAUSD and/or their designated representatives will, at their discretion, audit Subcontractor Safety Prequalification Questionnaires to verify the accuracy of the data.

7. RESPONSIBILITIES

7.1 PRIMARY SAFETY RESPONSIBILITIES

The Prime Contractor or Construction Management (CM) firm shall be responsible for initiating, maintaining, supervising, and enforcing all safety precautions and programs in connection with the performance of the construction contract for the on-site safety of their employees and (if applicable) their subcontractors performing work under their authority. To that end, an Environmental Health and Safety Management System (EHSMS) is required of all contractors. THE EHSMS may be modeled after ISO 14000, 14001 and OHSAS 18001 or equivalent. At the site location, this includes responsibilities for vendors, delivery and transportation services, service providers, LAUSD facility, students and the public. Note: Not applicable to LAUSD M and O. The OEHS department shall follow existing LAUSD policy for M and O.

The Contractor shall comply with all applicable provisions of Federal, State, and local laws, ordinances, codes, regulations, standards and practices affecting safety and health of employees, the public and environment.

Each Contractor and Subcontractor shall comply with the most stringent of the following:

- Applicable Cal OSHA Standards and Safety Orders or Federal OSHA Standards (Code of Federal Regulations, Title 29),
- The Contractor's Site-Specific Safety Program,
- Applicable National Consensus Standards (NCS) including ANSI, NFPA, etc.,
- These LAUSD Safety Standards.

Each Contractor shall have available for use and reference on the job site at a minimum; the contractor's Site Specific Safety Program, one copy of all applicable OSHA regulations and the LAUSD Safety Standards.

7.2 SUBCONTRACTOR SAFETY RESPONSIBILITIES

General/Prime Contractors will be responsible for ensuring their Subcontractors initiate, maintain, supervise and enforce the safety requirements of the LAUSD Safety Standards and the General/Prime Contractor's Site-Specific Safety Program, even though the requirements may be above and beyond the Subcontractor's own safety policies and Federal and Cal OSHA requirements.

8. SITE-SPECIFIC SAFETY PROGRAM (SSSP)

Each Contractor shall have a written "Site-Specific [SSSP] Safety Program" in accordance with the provisions contained in the California Labor Code § 6401.7, 8 CCR § 1509 and § 3203, OSHA and LAUSD Safety Prequalification criteria. The Site-Specific Safety Program shall include, but not be limited to, the following site-specific components as they apply to the Contractor's scope of work. Note: This section is not applicable to LAUSD M and O. The OEHS department shall follow existing LAUSD policy for M and O.

- Safety and Health Policy Statement
- An Environmental Health and Safety Management System (EHSMS) with assignment of accountability and responsibilities for key personnel responsible for implementation and enforcement of the Site-Specific Safety Program
- Identification of Competent Persons and Qualified Persons
- Audit/Inspection Program
- Leading and Lagging safety metrics
- Scope of Work Evaluation
- Job Safety Analysis/Job Hazard Analysis Program (JSA/JHA) Task-specific Hazard Assessment (THA)
- Hazard/Risk/Exposure Assessment
- Control Measures/Activity Hazard Analysis
- Minimum Three Week Look Ahead Safety Pre-planning incorporated into the Job Site Progress Meetings.
- Procedures for effectively communicating safety and health matters to Employees
- Safety Incentive Program/Safety Recognition Program
- Progressive Disciplinary Action Program
- Job Site Hazard Identification Inspection and Corrective Action Program
- Safety Training Program (including provisions for Supervisory and Craft Employee training)
- Site-specific Employee Safety Orientation Program
- Provisions for maintaining orientation, training, inspection, corrective action, and accident/incident investigation records
- Written Hazard Communication Program and Respiratory Protection Program
  - To include Material Safety Data Sheets for all products at the site
- Emergency Response and Evacuation Plan
- Storm Water Pollution Prevention Program (SWPPP)
- Fire Prevention Program

- Hot Work Program
- Drug Free Workplace/Substance Abuse Prevention Program
- Accident/Incident Reporting and Investigation Program
- Disability Management Program (Light Duty/Return to Work Program)
- Near Miss Incident Investigation Program
- Fall Prevention Program
- Scaffold Safety
  - o Scaffold Inspection shall be addressed in the Scaffold Safety Program
  - o Scaffold Erector and User Training shall be addressed in the Scaffold Safety Program
- Confined Space Entry Program
- Lockout/Tagout/Control of Hazardous Energy Program
- Excavation Safety Program
- Site Logistics Plan
- Other written programs required by this and other contract documents or regulatory agencies (i.e., heat stress, respiratory, equipment inspection program, etc.)
- Barricades and fencing protocols
- List of Attachments

The Contractor shall submit to LAUSD Safety within 10 days of contract award an electronic copy of the Corporate/Company Safety Plan and Site-Specific Safety Plan for review and approval.

- The Program(s) will be reviewed for inclusion of the requirements of California Code of Regulations, Section 3203 (T8 CCR 3203) Federal OSHA Standards, the LAUSD Safety Standards and applicable sections of the Site Contract Specifications.
- The approval of the Program(s) will be based solely on the content of the Program relative to compliance with California Code of Regulations, Section 3203 (T8 CCR 3202) Federal OSHA Standards, the LAUSD Safety Standards and Site Contract Specifications. The Contractor retains responsibility for regulatory compliance, and the means and methods employed to implement the contents of the Program(s).
- Failure to attain approval of the Program prior to the scheduled commencement of contract work is not grounds for a time extension.
- Upon approval of the Program(s) for conformance to said requirements, the Contractor shall submit two copies of the Program signed by the Contractor's Owner or CEO to the OAR.

Prior to mobilizing on site or during "Notice to Proceed I" (NTP-I) the General Contractor will submit to the OAR and/or LAUSD Safety copies of their Sub-Contractors Job Hazard Analysis (JHA) for review and recommended improvement suggestions/comments.

Each JHA will summarize specific job task(s) performed, potential hazards associated with each task and the safety protocol required/implemented to reduce the injury /accident potential. Reference the Job Hazard Analysis section of these Standards.

Prior to beginning work each Contractor will ensure and review with their employees the JHA specific to the work to be performed. As evidence of training each employee will sign the applicable JHA. Copies of the JHA will be maintained on site for review by LAUSD Safety.

The General/Prime Contractor shall be responsible for ensuring that their Subcontractors comply with the provisions summarized above.

The Contractor's scope of work shall include compliance with the LAUSD Safety Standards. This shall include all services required for the complete performance of the *LAUSD Site* contract work and all related site work in accordance with the LAUSD Safety Standards and all applicable State and Federal regulatory criteria/standards.

Every Contractor and/or Subcontractor is responsible for planning and executing work in harmony with stated objectives of the LAUSD Safety Standards and all applicable State and Federal regulatory criteria/standards.

Every Contractor and/or Subcontractor shall furnish all information concerning the safety of their LAUSD job site operations upon demand to LAUSD authorized representatives.

Every Contractor and/or Subcontractor will enforce compliance with all job site safety work practices and procedures applicable to their scope of work as defined in the contract.

Drugs and Alcohol - The Contractor must support and encourage a drug-free workplace.

Alcohol, drugs and weapons shall not be allowed on the job site under any circumstances, and violation of this policy shall be the cause for immediate removal.

All contractor and subcontractor site management/supervisory personnel shall have evidence of completing an OSHA 10/30 Hour Construction Outreach Training Program prior to mobilization.

Specifically, the following is required:

- A minimum of 20% of the jobsite workers to be OSHA 10-hour General or Construction Industry Safety and Health Certified.
- All foreman/first-line supervisors must have OSHA 30 hour training;
- Hazardous Waste Operations and Emergency Response (HAZWOPER) workers must comply with the Federal and State mandated HAZWOPER regulations, including physical exams and training;
- Asbestos Workers must comply with the Asbestos Training requirements of the Asbestos Hazard Emergency Response Act (AHERA) and licensing requirements;

Applicable personnel assigned to the site after mobilization shall complete this training within 30 days of assignment.

Prior to beginning work, all employees shall fill-out new-hire paperwork (MANDATORY) are to receive a site safety orientation which at a minimum reviews the IIPP, site safety rules, policies, procedures, regulations and applicable emergency and evacuation plans. This shall be done at the jobsite trailer prior to any job-setup, dropping off of tools, or taking part in any work related activity.

Authorized vendors, suppliers, haulers, visitors, etc. shall either be accompanied by a qualified Contractor employee or be provided with an orientation that is appropriate for their job task exposures during their time on site.

In order to address specific areas of concern LAUSD reserves the right to request additional Site Safety Meetings be conducted.

Every site shall schedule and conduct (at a minimum) monthly site safety meetings with their on site personnel to properly coordinate the work within the trades and resolve matters related to safety and health associated with site work. The General/Prime Contractor's safety pre-planning shall be incorporated into the job site progress/schedule meetings. Minutes shall be kept of each meeting which will include topics covered and attendees.

The Contractor will ensure that all personnel are properly trained and instructed for all jobs which require specific training and/or competency to meet all applicable Cal OSHA and Federal OSHA regulations, State and Federal laws, and compliance with the LAUSD Safety Standards and the contractor's Site-Specific Safety Program.

The Contractor shall conduct toolbox safety meetings with their Employees at least once a calendar week. Minutes of these toolbox meetings are to be prepared and maintained by the Contractor, and available for review by authorized LAUSD representatives.

- Meeting minutes shall contain the following:
  - o Employee names in a legible format
  - o Signature of each Employee
  - o Contractor name
  - o Date of meeting
  - o Description of meeting topics
  - o Name(s) of person(s) conducting the meeting

Prior to starting work, each Contractor and Subcontractor (via the General/Prime Contractor) shall submit to the OAR a list of (a) Competent Persons and Qualified Persons as applicable to the Contractor's scope of work, and (b) First Aid/CPR trained personnel.

- Each list shall be clearly dated, and updated as required throughout the contract period. Each time the list is updated, a copy shall be provided to the OAR.

Each Contractor is responsible for handling, on a daily basis, rubbish and debris generated by its work. The Contractor must keep the work place clean.

The Contractor is responsible for ensuring that corrective action is taken when *Loss Control Survey* forms are issued to the Contractor.

The *Safety Audit Corrective Action* form must be completed by the Contractor and returned to the OAR as required by these Safety Standards. Copies of these forms are provided in the appendix.

The Contractor will cooperate with inspections conducted by Cal OSHA/Federal OSHA and other regulatory agencies. The Contractor will immediately notify the OAR and LAUSD Safety of these inspections.

The cited Contractor(s) shall immediately upon receipt submit copies of all regulatory agency citation notices (if applicable) to the General/Prime Contractor, LAUSD OAR and LAUSD Safety.

- The General/Prime Contractor shall ensure that the cited Contractor posts copies of all citations as required by OSHA or the applicable regulatory agency.

9. CONTRACTOR SAFETY MANAGER, CONTRACTOR SAFETY REPRESENTATIVE AND SUBCONTRACTOR SAFETY REPRESENTATIVE

In order to ensure/maintain a safe work site, Contractor(s) shall designate a responsible and qualified member of its company who has the authority to assure compliance with the Contractor and LAUSD Safety Standards.

9.1 DEFINITIONS

Contractor Safety Manager (CSM): Projects which at any time throughout the duration of the contract will exceed 50 or more employees or contracts exceeding $10,000,000 or more in contract value will require a professional Contractor Safety Manager (CSM). The Contractor Safety Manager will be assigned to the site full time to carry out the duties as described in this document. The Contractor Safety Manager shall have no other duties other than maintaining the OCIP and Safety Programs.

Alternate Contractor Safety Manager (ACSM): An individual meeting the same requirements of the CSM that assumes the role of the CSM on a temporary basis.

Contractor Safety Representative (CSR) Less than 50 employees: A Contractor employee assigned safety responsibilities for shift work and distinct work locations as required. The CSR reports to the CSM. Additional SSR personnel shall cover shift work and distinct work locations as required. The Contractor can delegate the CSR duties to a qualified on-site Field Supervisor. CSR responsibilities cannot be delegated to an office or staff employee.

Alternate Contractor Safety Representative (ACSR): An individual meeting the same requirements of the CSR that assumes the role of the CSR on a temporary basis.

Subcontractor Safety Representative (SSR): Subcontractor employees assigned safety responsibilities for shift work and distinct work locations as required. Additional SSR personnel may be required to cover shift work and distinct work locations. The Subcontractor can delegate the SSR duties to a qualified on-site Field Supervisor. SSR responsibilities cannot be delegated to an office or staff employee.

Contractor Safety Manager (CSM)/Alternate Contractor Safety Manager (ACSM)

- The CONTRACTOR shall provide at a minimum, one (1) FULL TIME on-site competent and qualified English-speaking Contractor Safety Manager, with a proven record of accomplishment on sites of similar scope and complexity and the appropriate number of years as a Contractor Safety Manager on sites of this scope and complexity as evidenced by submitted background information. This person shall be physically present at the site while any aspect of the Work is being performed and shall have no tasks other than administering the Safety Program and ensuring adherence to the LAUSD Safety Standards. The Contractor Safety Manager shall be retained at this capacity for the duration of the Work. Should there be a need to replace the Contractor Safety Manager, the CONTRACTOR shall submit to LAUSD Safety for approval, within thirty (30) days prior to the proposed date of replacement, the appropriate background information for the new Contractor Safety Manager prior to such replacement. At a minimum, the Contractor

Safety Manager shall be on-site full time from NTP-1 thru Substantial Completion of the project. Any Safety Manager Personnel change requires 30 day notice to LAUSD.

Note: LAUSD construction safety will facilitate the proper transition of safety personnel in the event a Safety Manager leaves without knowledge or notification to their employer.

The Contractor Safety Manager (CSM) or Alternate Contractor Safety Manager (ACSM) must meet one of the following minimum qualifications:

- Degreed Safety Professional–(Bachelor's or higher) plus two (2) years of construction safety experience.
- Certified Safety Professional (CSP) as recognized by the Board of Certified Safety Professionals plus two (2) years of construction safety experience.
- Certified Health and Safety Technician (CHST) Board of Certified Safety Professionals (BCSP) seeking a program to certify people who will fill job site safety positions at construction sites with two (2) years of construction experience.
- Training and certification in the OSHA Construction Safety 30 Hour Program and must have received additional training, when required by OSHA standards, on specific hazards of the site, and has completion of the OSHA 500 Basic Instruction Course in Occupational Safety and Health Standards for the Construction Industry is recommended. This individual must have performed full-time safety responsibilities for a minimum of five (2) years in the construction industry.
- At the discretion of LAUSD, other certifications and qualifications may be considered.

In accordance with the Owner Controlled Insurance Program (OCIP), If at any time a Subcontractor has over 50 workers on the jobsite, the Subcontractor shall also have a DEDICATED, FULL TIME Subcontractor Safety Representative (SSR) on the site. If Subcontractors provide a FULL TIME SSR it will not absolve the General/Prime Contractor of their responsibilities to provide a FULL TIME, qualified CSM. The Subcontractor(s) Safety Representative(s) shall have no other tasks other than administering the Safety Program and ensuring adherence to the LAUSD Safety Standards. The Subcontractor(s) Safety Representative(s) shall also meet the minimum qualifications identified above.

- If the General/Prime Contractor and/or their Subcontractors daily job site work force will at no time throughout the duration of the site exceed 50 combined total employees, the Contractor and/or Subcontractor can delegate a Contractor Safety Representative (CSR) or Subcontractor Safety Representative (SSR) duties to an on-site supervisor who meets one of the following criteria.
  - o The CSR/SSR must be credentialed with a Safety Trained Supervisor (STS) certification.
  - o Or have successfully completed the OSHA Construction Outreach 30 Hour Programs within the past 3 years and have a minimum of two (2) years of construction safety experience.

- Prior to or during NTP-1, Contractor will submit to LAUSD Safety the resume of the person(s) who will manage their safety responsibilities on site. Once approved by LAUSD Safety, the safety representatives regardless of their job title designation will not be changed except with the approval of LAUSD Safety. Such approval is not an acceptance of responsibility. The Contractor shall submit for approval, within thirty (30) days prior to the proposed date of replacement, the appropriate background information for the new Contractor Safety Manager.
- All pre-qualified Contractor safety personnel regardless of their job title will have:
  - Construction safety experience relevant the scope/type of work the Contractor performs.
  - Current First Aid training from a provider recognized by OSHA.
  - Current CPR training from a provider recognized by OSHA.
- The CSR and/or SSR must be allocated sufficient time to perform their job site safety duties and responsibilities.
- If necessary, LAUSD Safety reserves the right to direct the removal and replacement of the CSM, CSR or SSR.
  - A CSM, CSR or SSR shall be present at all times, including overtime and weekends when work is being performed within the scope of their employer's authority or responsibility.
  - The CSM shall be provided on the job site from NTP-1 through Substantial Completion. The CSR(s) and/or SSR(s) shall be provided on site for the duration of work performed by their employer.
- An Alternate Contractor Safety Manager (ACSM) or Alternate Contractor Safety Representation (ACSR) meeting the same qualifications as the CSM or CSR shall be present when the CSM or CSR is not present on the job site. The ACSM or ACSR shall have the same responsibilities as the CSM or CSR. ACSM, ACSR or SSR duties may be assumed by a similarly qualified site supervisor.
- The Contractor will notify the OAR when the CSM and CSR will not be present on the job site. This notification will include the name of the ACSM or ACSR.
- The General/Prime Contractor shall maintain a list of all Contractor and Subcontractor safety representatives on the job site. Upon request this list will be made available for review by authorized LAUSD representatives.
- The OCIP Coordinator or Risk Manage may exclude contractors form the OCIP or claims may be denied for failure to follow the OCIP Manual requirements as part of the employer contract including the provision to have a full time safety representative as stated in this section.

9.2 CONTRACTOR SAFETY MANAGER, CONTRACTOR SAFETY REPRESENTATIVE, AND SUBCONTRACTOR SAFETY REPRESENTATIVE RESPONSIBILITIES

All Contractor Safety Representatives (regardless of their job title designation) responsibilities and authority must include but are not limited to the following:

- Authority to enforce COMPLIANCE WITH the Contractor's Site-Specific Safety Program, IIPP and LAUSD Safety Standards.
- Responsibility to assure compliance with the OSHA Act and any other safety standards relative to their scope of work.

In addition to requirements described elsewhere in the Safety Standard, the Contractor's Safety Manager, Alternate Construction Safety Manager and Contractor's Safety Representative and Subcontractor Safety Representative shall have at minimum:

- Authority to stop work when a serious safety or imminent danger/hazard is identified.
- Authority to implement corrective action(s).
- Authority to remove individuals, supervisors, or subcontractors from the site for refusing to comply with Contractor, LAUSD and OSHA Safety Standards.

Specific responsibilities of the Contractor's Safety Manager/Representative must include, but are not limited to assisting, completing or overseeing completion of the following by their Employer and Subcontractors:

- Assist Contractor Management with the planning and scheduling of work operations to prevent personal injury and/or property damage hazards.
- The CSM or CSR shall conduct safety orientation sessions for employees new to the site, prior to their beginning work. Documentation of site safety orientation will be maintained and identification made by the use of a hardhat sticker specific to the site.
- Conduct, participate in, or assist field supervisors with weekly tool box safety meetings.
- Conduct weekly supervisor/management safety meetings.
- Instruct and inform supervisors/management on safety rules and regulations.
- Assist supervision with correcting unsafe acts by employees through proper job placement, training, and the use of good discipline.
- With the support of Contractor Management, setup/draft, implement, monitor and enforce, the Job Hazard Analysis (JHA) Program.
- Instruct supervision and employees in the proper use and care of personal protective equipment (PPE).
- Instruct supervision and employees concerning special procedures for imminent hazard exposures (e.g. confined space entry, excavations, lock out/tag out, fall protection, etc.)
- Conduct OSHA required training.

- Complete and maintain on site for review OSHA, State, Federal, Company and site-specific safety reports.
- Complete accident reporting and investigation reports in accordance with the LAUSD Insurance Manual and LAUSD Safety Standards. Take corrective action to prevent recurrence of similar type accidents. Records will be maintained on the site and distributed as described in the Safety Standards.
- Ensure that required first aid supplies are adequate.
- Coordinate transportation of employees with minor injuries to the designated Medical Clinic.
- Maintain training documentation on site for review by authorized LAUSD and/or regulatory representatives.
- Implement site-specific safety policies and procedures.
- Demonstrate, by example, proper safety behavior.
- Keep the Project Manager, OAR, and LAUSD Safety informed of any safety related problems that have or may develop.
- Conduct and document (at a minimum) daily site safety inspections. Documentation shall be created and maintained on site listing action(s) taken to correct deficiencies identified during inspections.
- Forward copies of inspection and corrective action records to the OAR and LAUSD Safety.

Review LAUSD Safety Audit Reports received from LAUSD Safety or the Insurance Carrier Safety Representatives that note safety non-compliance items.

- Disseminate the LAUSD Safety Audit Reports to Subcontractors if necessary.
- Ensure corrective action is taken.
- Return the completed LAUSD Safety Audit Report Corrective Action Plan to the OAR and LAUSD Safety and others as required on the project within three (3) business days. LAUSD Safety Audit Report Corrective Action Plan will be reviewed at the Weekly Progress meeting.

10. LAUSD SAFETY RESPONSIBILITIES

LAUSD Safety is responsible for auditing the Contractor's Company/Corporate Safety Plan (C/CSP), including their Injury Illness Prevention Plan (IIPP) and Site-Specific Safety Program (SSSP). Note: This section is not applicable to LAUSD M and O. The OEHS department shall follow existing LAUSD policy for M and O.

LAUSD Safety reports these findings to LAUSD Construction Management, the OAR, and the Contractor for corrective action and enforcement. Responsibilities and duties of LAUSD Safety may include, but are not limited to the following:

- Compile and maintain safety performance statistics for the site.
  - o Communicate the above information to LAUSD Construction Management, the OAR and other authorized LAUSD representatives to ensure they are informed and/or involved with safety management activities.
- Keep apprised of and communicate to Contractor management new regulations and developments to assist Contractors with keeping safety policies and procedures current and effective.
- Conduct safety program audits and site safety surveys of Contractors and Subcontractors work activities to verify compliance with LAUSD, and Contractor safety protocol, confirm regulatory compliance, identify and document non-compliance items, and make recommendations for improvements.
- LAUSD Safety will document non-compliance items, recommendations, and or comments on the *Safety Audit Report*. Copies of the completed *Safety Audit Report* will be submitted to the OAR and Contractor(s). The *Corrective Action Plan* form will be submitted to the Contractor when a written response is required.
- Review and communicate safety methods and procedures to the Contractor's Safety Manager/Representative, and authorized LAUSD representative(s) to foster the highest level of accident/incident prevention performance possible.
- Provide special consulting to LAUSD Construction Management, OAR, Contractor and Subcontractors regarding safety issues and challenges that may arise on the site(s).
- If required, conduct or participate in accident/incident investigations.

LAUSD Accident Investigation Reports shall not relieve Contractor(s) of their obligation to conduct their own investigation, or of any responsibility they have to complete and file notices, reports and forms in accordance with applicable regulatory requirements and LAUSD accident reporting protocol as defined in the LAUSD Insurance Manual.

Review all Contractor incident investigation reports to ensure thorough investigations were conducted and controls instituted to prevent future accidents or incidents.

11. CONTRACTOR PROGRESS MEETINGS

Following is a suggested agenda for the Safety and Loss Control component of the Progress Meeting. This agenda may be modified to reflect site needs. Note: This section is not applicable to LAUSD M and O. The OEHS department shall follow existing LAUSD policy for M and O.

Contractor:

Report on accidents/incidents involving the Contractor or its' Subcontractors since the last progress meeting.

If the SAF 3 accident/incident form has been completed, it shall be distributed and discussed with the Contractors during this meeting.

Contractor discussion is to include corrective or preventative action taken to prevent a reoccurrence.

Contractor shall report on the work status of each injured Employee until said Employee returns to full duty.

Report on near-miss incidents involving the Contractor or its' Subcontractors since the last meeting.

If the SAF 4 form has not been filed relevant to any incident discussed, it shall be distributed and discussed with the Contractors during this meeting.

Contractor discussion is to include corrective or preventative action taken to prevent a reoccurrence.

Provide a description of work activities until the next meeting, including anticipated Employee and public safety concerns and non-routine tasks/activities.

Contractor is to report on safety pre-planning that has been done to include steps that will be taken to minimize hazards.

Contractor will be prepared to discuss potential public and vehicular exposure hazards and the loss prevention controls to be implanted to reduce the exposure potential.

In order to reduce the probability of schedule delays, provide a brief description of work activities anticipated (utilizing the job schedule) covering the next three weeks to identify in advance potential concerns to facilitate safety pre-planning by all parties.

A Job Safety Analysis (SAF-6) or Activity Hazard Analysis may be requested from the responsible Contractor(s) for future activities.

LAUSD Safety, OCIP Safety:

Report on non-compliance violations/hazards identified on Loss Control Surveys that have not been corrected.

Report on non-compliance violations/hazards identified on Loss Control Surveys that are repeat items (i.e., the same or substantively similar type violations/hazards that has been identified in the past, and has reoccurred).

Report on accidents/incidents involving the Contractor or its' Subcontractors since the last progress meeting.

Report on Near-Miss Incidents involving the Contractor or its' Subcontractors since the last progress meeting.

Report on any existing or emerging trends in the Contractor's safety performance

Report on future activities that require safety pre-planning.

Identify Potential Public and vehicular exposure hazards.

Review of Job Safety Analysis issues.

LAUSD OAR:

Reporting or discussion of any item(s) described herein.

Any additional/other topic(s)/item(s) not described herein.

11.1 SITE PRE-PLANNING/PLANNING AND PROGRESS COORDINATION MEETING(S)

Safety and loss control activities are to be integrated into the work plan such that safety is an integral component of the construction management process, rather than a separate activity.

There are five main elements to the preplanning and schedule component of the LAUSD Safety Standards.

- **Site Survey**: Prior to the start of work, the Contractor shall review the plans and specifications and conduct a physical survey of the job site.
- **Construction Process Plan:** From the Site Survey, the Contractor shall develop in conjunction with the job schedule a written Construction Process Plan. The Construction Process Plan shall identify tasks and activities under four main categories:
  - o Construction sequence and procedures
  - o Temporary Structures/Shoring/Reshoring/Bracing/Retention Systems required
  - o Critical Structures or Processes
  - o Description of required tests and approvals
- **Job Hazard Analysis:** Job Hazard Analysis (JHA) needs may be pre-determined in part by reviewing the Construction Process Plan and Construction Schedule. The JHA should be prepared far enough in advance of the task or activity to ensure that changes or revisions will not affect the scheduled execution of the

task or activity. Refer to Job Hazard Analysis Section for specific program criteria.

- **Site Progress Meetings**: These meetings are typically held on a weekly or bi-weekly basis, and are typically chaired by the OAR. Safety pre-planning should be incorporated into these meetings.
  - o The Contractor shall prepare a Three-Week Look-Ahead Schedule and submit same for review prior to each Site Progress Meeting.
- **Pre-Planning Meetings:** Pre-planning meeting needs may be identified from the Construction Process Plan and/or job schedule. The Pre-planning agenda should be incorporated into the Site Progress meetings.
  - o The Contractor shall schedule Pre-Planning into the Master Schedule far enough in advance of the start of the relevant phase to ensure that changes or revisions to JHA's and coordination efforts will not affect the scheduled execution of the relevant phase of work.
  - o The pre-planning shall include the OAR, as well as all Contractors and Subcontractors involved in that phase of work. At their discretion, LAUSD Safety may also be involved. This meeting shall identify and address the safety and coordination issues of the relevant phase of work.
  - o Job Hazard Analysis' shall be prepared using the JHA form (or an acceptable equivalent); specific JHA's are to be prepared using the Job Hazard Analysis as a guide.
  - o Subsequent meetings may be required throughout the phase of work to maintain safety and coordination efforts.

12. JOB HAZARD ANALYSIS (JHA)

The Job Hazard Analysis (JHA) is a written work plan that incorporates safety into work procedures to ensure that job task(s) or operations receive proper safety planning prior to beginning work.

Prior to mobilizing on site or during "Notice to Proceed I" (NTP-I) the General Contractor will submit to the OAR and/or LAUSD Safety copies of their Sub-Contractors Job Hazard Analysis (JHA) for review and recommended improvement suggestions/comments.

A Job Hazard Analysis (JHA) is to be developed by the site management or designee for each job task. Each JHA will summarize specific job task(s) performed, potential hazards associated with each task and the safety protocol required/implemented to reduce the exposure potential.

Prior to the start of each shift each employee/crew shall review the JHA(s) applicable to their scope of work. As evidence of training each employee will sign the applicable JHA.

Copies of the JHA will be maintained onsite for review by LAUSD Safety.

JHA's are to be completed by a supervisor familiar with the task(s) to be performed. A particular task is chosen and employees begin to identify potential hazards associated with performing the task.

- When specific tasks require that a JHA be completed, the CSM/CSR/SSR shall facilitate the JHA process and document review of the JHA with the supervisor(s) in advance of the work shift.

Following is the process which should be used to develop the JHA:

Select the job to be analyzed. Use the following factors as a guide in selecting jobs to be analyzed, remembering that those with the highest incident/accident severity potential shall be evaluated first.

- Frequency of incidents
- Disabling injuries
- Potential for severe injury
- New operations/jobs

Break the job down into successive steps. (Avoid making the breakdown too detailed or too general)

- Select an experienced and cooperative employee/crew to perform the job.
- Explain the purpose of the analysis.
- Observe the employee/crew as the job is performed.

- Record each job step in the breakdown.
- Review with the employee/crew and seek comments.

Identify the hazards and the potential incidents.

- Is there a danger of striking against, being stuck by, or incurring other injurious contact with an object?
- Can the work be caught in, between, or by objects?
- Is there a potential slip, trip, or fall hazard?
- Are there strain exposures from pushing, pulling, reaching, twisting or lifting?
- Are there environmental hazards in the form of gases, vapors, fumes, mists, or dusts?

Develop ways to eliminate hazards and prevent potential incidents.

- Find a new way to do the job.
- Change the physical conditions that create hazards.
- Implement:
    - Engineering Controls
    - Administrative Controls
    - PPE

13. SAFETY MEETINGS

13.1 ACCIENT/INCIDENT REVIEW MEETINGS

The Contractor's Safety Manager (CSM), Contractor Safety Representative (CSR) or immediate supervisor shall adopt a practice of scheduling an Accident/Incident Review Meeting within 72 hours of the occurrence of an accident/incident. Note: This section is not applicable to LAUSD M and O. The OEHS department shall follow existing LAUSD policy for M and O.

For the purposes of this section, "Accident/Incident" may be defined as any or all of the following:

- Near-Miss Incident
- First-Aid Case
- Recordable Injury
- Lost-Time Injury
- Vehicular Incident
- General Liability/Third-Party Incident
- Property Damage

The intent and purpose of this meeting is to interactively and cooperatively identify causal factors that had, or may have had, a role in the accident/incident, and to identify corrective action(s) and practice(s) which, when implemented, will reduce the probability of similar type occurrences in the future. It is NOT a fault-finding or blame-finding event.

Attendees should include:

- OAR (Owner Authorized Representative)
- CPM (Contractor Site Manager)
- CPS (Contractor Site Superintendent)
- CSM/CSR (Contractor Safety Manager/Representative)
- SSR (Subcontractor Safety Representative) [if applicable]
- LAUSD Safety
- Senior Project Management Representative and the Contractor/Subcontractors' Foremen accountable for the incident via the functional structure of the site
- Craftperson(s) involved with and/or witness to the incident.

13.2 PRE-SHIFT EMPLOYEE/CREW PRODUCTION AND SAFETY COORDINATION MEETINGS

At the start of every shift, each Contractor and Subcontractor crew shall conduct a pre-shift production and safety pre-planning meeting.

These meetings shall:

- Review the scope of work for the shift.
- Review of safety activities that are a component of the job tasks (JHA) to be performed.

Such meetings are to generally be five (5) to ten (10) minutes long, and are, at minimum, to focus on the following:

- Tasks for the shift
  - o Applicable Job Hazard Analysis
- Tools and equipment needed for those tasks
- Materials needed for those job tasks
- Proper material handling techniques
- Safe work procedures to perform those job tasks
- PPE needed to safety perform those tasks
- Questions from the crew

These meetings shall be documented in the same manner as the weekly Safety Meeting.

14. REPORTS AND FORMS COMPLETION

The Contractor will cooperate with and participate in inspections conducted by OSHA inspectors. Copies of all OSHA citation notices will be submitted to LAUSD Safety immediately upon receipt by the Contractor. Note: This section is not applicable to LAUSD M and O. The OEHS department shall follow existing LAUSD policy for M and O.

The Contractor is responsible for ensuring that corrective action is taken when Loss Control Survey forms are issued to the Contractor. The *LAUSD Corrective Action* plan must be completed by the Contractor and returned to the OAR and LAUSD Safety.

Each Contractor shall maintain copies of weekly safety tool box meeting reports, inspection reports and corresponding corrective action records, on site for periodic review by authorized LAUSD representatives and/or LAUSD Safety.

Contractor(s) will furnish LAUSD representatives and/or LAUSD Safety with a copy of completed Incident/Accident reporting and investigation forms, as described in the LAUSD Safety Standards and Insurance Manual, no later than 24 hours after knowledge of the incident/accident.

NOTE: The accident investigation report forms do not constitute notice of injury and do not replace the "Employers First Report of Injury" (Form 5020) form that must be completed by the Contractor and provided to the LAUSD OCIP Insurance Company and/or LAUSD Risk/Claims Management.

Forms summarized throughout the LAUSD Safety Standards are provided in the Appendix.

15. CONTRACTOR SAFETY VIOLATIONS

15.1 CONTRACTOR DISCIPLINARY ACTION – POLICY ENFORCEMENT

It is imperative that all Contractor employees at every level comply with all safety protocol relative to their scope of work at all times while working on LAUSD sites. Note: This section is not applicable to LAUSD M and O. The OEHS department shall follow existing LAUSD policy for M and O.

- All Contractors/Subcontractors will be contractually required to comply with all applicable Federal, State and LAUSD safety polices/procedures and regulations. When a Contractor/Subcontractor fails to correct unsafe conditions and/or unsafe actions of their employees, LAUSD will undertake corrective action(s) and, at their discretion, deduct the cost thereof from the responsible Contractors' progress payment. LAUSD cannot be held responsible for safety or security related work delays associated with violations of LAUSD Safety Standards and Federal or State regulatory requirements.
- Contractors/Subcontractors that are not responsive to safety issues, that have unsatisfactory safety evaluations(s) and/or repeated or willful safety violations by their employees will indicate non-compliance with the safety provisions included in the contract documents which may result in removal from the LAUSD bid lists and/or denial of job-site access for a period of time designated by LAUSD.
- Authorized LAUSD representatives have the right at any time to stop work activity that is dangerous to life or health until safety violations are corrected.
- An initial violation of a non-life threatening safety policy by a Contractor's/Subcontractor's employee(s) will result in a notification to the Contractor(s) supervisory personnel the OAR and/or LAUSD Safety. A second violation may result in the Contractor employee being excluded from the site for a period of time designated by LAUSD.
- Willful or repeat safety violations by Contractor employee(s) will result in permanent denial of LAUSD site access.
- The removal procedure may be accelerated and/or expanded to include removal of a Contractor's or Subcontractor's supervisory personnel and/or their entire workforce where violation(s) of safety regulations is widespread, or where the Contractor does not demonstrate good faith effort.
- Foremen/supervisors who give direct orders in violation of the safety protocol or are found to be present at the time and knowingly allow an employee safety infraction may be denied LAUSD site access for a period of time deemed appropriate by authorized LAUSD representatives.

- Should an imminent danger/hazardous condition be discovered, all work in the area of the danger/hazard must be stopped until corrective action has been taken.
- Contractors shall report legitimate unsafe actions/ conditions of other Contractors to the OAR, IOR or other LAUSD site representative(s) and/or LAUSD Safety.

16. SUBSTANCE ABUSE & ALCOHOL POLICY

16.1 PURPOSE

In order to maintain a safe, healthful and efficient work environment, Contractors and Subcontractors shall implement a Substance Abuse & Alcohol Policy. Note: This section is not applicable to LAUSD M and O. The OEHS department shall follow existing LAUSD policy for M and O.

16.2 FUNDAMENTAL REQUIREMENTS

All Contractors shall implement and enforce a policy which prohibits the possession, distribution, promotion, manufacture, sale, use or abuse of illegal and unauthorized drugs, drug paraphernalia, controlled substances and alcoholic beverages by any Contractor employee, agent or any person otherwise under the control of the Contractor, including employees and agents of Subcontractors and consultants while on any LAUSD construction site, including the work site, or while otherwise working on the project. Further, employees shall be prohibited from reporting to the premises under the influence of drugs or alcohol.

This Policy will apply to all employees, including but not limited to regular, part-time probationary, casual and contract employees of the Contractor, as well as to employees and agents of Subcontractors and consultants. The Contractor shall take whatever legally permissible steps are necessary or appropriate to enforce compliance with this policy.

Employees governed by this policy may possess a prescription medication in its original container and prescribed for current use by an authorized medical practitioner. The Contractor shall ensure that employees taking prescription medication inform their employer about potential side effects of medication which may affect the employees' ability to work safely.

At the discretion of the Contractor and/or LAUSD any Contractor employee working on LAUSD sites may be drug and alcohol screened in accordance with the protocol outlined in the LAUSD Safety Standards to include:

- A post accident/incident drug screen for those persons involved in any type accident/incident whether or not injury or property damage was in incurred.

Any employee who tests positive for drugs and/or alcohol or refuses to take a drug and alcohol screen shall be removed from the site.

16.3 GENERIC DRUG PROGRAM

16.3.1 Drug Free Work Environment

A. It is the responsibility of the Contractor/supplier/vendor to implement and maintain a drug free work environment and screening program to ensure a drug free workplace.

B. A post accident drug screen shall be required for those persons involved in accidents/incidents resulting in injury and/or property damage on LAUSD property.

C. Contractor/supplier/vendor employees who are reasonably suspected of being under the influence of narcotics or alcohol shall be drug tested as deemed appropriate by Contractor/supplier/vendor management, their designee and/or LAUSD.

D. Substance Abuse Testing

LAUSD reserves the right to require Contractor employees to undergo medical and/or physical examinations or tests at any time as a condition of being granted access onto LAUSD property, including urine drug tests, breathalyzer tests, hair samples, blood tests or other examinations to determine the use of any illegal or unauthorized drugs or substances prohibited in this policy

LAUSD shall reserve the right to approve the facility utilized for sample collection and/or testing utilized by Contractors/suppliers/vendors. Workplace testing may be altered or changed at the discretion of LAUSD.

These tests may be utilized under the following circumstances:

1. Post Accident. If a Contractor employee suffers an Occupational on-the-job injury (requiring treatment from a medical practitioner) or following a serious or potentially serious accident or incident in which safety precautions were violated, equipment or property was damaged, unusually careless acts were performed, or where the cause was due to an employee's or other person's failure to wear prescribed personal protective equipment or follow prescribed safety rules while working on LAUSD property, the employee will be tested. Refusal to undergo drug testing will be considered as a violation of the drug policy and the employee will be denied access to Owner's property.

2. Reasonable Suspicion Testing: "REASONABLE SUSPICION" means a suspicion based upon the observation of objective facts or specific behavior (or the report of such facts or behavior by a person believed to be reliable) which would lead a prudent person of ordinary intelligence to conclude that an individual may be using drugs and/or alcohol or in some other way is unfit to safely perform their job tasks.

3. For Cause, Reasonable Suspicion Testing will be used when there is a reasonable suspicion that a Contractor employee shows signs of possible intoxication, or is under the influence of drugs, or other facts that would lead a prudent person to be concerned about the individual's safety, the safety of others due to the person's physical condition or behavior covered under this policy.

4. All Contractor employees must agree to abide by this policy and must consent to drug testing and to the release of test results to their employer and/or LAUSD designated representatives as a condition of continued LAUSD job site access.

E. General Testing Procedures

1. The drug test will be taken from urine specimens or other standard testing methods and analyzed by a certified professional laboratory and may be administered by a Certified Third Party such as ASAP, DISA, LACC or equivalent .

2. The contracted facility will assure proper handling of the specimens so that the sample results can be traced to the proper individual. A chain-of-custody procedure will be developed to show a paper trail of the custody of samples at all times. The facility will also take necessary steps to avoid any dilution or alteration of specimens. This will be facilitated by using tamper resistant seals on all sample bottles.

3. Confirmation of test results will be reported to the employee's employer. The process normally takes 24 to 48 hours to be completed.

4. Testing will check for the following drugs:

Amphetamines	Cocaine
Phencyclidine	Opiates
Marijuana (THC)	

5. Any Contractor employee who is tested will have the right, if requested by that Contractor employee, to see the results of their test.

6. Contractor employees who have a positive test result will have a follow up confirmation drug test supervised by the designed testing facility.

7. Once documentation of a positive drug test is received, the Contractor will be notified. LAUSD will be notified of positive test results by the Contractor.

8. Contractor employees whose tests are confirmed positive by the confirmation drug test will be notified by the Medical Review Officer (MRO). At the earliest reasonable time, an interview with the MRO will be scheduled with the Contractor employee to discuss the impact of the positive test results on continued access to Owner property.

9. LAUSD and the Contractor will:

   - Maintain confidentiality of records associated with the administration of this policy.

- When required or requested, LAUSD will counsel Contractor management regarding the administration of this policy.

10. Prescription Drugs

- Contractor employees are required to inform their employer of any use of current prescribed medicine that could affect their performance. They may be required to obtain written statements from their doctor(s) regarding the drug(s) effect on the Contractor employee's performance of job duties and to present this statement to their employer.
- Contractor employees will not be allowed to operate equipment or perform their assigned job tasks if medication could interfere with safe equipment operations or work performance.
- Contractor employee failure to notify their employer with a written statement from their doctor regarding the use of medication that could affect performance on the job could lead to denial of job site access.

F. Post Accident Drug Testing

1. Any Contractor employee involved in an accident/incident resulting in injury/illness or property damage will be required to be tested for chemical substances within two hours of the incident (medical circumstances permitting). Failure or refusal to be tested will be considered as an insubordinate act and the Contractor employee will be denied access to LAUSD property. All accidents/incidents reported after the fact will be subject to drug testing.

2. The designated medical treatment facility will be responsible for the collection of specimens assuring proper handling of samples.

3. Contractor employees may be required to sign a consent form for drug or alcohol screening in the event of an occupational injury/illness.

4. In the case of an accident/incident requiring drug screening, it will be the Contractor supervisor's responsibility to see that the appropriate releases have been signed and that the Contractor employee proceeds with testing per above. This can be completed when the supervisor transports the employee to the designated medical facility.

5. If the test results indicate alcohol concentration at or above (.02%) or other regulatory standards, the Contractor employee is subject to having LAUSD site access denied.

G. Testing for Just Cause

1. Upon reasonable suspicious acts, a Contractor employee may be required to take a drug test. "Just cause" testing must be approved by the employee's supervisor.

2. The individual observing a Contractor employee who, in their objective opinion, shows abnormal behavior, impairment, or incoherent tendencies must confirm such observation through their immediate supervisor.

3. If the immediate supervisor confirms such observations, the Contractor employee shall be tested by the Contractor's designated testing facility. If the employee refuses, disciplinary action to include denial of LAUSD site access will be warranted. It is the Contractor's responsibility to see that a drug test requisition is signed, and that the employee is provided transportation to the collection site for testing.

4. If the test results indicate alcohol concentrations at or above (.02%) or at or above regulatory standards, the employee is subject to LAUSD site access being denied.

H. Collection Procedures

The contracted collection facility shall adhere to procedures assuring the security and Chain of Custody of the testing procedure consistent with regard for individual privacy.

I. Positive Detection Procedure

1. No information on drug types or amounts will be released to anyone other than the employee's employer, and if applicable, the General/Prime Contractor supervising construction activities.

2. In order to ensure the accuracy of the initial test results, all positive test results will have an additional confirmation test. If the confirmation test results are positive the employee will be notified by the MRO. The employee and his supervisor will meet following notification in a confidential setting.

3. If the test results are positive for cocaine, opiates, phencyclidine, barbiturates, amphetamines, marijuana, the Contractor employee will be denied access to LAUSD property until evidence of drug treatment through a State recognized program is obtained.

4. If the test results show an alcohol concentration equal to or above .02%, the Contractor employee will be denied access to LAUSD property.

5. The above provision (3 and 4) also applies to incidents where an employee refuses to submit to a drug screen. Refusal to test will be considered a positive test result.

J. Violations Meriting the Denial of Access to LAUSD Property

Any employee or person will be denied access to property for the following violations, even if such violations are "first offense":

1. The Contractor employee or person refuses to submit to a search, and/or inspection, and/or drug test when requested by their employer, LAUSD and/or (if applicable) the General/Prime Contractor.

2. The Contractor employee or person has submitted to a drug test and, in the judgment of their employer, LAUSD, (if applicable) the General/Prime Contractor and/or the approved drug testing facility, has degraded, diluted, switched, altered or tampered with their sample.

3. While on LAUSD property, the Contractor employee or person was using, manufacturing, distributing, dispensing, selling, or possessing any alcohol or illegal drugs.

K. Reinstatement to Work on LAUSD Following a Failed Drug Screen

1. Applicable Union applicable rules and agreements shall apply.

2. Non-Union workers shall show proof of drug and alcohol rehabilitation;

   a. Minimum Level 1 Outpatient Treatment

   b. Verification documentation of completion is required.

17. DISABILITY MANAGEMENT/RETURN TO WORK PROGRAM

17.1 DISABILITY MANAGEMENT/RETURN TO WORK POLICY

It is the policy of LAUSD, with support from all the Contractors working on LAUSD sites to assist a Contractor employee to return to work from an on-the-job injury at their regular rate of pay, as soon as possible after the Contractor employee has recovered sufficiently from the adverse effects of the injury and in accordance with guidance from the treating physician. Contractors will assist in this endeavor by finding their employee a productive task to accomplish. The employee will draw their regular rate of pay even if the designated task to which the Contractor employee is assigned is outside of their normal work assignments because of temporary physical limitations imposed by the consulting physician.

LAUSD, in conjunction with the Contractor, recognizes that an on-the-job injury can impose financial hardships upon a Contractor employee, in addition to other burdens. Through this return-to-work policy, we will endeavor to assist the Contractor employee in returning to productive employment. Under normal circumstances, restricted duty positions will be provided for as long as recommended by the treating physician. Employee refusal to accept limited or restricted duty, when appropriate and approved by the treating physician, can be considered as a voluntary resignation and Workers Compensation benefits will cease.

17.2 PURPOSE

This policy is implemented to establish basic guidelines for an Early Return to Work (transitional duty) Program which will minimize the time away from the job for injured Contractor employees who are unable to work or perform the normal functions of their jobs due to work-related injuries, but are able to work in a limited capacity assignment.

Each Contractor shall have a written Early Return to Work Program that shall be implemented on LAUSD sites unless specifically prohibited by the terms of a Collective Bargaining Agreement.

17.3 PROCEDURE

The specified steps taken to return an employee to work through modified/light duty must be carefully thought out to avoid aggravating the injury or illness. For this reason, each decision will require input from the attending physician and the Contractor.

- The Worker's Compensation Claims Coordinator and/or the LAUSD Claims Manager and construction safety department will contact and advise the Contractor of the need to develop a modified duty position for the employee involved.
- The attending physician will determine the work restrictions necessary to ensure that the employee does not aggravate the existing injury. The physicians work restrictions will be listed on the Work Status Report form.

- If necessary, after the modified/light duty job description is finalized the Worker's Compensation Claims Coordinator and/or the LAUSD Claims Manager will contact the attending physician to determine if the employee can be released to perform the proposed work assignment.
- If the employee refuses the modified/light duty work assignment the Contractor will notify The Worker's Compensation Claims Coordinator and/or the LAUSD Claims Manager. [In most cases, Workers Compensation indemnity payments will be immediately suspended.
- As soon as it can be determined through effective employee and physician contact that an employee is sufficiently recovered from a disability every effort will be made to quickly bring them back to work.
- If the employee accepts the modified/light duty work assignment, every effort should be made to bring them back to work at their normal pay rate.
- Injured employee considered for light duty work assignment will comply with the attending physician's work restrictions.

18. CONTRACTOR SAFETY STANDARDS

No attempt has been made to restate applicable Cal OSHA, Federal OSHA, ANSI, NFPA, standards in their entirety. Contractors are reminded it is their responsibility to have at least one copy of all applicable OSHA Standards, as well as other Standards incorporated by reference into the LAUSD Safety Standards, available on their sites for reference and review.

In some instances, the LAUSD Safety Standards are more stringent than the applicable Cal OSHA and Federal OSHA standards. In other instances due to variables in the CalOSHA program, the applicable CalOSHA standards may be more stringent than the LAUSD Safety Standards.

The Contractor is reminded that, in most instances, the most stringent safety requirements, regardless of source, shall apply.

Access for Maintenance and Operations (M and O):

All items requiring maintenance including all those related to Mechanical, Electrical, and Plumbing (MEP) require safe access for M and O personnel.

A safe means of access and egress to all mechanical unions, shutoff valves, pumps, HVAC, Utility Vaults, Interstitial Spaces or similar locations must be evaluated for safe access with regard to:

Electrical safety, Confined Space, Fall Protection or other recognized hazards and safe access are provided as part of the construction project.

This may require locating valves, unions, and associated MEP equipment as to be accessible preferably without the use of Personal Fall Arrest Systems (PFASs)

19. AIR TESTING EQUIPMENT

- Approved air testing equipment shall be used to test utility holes, cable vaults, pits, confined spaces and similar spaces for flammable, toxic, or oxygen deficient atmospheres. The exposing Contractor(s) are responsible for the use, maintenance, calibration and testing of said equipment.
- Air testing equipment shall be UL classified for use in Class I, Division 1, Groups A, B, C & D hazardous locations as defined by the National Electrical Code.
- Before each use air testing equipment must be tested and calibrated as required by the manufacturer to verify that it is fully functional.
- The use and repair of air testing equipment shall be in accordance with the manufacturer's operating manual and instructions.
- Prior to use, Contractor employees must be trained per manufacturer requirements on the use, limitations and alarm modes of each air-testing device that they use. Verification of training must be maintained on the job site.
- Employees must immediately leave a work area whenever an equipment alarm sounds due to:
  - o Low or high oxygen level (acceptable range is 19.5% to 23% oxygen).
  - o Flammable/combustible gas detected above 10% of the lower explosive limit (LEL).
  - o Set point for a toxic gas level is reached (e.g., 10 ppm hydrogen sulfide)
  - o Sensor failure
  - o Low battery alarm.
- Equipment must be carried with the Contractor employee or placed immediately adjacent to the work area and set to operate in a continuous monitor mode.
- Never enter an enclosed work/confined work space (i.e., utility hole, vault, pit, etc.) without:
  - o Completing required air testing.
  - o Purging the space.
  - o Providing continuous ventilation.
  - o Following all applicable regulatory guidelines specific to **"**Confined Space Entry" and "Utility Hole" work. Also reference "Confined Space Entry" and "Utility Hole" sections in these Safety Standards.

20. ASBESTOS

- Asbestos is to be handled only by qualified and certified Contractors. Asbestos Contractors/Subcontractors must be approved in accordance with applicable State, Federal, and Local regulations and must be approved by LAUSD to perform abatement and disposal of asbestos containing materials (ACM) and asbestos containing construction materials (ACCM), as defined.
- It is the Contractor's responsibility to review the Asbestos Assessment Report (Phase I) and the Abatement Design (Phase 2) prepared for a site prior to the commencement of work and take the necessary steps to ensure the safety of students, faculty, Contractor employees, and the general public through compliance with regulatory and LAUSD specification requirements.
- Contractors must verify the presence or absence of asbestos content in building materials **PRIOR** to impacting these materials during construction remodeling or demolition work.
- Upon discovery of any asbestos containing materials (ACM or ACCM) or presumed asbestos containing materials (PACM) not identified in the Phase I report, the Contractor will stop work in such areas and notify the LAUSD Construction Inspector. The material will be inspected and tested, if necessary, by the District's Asbestos Technical Unit (ATU) or by a LAUSD assigned environmental consultant.
- The Contractor shall ensure employees are trained in asbestos awareness to identify ACM, ACCM and PACM. Training will be in compliance with the requirements of the District's Standard Specification Section 13280 – Asbestos Abatement and Asbestos Related Disturbance – and be documented. Proof of such training is required to be submitted to a LAUSD authorized representative prior to commencement of work.
- All asbestos abatement/removal work must follow all regulations of OSHA, the U.S. Environmental Protection Agency (EPA), and/or the applicable State agency and the South Coast Air Quality Management District (SCAQMD).
- Maintenance and Operations personnel working in areas with ACM or PACM must have appropriate asbestos training which may include minor abatement and compliance with Negative Exposure Assessment Protocols. OEHS is responsible to ensure all asbestos surveys have been completed and information and training disseminated to effected employees and contractors per the applicable asbestos standards and LAUSD protocols.

21. BARRICADES AND FENCING

- Contractors shall provide and erect barricades around unprotected excavations, holes or openings in floor or roof areas, edges of roofs and elevated platforms, around certain types of overhead work, and wherever necessary to warn or protect people against falling in, through, off of or being struck by falling objects. Barricades may also be used to isolate people (such as employees of other Contractors, LAUSD personnel, faculty, students and the public) from vehicular and pedestrian traffic and/or work activities as required by the activity, potential hazards created by the activity, or the location of the activity.
- The type(s) barricades/barricade tape/fencing/perimeter protection required, its location and duration of use shall be reviewed during pre-construction and/or job progress meetings.
- To ensure the safety of students, faculty, and the general public, the Contractor, as directed by LAUSD, must provide and maintain adequate perimeter protection, such as chain link fences, gates, barricades, etc. to separate work areas from areas outside the perimeter of the job site.
- Void of sufficient illumination, lighting may also be required to sufficiently warn vehicular and/or pedestrian traffic of obstacles, trenches, evaluations, overhead work, etc.
- Barricades must be at least 42 inches high and must be square and level.
- Barricades must be suitable for the area of use (i.e., blinker type barricade for traffic control or protective barricade to provide physical protection from falling). Barricades/fences are to be placed around all construction trenches. However, barricade tape may be utilized to warn construction personnel of trenches/ excavations or overhead work inside construction sites which are provided with perimeter fencing.
- Construction work areas utilizing barricade tape shall be posted and protected using nationally accepted color coding as follows:
  - **RED – IMMEDIATELY DANGEROUS**
  - **YELLOW – CAUTION**
- Red barricade tape shall include placards/signage with work duration dates, responsible Contractor's name and contact person's telephone number.
- Entry into immediately dangerous (red tape barricaded) areas shall be by authorized personnel and only after being advised on the dangerous condition. Unauthorized entry into red tape barricaded areas is prohibited unless prior approval has been granted by a representative of the responsible Contractor.
- All barricade tape must be appropriately removed and discarded upon job completion or when the hazardous condition no longer exists.

- Projects extending over 30 days will require barriers that are not easily removed (must withstand 200 lbs. pressure).
- Portable/temporary fencing shall be installed around construction work areas, Contractor storage areas, and Contractor's heavy equipment if these areas are not otherwise protected within the confines of the sites perimeter fencing. Fencing must be in good repair and installed to ensure stability of the fencing from being knocked over by students, employees, or the general public.
- Chain link fencing shall be free from barbs, icicles (excess galvanizing material that may form sharp projections) or other projections that may cause injury.
- Portable fencing shall be installed/braced to prevent its being blown over during windy conditions. Portable fence braces shall not create a trip and fall exposure.
- Base supports of portable fencing shall be installed/placed to eliminate tripping hazards when fencing is placed adjacent to sidewalks and walkways.
- LAUSD reserves the right to prohibit use of temporary fence panel systems that require the use of a tubular pedestal base support system that presents a potential trip hazard to pedestrians.

22. HOT WORK, WELDING, CUTTING

- For fire prevention all Contractors performing hot work activities shall at a minimum implement and enforce the following Hot Work Program criteria:
- The Contractor's Hot Work Program shall meet or exceed the requirements of NFPA SIB, "Standard for Fire Prevention during Welding, Cutting and Other Hot Work."
- Hot work includes, but is not limited to, the following activities: grinding, cutting, welding, brazing or soldering, heating, hot air welding or other operations that generate heat, flames, arcs, sparks or other sources of ignition.
- Prior to performing hot work the Contractor shall evaluate the following: type of hot work to be performed, site preparation, atmospheric conditions, use of appropriate personal protective equipment, and firefighting equipment.
- Site preparation should include a survey for the following: flammable/combustible materials; hazards posed by heat transfer; flammable, corrosive, or toxic residues; equipment linings; appropriate lock/tagout application; confined space exposure and housekeeping.
- Contractor shall also evaluate the work area for the potential consequences of thermal conduction. Thermal conduction is the transfer of heat that could cause ignition by/through an object heated by the hot work operation.
- Contractor shall furnish their own UL/FM approved pressurized/charged portable fire extinguishers and/or other required fire protection equipment for all "hot work." This equipment shall be located on the same elevations of the work and within 25 feet of the hot work activity.
- The need for a fire watch in New Construction buildings will be contingent on the fire potential and/or at the discretion of LAUSD Safety.
- A fire watch person will be required for "hot work" operations conducted inside all Existing Facility school buildings.
- Fire watch personnel responsibilities/duties:
  - Fire watch personnel shall have fire-extinguishing equipment readily available and be trained in its use.
  - If available, they shall be familiar with alarm systems for sounding an alarm in the event of a fire.
  - They shall watch for fires in all exposed areas, try to extinguish them only when obviously within the capacity of the firefighting equipment available, or otherwise sound the alarm.
  - A fire watch shall be maintained for at least a half-hour after completion of welding, cutting or other hot work operations to detect and extinguish possible smoldering fires.

- Fire watch personnel may be required on different floor/surface levels and possibly in other rooms depending on the configuration of the building.

- Oxygen Acetylene Torches: Goggles approved for use when employees are working with oxygen acetylene torches will be worn.
- Arc Welding and Cutting Personnel Protective Equipment.
  - Welders shall wear the required eye protection contingent on the type welding activity performed.
  - They shall wear appropriate welding helmets, long-sleeve shirts, leathers and welders gloves.
  - If grinding or chipping is done, a face shield shall be worn in addition to safety glasses.
  - If respirators are required, they also shall be used according to the employer's written respiratory protection program.
- Arc-welding and cutting equipment shall be industrial rated, in good condition, and meet all governing authority requirements regarding application, installation, and operation. Trained and qualified personnel shall make a complete preventive maintenance inspection in accordance with manufacturer and/or other applicable regulatory criteria. The last inspection date shall be marked on the equipment.
- Before each use, the following items shall be inspected:
  - All leads for broken or cut insulation
  - Electrode holders for broken insulators or worn holders
  - Oil and fuels on gas or diesel-powered units
  - Covers are in place where leads attach to welding machines
  - All connections have no exposed current-carrying parts
- Inspect all leads, grounds, clamps, machines, hoses, gauges, torches, cylinders, etc. before each use.
- Do not run hoses and weld leads through doorways.
- All work must have a separate and adequate ground.
- Do not leave the rod in the electrode holder when not in use.
- Do not exceed 15 PSI on the torch side of the gauge when using acetylene.
- Do not use matches or cigarettes to light a torch.
- Anti-flashback arrestors shall be installed on all fuel gas cylinders or built into the regulators.

- Move all flammable/combustible materials at least 50 feet away from the welding/cutting area.
- Ventilation Requirements:
  - o Any welding, cutting and heating in enclosed/confined spaces should follow applicable confined space work protocol.
  - o General mechanical or local exhaust ventilation shall be provided whenever welding, cutting, or heating is performed in areas with inadequate ventilation in enclosed spaces or a potential fire or explosion threat from flammable or combustible gasses is present. The ventilation shall be of sufficient capacity and so arranged as to produce the number of air changes necessary to maintain welding fumes and smoke within safe limits. Levels below OSHA PELs and/or TLV's will be considered to be "safe limits" as described above. In some cases OSHA Action Levels, excursion limits and STELs may be substituted as "safe limits". The adequacy of the ventilation shall be determined by air monitoring and/ or ventilation measurements.
  - o When sufficient ventilation, as described above, cannot be obtained, the employees shall be protected by appropriate respiratory protection as described in the employer's written respiratory protection program. Confined space procedures will apply.
  - o When air monitoring is required, the Lower Explosive Limit must be non-detectable (0% LEL), prior to any type of burning, welding, or hot work being conducted by the Contractor. (For example, air monitoring will be required around or near any areas which may pose a potential fire or explosion threat from flammable or combustible vapors).
- The fire loss and employees injury exposure potential pertinent to hot work activities inside "Existing Facilities" and/or "New Construction" buildings may require the use of welding curtains. Welding curtains screens, barriers, drop cloth, etc. shall be made of flame resistant (cloth, polyethylene, plastic, etc.) materials.

23. CLOTHING/PROFESSIONAL DEMEANOR

Contractors shall require each employee, agent, vendor or Subcontractor to wear appropriate attire acceptable to *LAUSD* in accordance with the provisions in the *LAUSD Projects General Construction Specifications*.

23.1 CLOTHING

- Employee dress should be neat in appearance.
- Clothing contaminated by oily, flammable, toxic or caustic materials should not be worn until properly cleaned.
- Shirts and long pants must be worn at all times on the sites. Sleeveless shirts and tank tops are not permitted.
- Certain tasks may require the wearing of fire-resistant materials, such as Nomex®. In such circumstances, extremely flammable clothing material such as nylon should be discouraged.

24. CELLULAR TELEPHONE USE ON Emergency

- Personal cellular telephone use is prohibited except during lunch and authorized breaks.
- Equipment operators are prohibited from operating their equipment while conducting any (personal or business) cellular telephone conversation. Business cellular telephone use is permitted in those scenarios where visible contact between equipment operations, spotters, flagmen, etc. is limited.

25. COMPRESSED GAS CYLINDERS/BOTTLES

- In order to provide support, protection and stability, gas cylinders shall always be maintained and/or transported in an upright/vertical position and chained or tied to supporting structures, carts, etc. to prevent falling and damage.
- Cylinders must never be taken inside tanks, vessels, or confined spaces.
- Regulator fittings must be kept free of oil or grease.
- Cylinders valves must be turned to the "off" position when left inactive for 30 minutes or longer.
- Cylinders, hoses, valves, fittings and gauge connections shall be properly installed and inspected for leaks and damage before each use.
- Compressed gas cylinders must be secured in wheeled carts. Cylinders must not be stored in buildings.
- Cylinders must be maintained in good repair with appropriate pressure relief, hydrostatic testing and valve assembly
- When in storage, oxygen and fuel gas cylinders must be separated at a minimum of 20 ft., or by a 5 ft. high barrier with a 1/2 hour fire rating and placed away from contact that may rupture the tanks.
- Valve protection caps maintained (at least hand tight) must be on cylinders when not in use, in storage or when being transported.
- Cylinders must be labeled as to the nature of their contents per NFPA standard rules and the OSHA Hazard Communication Standard.
- Cylinder storage areas shall have appropriate warning signage posted.
- At no time will cylinders be accessible to the public.
- Appropriate fire-fighting equipment must be provided for each cylinder storage area.
- Torches and hoses shall not be left connected to cylinders overnight.
- Torches and hoses shall not be stored in unventilated gang boxes or storage containers.
- Flashback arrestors and back flow check valves shall be installed in accordance with manufacturer's instruction on all oxygen-fuel torch sets.

26. CONCRETE AND MASONRY

26.1 CONCRETE CONSTRUCTION

The creating Contractor must guard all protruding reinforcing steel, vertical conduit, anchor bolts, small diameter steel, etc. to eliminate impalement hazards in accordance with 8 CCR § 1712.

26.2 STRUCTURAL CONCRETE

The Contractor must not remove any forms or shoring until a determination has been made by the testing lab and structural engineer that the concrete has gained sufficient strength to support its own weight and superimposed loads.

The Contractor must not place loads on any concrete structure until concrete has reached a compressive strength predetermined by the structural engineer of record.

- The Contractor shall be the point of contact for information regarding load bearing reliability.

Where concrete shoring/reshoring is employed, a shoring/reshoring plan specific to the site shall be available for review at the site.

- Deviations from the shoring/reshoring plan will require the issuance of a new shoring/reshoring plan.
  - The addition of superimposed loads on the floor (such as equipment and/or materials) not considered in the reshoring plan shall be construed as a deviation from the plan and is prohibited.

26.3 POURING AND PUMPING OPERATIONS

- Permanent and temporary power lines shall be identified prior to the start of a concrete pour. Appropriate safeguards shall be implemented for the pumping, pouring and finishing operations.
- A site traffic control plan shall be established for concrete truck traffic. Trained spotters and flaggers shall be used as necessary for worker and public safety.
- Contractors involved in pouring and finishing activities shall have appropriate personal protection equipment, including gloves, mud boots, high visibility vests and eye protection.
- Concrete truck washout areas shall be in an area acceptable to LAUSD, located out of vehicular and pedestrian travel areas and comply with all applicable environmental laws, standards and regulations.
- Diapers or the equivalent shall be provided for the pump and concrete trucks when the truck to pump transfer occurs in a public street or other public area.

- A site logistics plan reviewed and approved during a job progress pre-planning meeting prior to commencing work shall be prepared for each pump location, and shall include provisions for concrete truck traffic routing and control, and (if applicable) pedestrian traffic routing and control.

26.4 MASONRY CONSTRUCTION

- Masonry walls shall be braced and/or supported as required by OSHA and/or local requirements.
- A "Clear Zone" may be required. Unauthorized personnel shall be prohibited from entering the work area. Barricading may be required to limited unauthorized access.
- LAUSD enforces a 6 foot fall protection rule and does not recognize the block-wall side masonry construction exception as listed in the Cal-OSHA Standard. Contractor may use integrated rebar system or equivalent on blockside of work to facilitate fall protection methods.

26.5 CUTTING, GRINDING AND PROFILING

- Dry cutting, grinding, and profiling of concrete or masonry shall be prohibited except in instances where it is determined in a manner consistent with applicable safety and health standards that the use of water in the cutting, grinding or profiling is not feasible.
- If it is determined that the use of water is not feasible:
  - The Contractor shall perform the work off site or use engineering and work practice controls on site to control the dust, such as a vacuum with a high efficiency particulate air filter (HEPA), or other dust control system(s);
  - If possible, any dry cutting which occurs shall be done in a designated area away from other employees; and
  - The Contractor shall provide affected employees with appropriate respiratory protection in accordance with applicable Contractor, LAUSD and/or OSHA/NIOSH Standards which includes but not limited to:
    - A written respiratory protection program;
    - Physical Examinations for respirator use;
    - Written cartridge change out schedules; and
    - Care, maintenance and disposal process.

27. CONFINED SPACE ENTRY

- OSHA defines a confined space as a space that:
  - o is large enough and so configured that an employee can physically enter and perform assigned work; and
  - o has limited or restricted means for entry or exit (examples may include tanks, vessels, silos, storage bins, hoppers, vaults, pit, subfloor crawl spaces, manhole systems, etc.); and
  - o Is not designed for continuous employee occupancy.
  - o Has the potential to contain a hazardous atmosphere/ or other hazards.
- Any areas defined as confined space will require special precautions. Before any work begins in a confined space a pre-planning meeting will be held to review the exposures associated with work performed and the required controls/countermeasures necessary to prevent injury.
- Any violations of confined space protocol creating imminent life threatening hazard exposure(s) shall result in immediate cessation of work until the required safety protocol has been implemented.
- The Contractor must abide by the OSHA Standard (8 CCR §5156, 5157 and 5158) for confined space entry and furnish all appropriate personnel, equipment, and support.
- Contractors conducting work in utility holes (manholes and vaults) shall comply with the provisions contained in 8 CCR §5156, 5157, and 5158) and the section of LAUSD Safety Standards titled **Utility Holes.**
- Contractor personnel must be trained in the hazards of confined space work, including operating and rescue procedures, the use of respiratory equipment, and instructions as to the hazards they may encounter. Documentation of all required training and/or certification will be maintained on site for review by authorized LAUSD representatives.
- Contractor employee(s) who by the required training, with the supporting documentation/certification, which complies with the criteria certifying them as a "Confined Space Competent Person" will be on site throughout any confined space work activities.
- The Contractor shall develop a written, understandable confined space operating and rescue procedure which must be made available to all affected employees.
- The Contractor is required to provide all necessary entry/rescue equipment required for all entries into confined spaces (tripod, full body harness and lifeline or equivalent, etc.). With approval from LAUSD Safety, wrist straps may be used in designated areas instead of a full body harness.

- Prior to entry into a confined space, the Contractor shall ensure all pipe lines which may convey flammable, injurious, or incapacitating substances into the space are disconnected, blinded, or blocked off by other positive means in accordance with applicable Lockout/Tagout regulations.
- Prior to entry into confined space, the Contractor shall test the air with an appropriate device or method for: (1) Oxygen content, (2) Flammable gases and vapors, and (3) Potential toxic air contaminants. A written record shall be made and kept at the work site for the duration of the work.
- The Contractor shall conduct air testing with such frequency to ensure that the development of dangerous air contamination and/or oxygen deficiency does not occur during the performance of operations.
- The confined space shall be emptied, flushed, or otherwise purged of flammable or injurious substances to the extent feasible.
- The Contractor is required to provide proper ventilation equipment.
- Whenever an atmosphere free of dangerous air contamination and/or oxygen deficiency cannot be ensured, the Contractor shall provide approved respiratory equipment to affected employees, who have been properly trained and are involved in a comprehensive respiratory protection program in accordance with *8 CCR 5144*.
- The Contractor shall provide a trained standby employee on the outside of the confined space ready to give assistance in case of an emergency. The standby employee shall have appropriate, approved respiratory protective equipment, including an independent source of breathing air conforming with *8 CCR 5144*.
- The standby employee must have a valid certificate in first aid and CPR training from the American Red Cross, or equivalent training verified by documentary evidence.
- Visual contact or two-way radio communication must be available at all times. When required, the Contractor shall provide radios/two way communication.
- In order to provide emergency assistance, the Contractor must establish a means of communication with the local emergency service entities.

27.1 PERMIT REQUIRED CONFINED SPACE

- A confined space that has one or more of the following characteristics will be considered a permit-required confined space and the applicable regulations/standards will apply:
  - Contains or has the potential to contain a hazardous atmosphere which includes dangerous air contamination, flammable materials/atmosphere and/or oxygen deficiency.
  - Contains a material that has the potential for engulfing an entrant.

- Has an internal configuration such that an entrant could be trapped or asphyxiated by inwardly converging walls or by a floor which slopes downward/upward and tapers to a smaller cross-section.
- Contains any other recognized serious safety or health hazards

- Confined spaces classified as "Permit Required Confined Space" shall be labeled as follows:

DANGER
PERMIT REQUIRED CONFINED SPACE
DO NOT ENTER

27.2 UTILITY HOLES (MANHOLES AND VAULTS)

- Work in utility holes may expose employees to potential injury due to a lack of oxygen, or the presence of toxic or flammable/combustible gas. Therefore all work activities conducted in utility holes will be considered as confined space work and confined space safety protocol will apply to include, but not limited to, the following:
- To remove the utility hole cover:
  - Use appropriate lifting hooks or bars.
  - Place feet clear of the cover.
  - To avoid back injuries, lift using bent knees and keep the back straight.
  - Place utility hole guard over the opening.
- Only trained and qualified employees can test, purge and enter a utility hole. An employee who through training and experience is certified as a Confined Space Competent Person will be on site to supervise and enforce compliance with applicable confined space safety protocol.
- Test the utility holes internal atmosphere with a properly calibrated air testing instrument as follows:
  - Immediately after removing the utility hole cover, lower the air sampling hose to the point where a person's will be when working in the utility hole.
  - After entering the hole, test duct entrances, corners and generally throughout the utility hole.
  - Test when duct plugs are removed.
  - A log must be kept on air monitoring results.
- If continuous air monitoring is not performed, monitoring must be performed:
  - A minimum of every two hours after making initial tests.

- A minimum of every hour if a utility hole tent is used, or if gas is detected during the initial atmosphere test.
- At every shift change.

- Utility holes must be purged prior to entry to dissipate stagnant or contaminated air, ensure against oxygen deficiency, and provide a complete air change.
- Position ventilation blower intake away from exhaust or other emission sources.
- Only one 90-degree bend in a ventilation blow hose is permitted while purging.
- Continuously ventilate occupied utility holes. Only two 90 degree bends in blow duct are permitted during continuous ventilation.
- Employees must immediately exit a hole if the blower stops or has abnormal air flow.
- Rescue and emergency equipment must be available in accordance with 8 CCR 5156-58.
- Do not take propane or other compressed gases into a utility hole.
- Do not permit open flames in a utility hole.
- Implement traffic/vehicular control criteria as mandated by the applicable regulatory agency (DOT).
- If possible, park the gang truck or utility truck in such a manner to provide a barrier to vehicle traffic.
- Where applicable, use a ladder to exit/enter utility holes more than 4 feet deep. Secure and test the ladder for slippage.
- Conduct a visual inspection of the utilities for any deterioration that may pose a safety hazard.
- Do not move power conductors. Power conductors can only be moved by an authorized representative of the power company.
- Employees are not permitted to remain in a utility hole during cable placing or removal operations.
- Secure all equipment and replace utility hole cover upon completion of work.

27.3 CONNECTIONS TO UTILITIES

- Neither the Contractor nor any Subcontractors will be permitted to make any temporary service connections to electrical, water, air or steam utilities without approval of the OAR, IOR or other authorized LAUSD representative.
- Temporary connections shall comply with all applicable Federal, State, and local regulations.
- Temporary connections shall be inspected on a regular basis. At the discretion of LAUSD documentation of inspection may be required and maintained on site.

28. CRANES/BOOM TRUCKS AND RIGGING

28.1 LAUSD SAFETY REQUIREMENTS

All crane operations conducted on LAUSD Facilities job sites will be considered critical lifts requiring a written lift plan utilizing the LAUSD "Lift Evaluation Form" which, prior to commencing work, will be provided to, reviewed by LAUSD Facilities Construction Safety. The "Instructions" tab on the "Lift Evaluation Form" lists the information required for a complete lift plan submission. Lift plans must be submitted a minimum of two weeks in advance of the lift.

28.2 GENERAL REQUIREMENTS

The term crane as used in this section shall include boom trucks and similar truck mounted cranes.

- Know the weight of the object to be handled.
- Know the capacity of the handling device (crane, forklift, and chain fall, come-along) that is intended for use.
- Visually inspect hooks, wire, slings, other attachments etc. for irregularities, damage, weaknesses, etc., before use.
- Tag/restraint lines or guide ropes in good condition shall be used to control all loads except where their use presents a greater hazard.
- Never raise or swing a load over people.
- All hooks except shake out hooks must have a safety latch. Shake out hooks will not have a safety latch (mouse).
- Always place a load in the center of a hook and never on the point.
- Cranes, hoists or derricks shall not be left unattended while a load is suspended.
- Swing radius protection (i.e. barricades) shall be provided where rotating crane superstructure is positioned to operate in areas where persons may be caught between rotating parts and fixed objects or non-rotating crane components.
- Crane outriggers must be leveled and fully extended when making a lift.
- When required for crane stability, plates, pads or mats shall be used under the outriggers or crawlers. The plates, pads or mats shall be of suitable material and size to support the crane on the surface that it is set up on.
- No part of the crane, load, hoist, lines, boom, tag-line, shall come within 15 feet of energized electrical lines.
- All slings, chains and rigging equipment must be inspected in accordance with manufacturers' criteria.

- When hand signaling is utilized for communication between the operator and the signalman, only approved hand signals for crane, derrick and boom equipment shall be used. A copy of these hand signals will be posted at the operating position of each piece of equipment.
- The manufacturer's specifications and limitations applicable to the operation of any and all cranes and derricks must be complied with. When manufacturer's specifications are not available, the limitations assigned to the equipment shall be based on the determinations of a qualified engineer competent in this field and such determinations, will be appropriately posted, documented, and recorded. Attachments used with cranes shall not exceed the capacity, rating, or scope recommended by the manufacturer.
- A competent person shall make a thorough annual inspection of the crane. A record of the dates and results of inspections for each crane must be maintained and available for review.
- Wire rope safety factors shall be in accordance with American National Standards Institute B30.5 series.
- Certification of a crane operator's ability to operate safely is required and records of such certifications must be available. The Contractor is responsible for determining the operator's skill, verifying the certification, and maintaining the records. Operator certification will be maintained on site available for review by LAUSD authorized representatives and/or any inspectors representing governing/regulatory entities.

28.3 DETAILED REQUIREMENTS

Cranes are a vital part of any construction operation. To assure that they handle loads properly, safely and with greatest efficiency, the following guidelines are provided**.**

Mobile Cranes - Setup

The operator shall be responsible for:

- Performing a daily inspection of the crane. Written documentation of this inspection will be maintained on the crane.
- The proper placement of the crane in relationship to the load to be handled and the landing area so as to obtain the best rated lift capacity.
- Every time a crane is moved/repositioned the crane will be leveled to within 1 degree of level. Recheck the level, a minimum of three times, during an 8-hour work shift.
- The proper placement and use of outriggers for all lifts.

- The determination of stable or unstable ground and the need for additional floats, cribbing, timbers, and structural members as may be needed.
- The installation and maintenance of crane swing radius protection.

28.4 LOAD RATINGS

Determination

- The weight of all auxiliary handling devices such as hoist blocks, headache balls, hooks and rigging shall be considered as part of the total load.
- Additionally, the weight of all items added to the load at the site must be determined and added to the total weight.
- The operator shall be provided with a copy of the Bill of Lading with the item weight clearly legible. This will be used to determine total load weight.
- All lifts exceeding 75% of the rated capacity of the crane at the boom angle for which the lift is made, lifts involving two or more cranes/lifting devices or lifts involving high value loads will be considered "critical lifts" (see "Critical Lifts). Prior to any crane lifts a written lift plan, utilizing the LAUSD "Lift Evaluation Form submission package (see Appendix) will be submitted, reviewed and accepted by LAUSD Construction Safety and/or their designated representative.

28.5 CRANE INSPECTION

Contractors shall ensure that a qualified person visually inspects the crane, derrick, or hoist's controls, rigging and operating mechanisms prior to the first operation of any work shift.

Cranes shall be inspected:

- After setup and prior to initial lift.
- Before each shift.
- After every malfunction.

Documented daily visual inspections by the operator or other qualified person shall include:

- A check of all functional mechanisms for maladjustment causing unsafe operations.
- Operation of all limit switches without a load on the hook.
- Inspection of lines, tanks, valves, pumps, and other parts of air or hydraulic systems for leaks.
- Inspection of hoist or load attachment chains and end connections for excessive wear, twist, and distorted or stretched links.
- A check for excessive wear, broken wires/strands, fraying, stretch, kinking, or twisting of ropes, chokers, rope slings and their connections.

- Inspection of hooks for deformation and cracks.
- All control mechanisms for excessive wear of components and contamination by lubricants or other foreign matter.
- All safety devices for malfunction.
- Deterioration or leakage in air or hydraulic systems.
- Electrical apparatus for malfunctioning, signs of excessive wear, dirt and moisture accumulation.
- Tires for proper inflation.

Daily inspection documentation shall be maintained by the operator and available for review by LAUSD authorized representatives and/or any inspectors representing governing/ regulatory entities.

Adjustments and repairs shall be made only by a qualified person. Adjustments shall be maintained to assure correct functioning of the following:

- All Functional Operating Equipment.
- Safety Devices
- Control Systems;
- Power Plants.
- Brakes

All adjustments and repairs shall be documented and the documentation shall be maintained on the job site for review, upon request, by any authorized LAUSD representatives and/or inspectors representing governing/regulatory entities.

Periodic and annual third party inspections shall be performed in accordance with the manufacturer's recommendations and governing regulatory entities and submitted to LAUSD upon request.

An approved certifying agent shall re-inspect any crane that is involved in any incident or is damaged during set-up or operation, and a new certificate of inspection issued prior to being returned to service.

Record Keeping:

- All records pertaining to crane inspections shall be kept on-site with the crane or in the Contractor's site field office.
- If during any safety inspection, the operator or supervisor cannot produce the required crane inspection records; the crane shall be shut down and inspected.

28.6 OPERATOR QUALIFICATIONS AND OPERATING PROCEDURES

Operator Qualifications

Cranes shall only be operated by the following personnel:

- Only Employees authorized by the contractor or crane leasing company who are trained, or known to be certified and qualified, in the safe operation of specific cranes or hoisting apparatus shall be permitted to operate such equipment.
- Where required, operators shall have valid evidence of current Licensing or Certification in accordance with State and Local requirements. Operators not having such evidence where required shall not be permitted to operate applicable machinery (except under terms and conditions prescribed for Trainees by applicable regulations).
- Inspectors certified for crane operation.
- When necessary qualified testing and maintenance personnel.

No one other than the above personnel shall be in or on the crane during operations.

Operating Procedures

The operator shall:

- Not engage in any practice which may divert his attention while engaged in crane operations;
- Not operate his crane if physically or mentally unfit, or taking prescription drugs which may affect judgment;
- Not respond to any signal that is unclear or is given by anyone other than appointed signalmen. Exception: The operator shall respond to a stop signal given by anyone.
- Have final responsibility and control over the crane operations. Whenever there is any doubt as to safety, the operator shall have the authority to stop and refuse to handle loads until safety has been assured.
- Be familiar with the crane and its care, the operators' manual and load charts. He shall be responsible for notifying his supervisor of any needed adjustments or repairs, and for logging his findings in the crane log.
- Upon request, demonstrate his ability to determine total load weight and its relationship to the crane load charts.
- When loads which are limited to structural competence rather than by stability are to be handled, the operator and supervisor shall concurrently determine that the weight of the load has been determined within plus or minus 5 percent before the load is lifted.

Attaching the load:

- The load shall be attached to the hook by means of slings or other approved devices.
- No open hooks shall be used for lifts. Hooks used for lifts shall have hook safety latches or be safety wired.

Moving the load:

- The operator shall determine that the crane is level to within one (1) degree and, where necessary, is properly cribbed and blocked.
- The operator shall be responsible for determining that the load is properly secured and balanced before making the hoist.
- The operator shall position the hook over the load in a manner to prevent load swing.
- The operator shall determine that the rope is properly seated on the drum and in the sheaves, the load line is not kinked and multiple part lines are not twisted around each other.

29.7.1 Rigging Requirements

All loads shall be rigged by an authorized and qualified rigger. Qualified Riggers shall at a minimum meet the training requirements as recognized by the National Commission for the Certification of Crane Operations (NCCCO). Riggers shall have a certification that identifies the following:

- Date of Training;
- Name of training and printed name and signature of trainer;
- Number of hours of classroom training; and
- Hours of practical training.

The minimum requirements shall be followed:

- All rigging equipment shall be inspected prior to each shift and as necessary during the shift to ensure safety. Damaged or defective slings shall be immediately removed from service.
- All rigging devices including slings shall have permanently affixed identification stating size, grade, rated capacity, and manufacturer.
- Rigging not in use shall be removed from the immediate work area.
- Rigging, including slings, shall be hung on a rigging frame so that bends and kinks do not set in.

- Slings shall not be left lying on the ground or otherwise exposed to dirt and the elements.
- Wire rope slings shall be lubricated as necessary during use. When in storage, slings shall be lubricated no less than every 4 months.
- "Shop-made" grabs, hooks, clamps, or other lifting devices shall not be used unless proof-tested to 125 percent of their rated load by an approved-testing agency. Approved devices shall have the capacity permanently affixed.
- Eyes in wire rope bridles, slings, or bull wires shall not be formed by wire clips or knots.
- Protruding ends of strands in splices on slings bridles shall be covered or blunted.
- All rigging equipment in use shall have a safety factor of five.

29.7.1 Slings: Safe Operating Practices

- Slings shall not be shortened by knots, bolts, or other make-shift devices.
- All slings shall be padded with softeners to protect them from damage due to sharp corners.
- Slings used in a basket hitch shall have the loads balanced to prevent slippage.
- Loads handled by slings shall be landed on cribbing or dunnage so that slings need not be pulled from under or be crushed by the load.
- Slings subjected to shock loading shall be immediately removed from use and destroyed.
- Slings shall not be made from wire rope and cable clips.

29.7.3 Sling Inspection

A thorough inspection of slings in use shall be made daily or on a regular basis as determined by:

- Severity of service conditions.
- Frequency of sling use.
- Nature of lifts being made.
- Experience gained on the service life of slings used in similar use.
- Formal inspection periods shall not exceed once in twelve months.

29.7.4 RIGGING SLINGS AND HOOKS

Hoisting hooks shall be of the safety latch-type. Crane hooks with cracks or with deformation of throat opening more than 15 percent in excess of normal opening or more than 10 degree twist from plane of unbent hook shall be removed from service.

Ropes shall be inspected for proper lubrication, excessive wear, broken strands, and proper weaving.

In order to determine proper time for replacement, a continuing inspection record shall be maintained for hoisting ropes. Conditions such as the following shall be reason for replacement:

- In running ropes, 6 randomly distributed broken wires in one rope lay, or 3 broken wires in one strand in one lay.
- Wear of 1/3 the diameter of outside individual wires.
- Kinking, crushing, bird caging, or other damage resulting in distortion of the rope structure.
- In standing ropes, more than 2 broken wires in one lay in sections beyond end connections or more than one broken wire at an end connection.
- Reduction of rope diameter below nominal diameter due to loss of core support, internal or external corrosion, or wear of outside wires.
- Inspection documentation shall be available on site for review by authorized LAUSD representatives and/or authorized regulatory agents/inspectors.

Fixtures are usually attached to wire rope by wire rope clips. The clips must be attached with the inside curve of the U-bolt against the live, or long end, and flat clip against the dead, or short end of the wire rope.

Each day before being used, wire rope slings, alloy steel chain slings, metal mesh slings, and natural and synthetic fiber rope slings, and all fastenings and attachments shall be inspected for damage or defects by a qualified person.

Slings shall have permanently affixed durable identification stating the following:

- Manufacturer's name or trademark
- Rated capacity

Cranes and derricks exceeding 3 tons rated capacity shall not be used in lifting service until an approved/qualified certifying agent has certified the equipment. Annual and quadrennial inspection certificates shall be maintained on each crane. Cranes that do not have such verification of inspection will not be permitted to operate on LAUSD sites.

A durable load chart with clearly legible letters and figures, showing rated load capacity, recommended operating speeds, and special hazard warnings (hand signal diagram and instructions) must be clearly visible to the operator.

All mobile cranes having either a maximum rated boom length exceeding 200 feet or a maximum rated capacity exceeding 50 tons shall be equipped with a load indicating device or a load movement device. The indicator shall give a clear visual warning signal before high or low unsafe boom angles are reached.

Cranes having a boom exceeding 60 feet in length or a maximum rated capacity exceeding 15 tons shall be provided with an approved boom angle or radius indicator which clearly shows the boom angle in degrees to the operator at all times.

Each variable radius boom-type crane shall be equipped with a boom angle or a boom radius indicator and clearly legible load rating chart in clear view from the operator's position.

An effective, audible warning and operating signal device shall be provided on the outside of the crane. The controls shall be in easy reach of the operator.

Cranes of such design that the boom could fall over backward shall be equipped with boom stops whenever the main boom is rope supported. The boom-stop shall provide emergency protection against destructive damage and related hazards by opposing any unexpected upward and rearward boom movement beyond the working range.

Crane operators exposed to the hazard of falling material or objects shall be protected by a canopy-type guard or cab. All windows shall be safety glass, or equivalent, that introduces no visible distortion that will interfere with the safe operation of the crane.

When required by the manufacturer certified agent's instructions, outriggers shall be set so that wheels within the boundary of the outriggers shall be relieved of all weight by the outrigger jacks or blocking.

A fire extinguisher of not less than 10-B:C rating shall be kept in serviceable condition and readily accessible to the operator.

Operations shall be conducted and the job controlled in a manner to prevent loads from being passed directly over workers, occupied work spaces, or occupied passageways.

A qualified signal person shall be provided when the entire radius of operation is not in full and direct view of the operator unless a signaling or control device is provided. Only one person shall be permitted to give signals to the operator.

There shall be conspicuously posted in the vicinity of the hoisting operation, a legible chart depicting and explaining the system of signals used.

No employee shall be permitted to ride on loads, hooks, or slings of any derrick, hoist, or crane.

Swing radius protection shall be provided where a rotating crane is positioned to operate in areas where persons may be caught between rotating parts.

For all power lines, regardless of load/power rating, the minimum clearance between the lines and any part of the crane or load shall be 15 feet.

A designated person shall monitor the clearance between crane booms and power lines and alert the operator when necessary.

If working within in close proximity to energized power lines taglines, restraint lines, or guide ropes shall be used on all loads and should be protected or insulated to prevent shock.

Cranes, hoists, or derricks shall not be left unattended while the load is suspended unless the load is in a barricaded area or is blocked up or otherwise supported.

Before leaving the crane unattended, the operator shall:

- Land or properly secure any attached load.
- Disengage the clutch.
- Set travel, swing, boom brakes, and other locking devices unless otherwise specified by the certifying agents.
- Put controls in the "off" position.
- Stop the engine or motor.
- Secure the crane against accidental travel.

The load or the boom shall not be lowered below the point where less than two full wraps of rope remain on grooved drums and three full wraps on un-grooved drums.

In all operations where the weight of the load being handled is unknown and may approach the rated capacity, a qualified person shall determine the magnitude of the load unless the crane is equipped with a load indicating device.

The Contractor shall provide a qualified person to direct the lift. The qualified person shall see that:

- The crane is properly leveled for the work being performed and blocked where necessary.
- The load is well secured and properly balanced in the sling or lifting device before it is lifted more than a few inches.

28.8 CRITICAL LIFTS (CRANES, BOOM TRUCKS, DERRICKS, ETC.)

All crane lifts on LAUSD construction sites shall be considered critical lifts requiring a written lift plan submission to and acceptance from LAUSD Facilities Construction Safety.

A qualified person shall prepare the Critical Lift Plan utilizing the LAUSD "Lift Evaluation Form" package. The qualified person preparing the lift plan may be the crane operator, lift supervisor, or rigger. The crane operator, lift supervisor, and rigger shall participate in the preparation of the plan. The plan shall be documented, and a copy provided to the Contractor and LAUSD Construction Safety. The lift plan shall be reviewed by LAUSD Construction Safety and will be "accepted" or "rejected" contingent on content. No lifts / picks will take place without prior written "acceptance" of the lift plan submission by a LAUSD Construction Safety representative.

- The Lift Plan shall specify the exact size and weight of the load to be lifted and all crane and rigging components that add to the weight. The manufacturer's maximum load limits for the entire range of the lift as listed in the load charts shall also be specified.
- Shall specify the lift geometry and procedures, including the crane position, height of the lift, the load radius, and the boom length and angle, for the entire range of the lift.
- Shall designate the crane operator, lift supervisor, and rigger, and state their qualifications.
- Will include a rigging plan that shows the lift points and describes rigging procedures and hardware requirements.
- Will describe the ground conditions, outrigger or crawler track requirements, and, if necessary, the design of mats, necessary to achieve a level, stable foundation of sufficient bearing capacity for the lift.
- Will list environmental conditions under which lift operations are to be stopped. Prior to commencing crane operations in bad weather (primarily rain and/or high wind conditions) which could have a negative impact on site crane operations approval from the OAR and/or LAUSD Construction Safety and the General Contractor Site Manager/Superintendent will be required.
- Will specify coordination and communication requirements for the lift operation.
- For tandem or tailing crane lifts specify the make and model of the cranes, the line, boom and swing speeds, and requirements for an equalizer beam.
- Shall include any additional information determined by the LAUSD Construction Safety Department to be pertinent to the lift.

29. DEMOLITION

Demolition activities at both New and Existing LAUSD construction site sites shall be reviewed and a demolition plan/schedule shall be developed and implemented prior to commencing demolition work.

The pre-planning of demolition activities shall take into consideration the liability exposure potential attributed to demolition work in and/or adjacent to LAUSD facilities when occupied by faculty, students and the public.

Contractor shall ensure safe passage of persons around areas of demolition. Conduct operations to prevent damage to adjacent buildings, structures, other facilities, and people.

Utility companies shall be notified and all utility service shut off, capped, or otherwise controlled, at the building or curb line before starting demolition. The Contractor is responsible for ensuring that these actions have been taken.

The Contractor shall develop an Emergency Call List for all known utility owners prior to the start of demolition activities.

A site plan shall be marked up to show the locations of known utilities, and the nearest identified shut-off valves/controls. This plan shall be available in the Contractor's Site Office. The site LAUSD representative (OAR) and LAUSD Safety shall be provided with a copy.

Contractors shall determine if any type of hazardous chemicals, gases, explosives, flammable materials, or similarly dangerous substances have been used in any pipes, tanks, or other equipment on the property.

When the presence of hazardous substances is apparent or suspected, testing and purging shall be formed and the hazard eliminated prior to demolition.

Adequate dust control measures shall be implemented during demolition stock piling and leading operations.

Pipe-covering insulation, steel beam and column fire protection, heating, ventilation and air-conditioning duck work shall be surveyed for asbestos.

Painted surfaces shall be analyzed for lead content.

Lead and/or asbestos removal shall be in accordance with all applicable standards.

During demolition, continuing inspections shall be made as the work progresses to detect hazards resulting from weakened or deteriorated floors, walls or loosened materials.

The Contractor shall ensure that floor load limits are not exceeded during demolition operations.

Disperse demolition equipment throughout structure and remove demolished materials to prevent excessive loads on supporting walls, floors or framing.

Perimeter protection shall be utilized around all demolition sites in order to protect the public and reduce the probability of unauthorized site access.

Walking across exposed floor joists, steel beams, or girders is prohibited.

Provide interior and exterior shoring, bracing, or supports to prevent movement, settlement or collapse of structures to be demolished, and to adjacent facilities.

Demolish concrete and masonry in sections. Use bracing and shoring to prevent collapse.

30. ELECTRICAL

All electrical installation shall meet the current NFPA 70 and NFPA 70E and building code requirements.

All temporary power panels shall have covers installed at all times. All circuits shall be clearly labeled.

Treat all equipment and parts as if they are energized unless determined and verified by testing to be otherwise.

Only qualified and authorized electricians utilizing safe work procedures and personal protective equipment are allowed to work on or near exposed energized parts.

Safety signs, barricades, and attendants shall be required to prevent accidental contact with live electrical parts and equipment.

Cover or guard live parts operating at 50 volts or more.

All disconnects for motors, branch circuits, service feeders; etc. must be marked to include what it controls.

Extension cords must be a minimum 12 gauge three (3) wire cords.

Do not alter electrical plugs (remove ground pins) and receptacles that prevent grounding.

Metal/conductive ladders will not be permitted/used on site.

Damaged or defective tools and cords shall be removed from service.

Electrical equipment used in hazardous locations must be rated and approved for the hazardous location.

Do not run extension cords through doors, windows, walls, and over metal objects such as conduit, pipes, and racks. To avoid damage and/or a trip hazard, cords will be hung at least 7 feet above the floor when crossing over passageways, isles/walkways.

Per the OSHA "Assured Equipment Grounding" program, all electrical tools and equipment must be inspected quarterly and provided with labels, tags or color coding to indicate an inspection has been conducted.

The Contractor is to supply and utilize ground fault circuit interrupters (GFCI) for all temporary electrical wiring, extension cords, and electrical equipment.

Ground Fault Circuit Interrupters shall be tested in accordance with manufacturer's requirements. Logs shall be maintained of all such testing.

Ground Fault Circuit Interrupters that have an automatic reset feature are not permitted on LAUSD site.

All panel schedules shall remain current identifying the proper disconnects and locations.

Do not block or obstruct electrical panels, breakers, switches, etc.

All electrical installations shall have adequate working space and panels labeled per NFPA70E for Arc-Flash protection. All new installations shall not be considered complete without proper labeling per NFPA 70E.

Absolutely no storage is allowed in electrical vaults.

Temporary lights shall not be suspended by their extension/power cords and must be equipped with guards to prevent contact with the bulb.

All power tools must be double insulated or grounded properly, and inspected prior to use.

The Contractor shall use a foreign voltage detector (FVD) to test for the presence of foreign voltage. See the **Foreign Voltage Detectors** section in these Standards.

The Contractor must properly lockout/tagout any machinery/equipment in accordance with protocol summarized in the lockout/tagout section in these Standards.

The General/Prime Contractor shall coordinate instances that require multi-Contractor lockout/tagout activities.

31. E LEVATING WORK PLATFORMS AND AERIAL DEVICES

An elevating work platform is a device designed to elevate a platform in a substantially vertical axis. (Vertical Tower, Scissor-Lift)

An aerial device is any vehicle-mounted or self-propelled device with a telescoping extendable or articulating boom, or both, with personal basket which is primarily designed to position personnel.

Only authorized and trained personnel shall operate an aerial device or elevating work platform.

The manufacturer operating instructions shall be onboard the lift at all times and the lift shall be operated per the manufacturer operating instructions.

Lifts may not be modified or altered without express written approval of the manufacturer.

Boom, basket and platform load limits specified by the manufacturer shall not be exceeded.

Elevating work platforms and aerial devices are designed for use as personnel work platforms and will **not** be utilized to lift/elevate construction materials.

Employees shall not sit or climb on the edge of the basket or platform or use planks, ladders or other devices to gain greater height.

Employees shall not work off elevating work platforms or aerial devices when exposed to high winds.

"Belting/tieing off" to an adjacent pole, structure, or equipment while working from an aerial device is not permitted.

Lift controls shall be tested in accordance with the manufacturer's recommendations or instructions prior to use to determine that such controls are in safe working condition.

While in an elevated position, aerial baskets or platforms shall not be supported by adjacent structures when workers are on the platform or in the baskets.

For fall protection any employees while in an elevated aerial device regardless of type, shall be secured to the boom basket manufacturer installed anchor points through the use of a full body harness and lanyard. LAUSD requires tie-off while using scissor lifts as positioning devices only to keep workers from overreaching from the lift creating a fall hazard.

Prior to use all elevating work platforms and aerial devices shall be inspected daily. Items/areas of inspection shall be per the manufacturer's recommendation/specifications.

Documentation verifying inspection will be available on site for review by authorized LAUSD representatives and/or any authorized regulatory agency inspection personnel.

The platform guardrails shall be 42 inches high with a midrail at the half-height point.

Powered elevating work platforms shall have both upper and lower control devices. Controls shall be plainly marked as to their function and guarded to prevent accidental operation.

An emergency stopping device shall be provided at the upper controls of elevating work platforms.

Ladders or other objects shall not be placed in the buckets of units to gain greater height.

32. ENVIRONMENTAL CONTROLS

Only LAUSD approved chemicals/materials can be brought onto LAUSD construction sites.

All chemical spills (including cutting oil, fuel, solvents, antifreeze, etc.) must be reported immediately to the LAUSD OAR and OEHS

All chemical containers must be stored in or have secondary containment. This policy will include cutting equipment (drip pans, sandboxes, etc.).

Hazardous material storage facilities will be located away from the public and separated from each other in accordance with all applicable regulatory criteria/standards.

All chemical containers must be maintained in good condition, and must be appropriate for the materials stored in them.

All chemical containers, including empty containers, must be accurately labeled with their contents and precautions for use.

Containers which contain or contained hazardous waste must be affixed with an appropriate hazardous waste label (see LAUSD Reference Guide 4149.0) in addition to a label listing their contents.

Schedule dusty, noisy or odorous activities with School Administration and the OAR/IOR in order to avoid disrupting normal school activities and/or alarming the community.

Air Pollution: Open burning shall not be allowed unless approved by an authorized LAUSD representative. Control measures must be taken to minimize airborne/fugitive dust.

Weekly inspections of chemical containers must be performed in all Contractor controlled areas/laydown areas to assure compliance with this section. The inspection records shall be retained on site for a minimum of three (3) years.

Prior to transporting hazardous waste off site, the company/entity transporting the waste must complete the EPA Hazardous Waste Manifest and fax a copy to OEHS at (213) 241-6816 for review and approval.

Hazardous waste will be moved only to facilities that are licensed, certified to accept and process that kind of waste.

All Contractors are responsible for proper disposal of their wastes, both hazardous and non-hazardous. A copy of the completed *Uniform Hazardous Waste Manifest* must be provided to the LAUSD Environmental Compliance Manager.

Contractors may not dump any contaminants/chemicals into floor drains, sinks, clean-outs, sewer drains or sumps without the prior written approval from the LAUSD Environmental Compliance Manager.

Emergency response equipment to include spill kits and fire extinguishers will be provided near storage areas.

Chemical storage areas must be kept neat, orderly and clean. All stored chemicals/waste must be kept in labeled, sealed containers. Warning signs will be posted at storage areas.

Material Safety Data Sheets (MSDS) must be available on site for review by LAUSD, representatives and all emergency response personnel and the public.

It is Contractor management's responsibility to inform all their employees (to include their Subcontractor employees) of these environmental requirements.

33. EQUIPMENT/TOOLS

Contractor equipment and tools must be in proper working condition and routinely (i.e. daily or prior to use) inspected for defects.

Any defective equipment or tool must be removed from service.

Equipment is not to be used with loads that exceed the recommended rated capacity.

The Contractor will use only their equipment and tools and not of those other Contractors.

Equipment and tools will be used for their designated purpose.

Equipment and tools are to be used only by trained and authorized employees.

Before use all equipment and power tools must be equipped with all required guards or shields. All guards must be manufactured by and/or approved by the manufacturer for that specific power tool or equipment.

The practice of "wedging or pegging" guards on skill saws or other equipment rendering them nonfunctional will not be permitted.

No internal combustion engine vehicles, equipment or machinery is to be operated inside buildings unless approved by authorized LAUSD representative(s) and/or proper engineering controls have been implemented to minimize carbon monoxide levels.

In such cases where LAUSD approved vehicles or machinery are operated inside structures, scrubbers shall be installed on the exhaust system and/or carbon monoxide levels shall be monitored as often as required to ensure a safe work environment.

All motorized material handling equipment must have an audible backup alarm and light(s).

Equipment and tools must be properly stored, secured and located away from unauthorized access.

For pneumatic power tools, all air hoses exceeding ½ inch inside diameter shall have a safety device (commonly known as an "OSHA valve" or "safety check valve) at the source of air supply or branch line origin (such as a manifold) to reduce pressure in case of hose failure.

Pocket knives including Leatherman style tools are prohibited on LAUSD job sites.

Utility knives shall be of the automatic retractable style such as spring retractable.

34. EXCAVATIONS

When excavating and trenching activities are performed, Contractors must follow all regulations as outlined in the *LAUSD Safety Standards* and when required by CalOSHA/OSHA regulations and local requirements.

All Contractors performing excavation work shall obtain an activity permit, for excavations five (5) feet or more in depth, from Cal/OSHA in accordance with 8 CCR §341 and §1539.

The Contractor(s) will be responsible for identifying the location of any underground utilities (piping, communication cable, electrical lines, etc.). Before beginning any excavation/trench work, the Contractor will contact "Underground Service Alert California (Dig Alert)" to ensure that the owners of underground utilities are notified to mark their utility locations. Reference "**LOCATING UNDERGROUND UTILITIES BEFORE EXCAVATING"** in these Standards.

The Contractor materials utilized for protection of employees to include bracing, shoring, shielding, and trench boxes must be in good condition and of proper dimensions.

All excavations/trenches deeper than 5 feet will be sloped, benched, braced, shored, shielded, trench boxed, etc. in accordance with all applicable standards.

All Contractors performing trenching/excavation work must have a designated and trained competent person to assure compliance with all applicable regulations and LAUSD requirements. The credentials of the competent person must be available on site for review, upon request, by LAUSD and/or authorized governmental representatives.

Excavations/trenches must be inspected each day by the Contractor's "competent person."

The Contractors "competent person" must determine the soil classification (Type A, B, C, or stable rock) to determine the appropriate type of protective system required for the excavation/trench.

Excavated soils, materials or equipment are to be kept at least two feet from the edge of the excavation.

The Contractor must provide barricades to protect people from falling into the excavation/trench. Lighted barricades must be provided at night.

Ladders extending 3 feet above an excavation 4 ft. or more in depth or other means of egress must be provided by the Contractor for access/egress. Access to a ladder shall not exceed 25 feet in any direction.

Excavation/trench work, whenever possible, will be backfilled while work progresses and/or at the end of each shift.

Walkways are to be provided over any excavation or trench point that employees and/or the public may need to cross. Walkways must have handrails, midrails, and toeboards, and be constructed with material capable of withstanding at least twice the maximum intended load.

- The edges of the walkway shall be tapered to minimize trip hazards. The approach to the walkway shall be tapered with a suitable and durable material or the walkway set into the surface to minimize trip hazards.

Any trench or excavation work which creates a potential confined space work environment will be subject to compliance with all applicable LAUSD (reference Confined Space Entry) and/or OSHA confined space safety standards.

Rescue equipment must be provided by the Contractor (full body harness and lifeline, breathing apparatus, basket stretcher, etc.) when hazardous atmospheric conditions are expected to exist.

35. FALL PROTECTION

Where a fall hazard exists, efforts must be made to eliminate the hazard; provide protection against the hazard; or establish alternative methods to control/monitor the hazard in accordance with the provisions contained in 8 CCR, *Subchapter 4, Construction Safety Orders*.

Fall protection plans, controlled access zones, safety monitoring systems and controlled decking zones require the approval of the Contractor, OAR and/or LAUSD Safety before their use.

39.1 TRAINING AND RETRAINING

Contractors are required to provide training for any employee who might be exposed to a fall hazard prior to the exposure.

Training must include an explanation of the Contractor's fall protection policies and safe work practices with general instructions and precautions; specific instruction where required; hazard identification and correction; selection and proper use of protective devices; and maintenance of equipment. Instruction should also include correct procedures for inspecting, erecting, disassembling, and maintaining fall protection systems used; and the employee's role in fall safety monitoring.

Personnel rescue shall be addressed in the Contractor's fall protection policy and fall protection training.

Documentation of fall protection training/instruction shall be maintained by the Contractor on site for review by LAUSD and/or any authorized governing regulatory representatives.

Methods of fall protection include but are not limited to:

- Guardrails and toe-boards *[8 CCR 1620 and 1621]*
- Covers for floor opening, pits, trap-door, and temporary floor openings. *[8 CCR 1632]*
- Personal Fall Restraint/Arrest. *[8 CCR 1670]*
- Safety Nets. *[8 CCR 1671]*
- Scaffold Platforms. *[8 CCR 1724]*
- Roof Warning Lines. *[8 CCR 1730]*
- Any deviations/variances from controlled Access and Controlled Decking Zones and Safety Monitoring Systems will require prior written approval from the Contractor, OAR and/or LAUSD Safety. *[8 CCR 1671.2]*

39.2 PERSONNEL FALL PROTECTION TRIGGER HEIGHT

For all work activities exceeding **six (6) ft.** in height where methods of fall protection (guardrails, hole covers, etc.) are not provided exposed Contractor employees will wear and

use a personal fall arrest system (full body harness with a life line, lanyard or deceleration device) secured to approved anchor point(s).

All deviations/variance from this fall protection policy will require at a minimum 3 weeks advance written notification from the General Contractor to the OAR and LAUSD Safety for their written approval.

When fall protection may create a greater hazard or is otherwise not feasible using conventional fall protection methods, the provisions of Cal-OSHA Title 8, Section 1671.1 may be followed which requires a written plan that includes but not limited to:

- Why conventional fall protection is not feasible;
- Alternate methods to protect from falls;
- Training;
- Identifying personnel authorized to work at heights;
- Personal monitoring system; and
- Trained observers.

At the discretion of LAUSD Safety, the OAR and the site Contractor Safety Manager Personnel erecting or dismantling scaffolds under the supervision of the competent person may be excluded from this policy if no approved anchor point(s) are available/feasible

39.3 PERSONNEL FALL ARREST/RESTRAINT

In situations where it is either impractical or impossible to protect elevated work areas in excess of **6 feet** with standard fall protection, another means of employee fall protection must be utilized. The following are some general requirements concerning the use of safety harness, lanyard(s), life lines, and safety nets.

- A safety harness and shock absorbing lanyard must be worn in elevated work areas, more than six (6) feet in height when other means of fall protection are not available or feasible.
- Anchorages used for attachment of personal fall arrest equipment:
    - shall be independent of any anchorage being used to support or suspend platforms, and
    - capable of supporting at least 5,000 pounds per employee, or
    - Part of a complete personal fall protection system, used under the supervision of a qualified person that maintains a safety factor of at least two (2).
- The only allowable type of body fall arrest system allowed will be a full body harness with a lifeline, lanyard, or deceleration device. Safety/body belts are not permitted on LAUSD sites for fall arrest or restraint.

- Lanyards shall be secured to an approved anchor point which includes a substantial member of the structure or to securely rigged lines, using a positive descent control device.
- Lifelines and anchorages shall be capable of supporting a minimum dead weight of 5,000 pounds.
- Lanyards and vertical lifelines shall have a minimum breaking strength of 5,000 pounds.
- Where practical, the anchor end of the lanyard shall be secured at a level not lower than the employee's waist thereby limiting the fall distance.
- In areas where there is not an anchorage to secure a safety lanyard, lifelines must be used.
- All personal fall arrest systems shall be labeled as meeting the requirements contained in ANSI A10.14.
- Personal Fall Arrest Systems shall:
  - limit the fall distance to a maximum of 6 feet and
  - Prohibit/prevent the Employee from contacting a lower level or structural element.

- The use of non-locking snap-hooks is prohibited.
- The safety harness and lanyard(s) should be inspected before use each work day by the user. Items to look for when inspecting a safety harness and lanyard include:
  - Broken, cut or burnt fibers in the harness and lanyard.
  - Cracked or deformed hardware.
  - Loose or bent rivets.
  - Any sharp edges.
  - Loose thimbles at the splice.
  - Discoloration from exposure to chemicals.
  - Loss of elasticity in the harness.
- When a safety lanyard is subjected to the stress of a fall, it must be removed from service and discarded. The harness will also be inspected and discarded if any defects are identified.
- Safety harness and lanyards should not be used for lifting materials or any other purpose other than protection against falls.
- Safety harness with one D-ring should be worn with the D-ring in the back so that the stomach, not the back, will absorb the shock in the event of a fall.

- The safety harness and lanyard should not be stored in tool boxes or on the floor where they could be easily damaged.
- Debris nets may be required under certain circumstances and must comply with current applicable laws and regulations.

Additional requirements on fall protection can be found in the OSHA Federal Register, Parts 1926.104, 105.

36. FIRE PROTECTION AND PREVENTION – FIRE EXTINGUISHERS

All fire extinguishers must be provided by the Contractor.

Travel distance from any point of the protected area to the nearest fire extinguisher shall not exceed 75 feet. *[8 CCR 1922(a) (1)]*

In multi-story buildings, at least one fire extinguisher shall be provided on each floor and located adjacent to the stairway. *[8 CCR 1922(a) (1)]*

Portable fire extinguishers shall be fully charged, inspected monthly and serviced annually. *[8 CCR 1922(a) (4)]*.

A fire extinguisher rated not less than 10 B:C shall be:

- Provided for each 3,000 square feet of floor area and fraction thereof. Where the floor area is less than 3, 000 square feet at least one fire extinguisher is required. *[8 CCR 1922(a)(1)]*
- Provided within 50 feet of wherever more than 5 gallons of flammable or combustible liquids are stored. *[8 CCR 1922(a)(3)]*
- Kept near operations where bottled fuel gases are being used. *[8 CCR 1743(j)]*
- Adjacent to any "hot work" to include welding, cutting, and burning work activities.

A fire extinguisher, rated not less than 20-B, shall be located outside of, but not more than 10 feet from the door opening of storage rooms. *[8 CCR 1933(b)]*

All portable fire extinguishers shall be readily available for use where temporary heating devices are used. *[8 CCR 1693(g)]*

For roofing work at least two extinguishers must be provided if flammables are present.

37. FLAMMABLES AND COMBUSTIBLES USE AND STORAGE

All Contractors must develop a fire protection program to be followed throughout all phases of construction. *[8 CCR 1920(a)]*

The program will include the most stringent applicable NFPA and/or local Fire Department fire code requirements.

Firefighting equipment must be conspicuously located or conspicuously marked. *[8 CCR1920(c)]*

The Contractor is required to supply fire extinguishers, fire blankets, and other sufficient fire protection devices for the immediate work areas where flammable and combustible material is stored, used, and/or "hot work" is performed.

All Contractor supplied flammable/combustible liquids must be stored in approved safety containers/cans in accordance with *8 CCR 1930(a) (2).* Plastic storage containers are not permitted. All safety containers/cans must have a self closing lid and spout cover that is designed to relieve internal pressure. All containers must be properly labeled as to contents and stored in approved designated areas when not in use.

All flammable liquids such as fuels, paint thinner, solvents, etc. must be stored in an area approved by LAUSD.

Storage of flammable and combustible materials inside existing LAUSD buildings is prohibited unless approved by LAUSD.

All outside storage areas must be at least 35 feet (or if applicable in accordance with NFPA standards) from any building and 50 feet from adjacent properties. Approved flammable enclosures may be used in lieu of distance requirement form adjacent properties. Ensure all flammables/combustibles are a minimum of 35 ft. from "hot work" areas or are covered by a fire blanket.

For roofing work:

- At least two (2) fire extinguishers must be provided if flammables are present.
- No more than a one day supply of flammables may be placed on the roof during working hours.
- All flammables must be removed from the roof at the end of each work day by the Contractor.

Do not smoke; use open flames, or use spark producing tools/equipment, heaters or any other heat/ignition source around flammable or combustible materials.

"No Smoking" signs shall be posted as required by work operations or material storage exposures.

LAUSD reserves the right to designate "no smoking" and/or designated "smoking permitted" areas on the job site on a case by case basis.

Open fires are not permitted on the job site.

All flammable and combustible liquid containers shall be grounded and bonded when dispensing liquid from the containers.

Do not block or obstruct fire response equipment (extinguishers, hoses, manual pull alarms, sprinklers, control valves, etc.)

Flammable and combustible liquid storage areas must be provided with secondary containment.

Storage of more than 25 gallons of flammable liquids or 60 gallons of combustible liquids shall be in cabinets constructed to the requirements of NFPA 30. Not more than 120 gallons of Class I, II, or IIIA liquids may be stored in a storage cabinet. *[8 CCR 1930(a) (4) (A) and (a) (5)]*

The Contractor shall identify non-compatible (could create a chemical reaction if they come in contact) chemicals/materials in advance and, as required, provide for separate storage.

38. FIRST AID

Regardless of the extent of injury all accidents (even first-aid cases) will at a minimum be verbally reported by Contractor management to the LAUSD job site representative (OAR) and LAUSD Safety. At the discretion of or contingent on the severity potential of the first-aid accident or a "near miss" incident, the LAUSD job site representative (OAR) and LAUSD Safety may request a written accident investigation report from the Contractor.

Every Contractor shall ensure the availability of a suitable number of appropriately trained persons to render First Aid and CPR. Contractor Supervision and safety representatives (CSM, CSR, SSR) must be trained in First Aid and CPR.

Evidence of training must be available on site for review upon request. First aid trained personnel shall also receive Blood Borne Pathogen training.

The list of first aid trained personnel must be dated and updated as required throughout the duration of the contract period. Each time the list is updated, a copy shall be provided to LAUSD.

Every Contractor working on or furnishing personnel on a LAUSD job site shall provide at least one first-aid kit in a weatherproof container.

The first-aid kit shall be inspected regularly to ensure that the expended items are promptly replaced.

Eye wash capabilities shall be provided by the exposing Contractor as required by the Material Safety Data Sheet (MSDS) for products/chemicals used on the job site.

39. FOREIGN VOLTAGE DETECTORS

The Contractor shall use a foreign voltage detector (FVD) to test for the presence of foreign voltage:

- Whenever there is reason to suspect damage to any utility (test closures before accessing).
- Un-insulated vertical grounds, electrical power guys, and conduits.
- Street light fixtures (ungrounded) within 20 inches of communication attachments.
- Metal sided buildings, mobile homes and trailers.
- Buried metallic closures must always be tested before accessing.

Inspect the FVD and grounding cord before each use for cracks, holes, cuts, unauthorized decals or markings.

Verify the conductive probe cap is in place.

Inspect the grounding cord for loose connections, broken wires and defective clamps.

Do not use the FVD if the continuity test fails.

Do not use foreign voltage detectors that are out of date. Verify the calibration date is within twelve (12) months of the present date. If calibration is out of date utilize another FVD.

When not in use, store the FVD in the appropriate canvas bag or case to protect its dielectric strength.

40. FORKLIFTS (INDUSTRIAL TRUCKS AND TRACTORS)

Only employees trained and certified by the Contractor in the safe operation of industrial trucks (forklifts) shall be permitted to operate forklifts. Certification of an equipment operator's ability to operate safely is required. The Contractor is responsible for determining the operator's skill, verifying the certification, and maintaining the records.

Documentation of operator training and certification shall be in accordance with *8 CCR §3668* and must be available for review when requested by LAUSD and/or their authorized representatives.

All forklifts, industrial trucks and tractors shall be equipped with a back-up light and an audible backup alarm which can be clearly heard from a distance of 200 feet. In congested areas or areas with high noise levels which obscures the audible alarm, a signal person in clear view of the operator shall direct the backing operation.

Every forklift, industrial truck and tractor shall be equipped with brakes, a parking brake, and a horn.

The rated capacity of all forklifts, industrial trucks and tractors shall be displayed at all times on the vehicle in such a manner that it is readily visible to the operator.

Forklifts and industrial trucks shall not be loaded in excess of their rated capacity.

Seat belts shall be provided on forklifts, industrial trucks and tractors where rollover protection is installed and shall be utilized by employees when operating the trucks/equipment.

No riders shall be permitted on forklifts, industrial tracks and tractors unless provided with approved riding seats.

Employees shall not ride on, or be elevated on the forks of lift trucks.

When elevating employees using an industrial truck (forklift), the following safety protocol shall be implemented and adhered to:

- A platform shall be used of sufficient size, but not less than 24" x 24" with standard guardrails and toeboards.
- The platform shall be secured to the forks or mast.
- There shall be an operator in the control position on the forklift while employee(s) are elevated.
- Never travel with personnel on the work platform.
- Protect mast components.
- All other applicable standards and manufacturers' instructions pertaining to the use of personnel platforms will be implemented and enforced.

Employees shall not be allowed to stand, pass, or work under the elevated portion of an industrial truck, loaded or empty.

All equipment brought on-site will be inspected and tested by the Contractor at the beginning of each shift, and certified on a scheduled basis in accordance with the manufacturer's criteria, to be in a safe operating condition.

Attention shall be given to tires, horn, lights, battery, seat belt(s), controller, brakes, steering mechanism, cooling system, and the lift system (forks, chains, cable and limit switches). Any deficiencies shall be repaired, or defective parts replaced, before continued use.

Forklifts and industrial trucks shall not exceed the authorized or safe speed, always maintaining a safe distance from other vehicles, and personnel keeping the truck under positive control at all times.

The driver shall slow down and sound the horn at all locations where vision is obstructed. When required a spotter will be provided.

An accessible fire extinguisher of CO2 5 lb rating or higher shall be available at all operator stations or cabs of equipment.

Feet and arms are not to be outside the envelope of the vehicle.

Floor/ground grades shall be ascended or descended slowly.

The forks shall always be carried as low as possible, consistent with safe operation.

When leaving a forklift unattended, the power shall be shut off, brakes set, the mast brought to the vertical position, and forks left in the down position.

Cords and hoses must be secured seven feet overhead in all areas with industrial truck/forklift traffic. In areas absent of industrial truck/forklift traffic, cords and hoses may be secured at floor level but must be protected from possible damage and not create an employee trip/fall hazard.

Forklifts/industrial trucks shall be locked out and/or secured/garaged to reduce the probability of unauthorized access and/or use.

41. HEAVY EQUIPMENT-MATERIAL HANDLING/EARTHMOVING

Whenever visibility conditions warrant additional light, all heavy equipment in use shall be equipped with at least two headlights and two taillights in operable condition.

If possible, equipment shall not be driven on a roadway at night.

All heavy equipment shall have brake lights in operable condition.

All heavy equipment shall be equipped with an adequate audible warning device (horn) at the operator's station.

All heavy equipment must have a back-up alarm audible for a distance of 200 feet.

In congested areas or areas with high noise levels which obscure the audible alarm a signal person in clear view of the operator shall direct the backing operation.

All heavy equipment with cabs shall be equipped with windshields and powered wipers.

- Windshields and mirrors shall be kept clear such that vision is not obstructed.
- Equipment operating in areas or conditions that causes fogging or frosting of windshields shall be equipped with operable defogging or defrosting devices.
- Cracked or broken windshields shall be promptly replaced.

When mandated by regulatory criteria, heavy equipment shall be equipped with rollover protection.

Seat belts and anchorages shall be installed in all heavy equipment

The Contractor shall ensure employee use of seat belts on vehicles and equipment.

Trucks with dump bodies shall be equipped with positive means of support, permanently attached, to prevent accidental lowering of the body while maintenance or inspection work is being done.

Operating levers controlling hoisting or dumping devices on haulage bodies shall be equipped with a latch or other device which will prevent accidental starting or tripping of the mechanism.

Trip handles for tailgates of dump trucks shall be so arranged that, in dumping, the operator will be in the clear.

All equipment shall be maintained in good working order and shall be inspected at the beginning of each shift for defects. A competent person shall in accordance with the manufacturers criteria, inspect and/or perform all maintenance of heavy equipment to include:

- Bulldozer and scraper blades, end-loader buckets, dump bodies, and similar equipment shall be either fully lowered or blocked when not in use and/or maintenance, repair or inspection work is being performed. All controls shall be in a neutral position, with the motors stopped and brakes set, unless work being performed requires otherwise.

- Service brakes, trailer brake connections, parking brake system, and emergency stopping system (brakes).
- Tires, horn, steering mechanism, seat belts, operating controls and safety devices.
- Lights, reflectors, windshield wipers, defrosters, and fire extinguishers.
- All vital parts such as motors, chassis, blades and blade holders, tracks drives, hydraulic and pneumatic mechanisms, and transmissions must be inspected.
- All deficiencies shall be repaired or defective parts replaced prior to continued use.
- Verification of inspection will be available for review by LAUSD authorized representatives.

Before starting a job, the operator shall be given instructions regarding the work to be done.

Before starting the motor the operator shall check to make sure that all operating controls are in the neutral position.

Before moving, the operator shall walk entirely around the equipment to make sure no other personnel, equipment or material will be struck.

Spotters/flaggers must be used when equipment enters exits or uses public roads, during backing and/or the equipment operator's view is obstructed whether moving forward or backward.

Contractors when required shall ensure that operators of heavy equipment wear appropriate hearing protection devices.

Operators will wear hard hats in equipment not fully enclosed to include no overhead protection/rollover cages, doors, windows, etc.

At no time shall equipment be left unattended while the motor is running, especially if the machine is on an inclined surface or on loose material.

Machines shall be operated at safe speeds and in a manner consistent with conditions on the job.

No employee other than the operator shall ride on equipment.

During refueling operations equipment motors shall be turned off. Smoking is prohibited during refueling.

In order to reduce the probability of unauthorized use by students or the public, unattended equipment must be locked out at all times and parked in a secure area. Keys shall be removed from unattended equipment.

An accessible functional fire extinguisher of CO2, 5-lb. rating or higher shall be available at all operator stations or cabs of equipment.

42. HAZARD COMMUNICATION

In accordance with the provisions of 29CFR1926.59 and 8 CCR §5194 every Contractor must have a comprehensive written Hazard Communication Program which includes:

- A list of hazardous substances known to be on site.
- Methods the Contractor will use to inform employees of the hazards of non-routine tasks.
- On multi-Contractor job sites, the program shall include the methods Contractors will use to inform other Contractors of any precautionary measures to protect their employees.
- The methods used to provide other Contractor(s) with access to Material Safety Data Sheets (MSDS).
- The methods the Contractor will use to inform the other Contractor (s) of the labeling system in use.

The Contractor must submit a copy of its Hazard Communication Program to the *LAUSD OAR or LAUSD Safety* for their review and comments.

The Hazard Communication Program will be in a binder maintained on the job site and contain the following information:

- A comprehensive written Hazard Communication Policy.
- Material Safety Data Sheets (MSDS's) for all hazardous materials used on the site. General/Prime Contractors are responsible for maintaining on the job site in a central location Material Safety Data Sheets (MSDS) on all chemicals/materials brought on site or used by the General/Prime Contractor and Subcontractors of all tiers.

The Contractor shall ensure that all employees have received training in the safe use of hazardous materials; and that employees are able to read and understand the information on Material Safety Data Sheets. At a minimum training shall include:

- Methods and observations that may be used to detect the presence or release of a hazardous chemical.
- The physical and health hazards of the chemicals used in the work area.
- Measures employees can take to protect themselves from the hazards.
- Details of the hazard communication program, including the labeling systems and use of MSDS.

Documentation of training must be provided, upon request, to LAUSD Safety for their review and comments.

The Contractor shall ensure that all containers used on the construction site are properly labeled as to their contents, including gas and diesel fuel containers.

LAUSD Safety and/or their authorized representative(s), at their discretion, will determine/ approve the storage location(s), quantity and container volume of all chemicals/hazardous substances stored on site.

Note: M and O will follow the OEHS Hazard Communication Program in employed by LAUSD - OEHS.

43. PORTABLE HEATERS

All portable heaters brought on-site must be Factory Mutual and/or Underwriters Laboratory approved.

Prior to use, the General/Prime Contractor will review and approve all liquid/gas fueled portable heaters brought onto the site.

The use of liquid/gas fueled portable heaters inside buildings requires the approval of the General/Prime Contractor, and/or LAUSD authorized representatives.

Tent Heater use requirements:

- Use only in tents made of fire resistant material.
- Avoid contact with heating elements or other hot parts.
- Keep flammable materials and clothing away from hot equipment.
- Never use heaters in a utility hole or in a tent that covers a utility hole.
- Ensure adequate ventilation is provided when using a tent.
- Secure a fire extinguisher within the tent in an accessible location.

44. HORIZONTAL BORING/JACKING

(Reference "LOCATING UNDERGROUND UTILITIES BEFORE EXCAVATING" in these Safety Standards for additional safety protocol)

- The Contractor shall locate all buried utilities before commencing boring/jacking operations by contacting the "Underground Service Alert California (Dig Alert) to ensure all underground utilities owners in the area of are notified to mark their utility locations.
- Open a guide hole (bore slot) over any existing utility that is in line with the bore slot.
- Excavate bore slot, bell hole and guide holes as necessary.
- If resistance is encountered during the boring/jacking operation, cease the boring operation immediately and excavate at the point of resistance to determine necessary action.
- All operators must be qualified and trained in the use of the boring/jacking machinery.
- At least two crew members must operate the bore motor at all times.
- Stay clear of the rotating bore pipe and rotating head of boring machines. Loose clothing, long hair, or gloves can cause injury if caught in the rotating bore pipe.
- Do not hold rotating bore pipe with hands or feet.
- Only one crew member shall transmit signals to the operator.
- When using to connect or disconnect bore pipe, operate the boring machine only at slow RPM's.

45. HOUSEKEEPING

[Reference 6.39 page 43 of the General Conditions]

- All construction materials must be stored in an orderly manner.
- Work areas shall be inspected at the completion of each shift to ensure that the work area is maintained and clean as possible.
- All scrap, trash and debris shall be cleaned up as work progresses.
- Metal containers with covers must be provided for disposal of rags soaked with flammable/combustible liquids.
- All exits to include emergency exits and/or access ways must be kept unobstructed. Panic hardware, where present, must remain unobstructed.
- Walkways and sidewalks in or around school facilities must be kept free of construction materials, debris, dirt, tools and extension cords.
- Keep all materials, tools, and equipment in a stable position (tied, stacked, or chocked) to prevent rolling or tolling.
- Puncture hazards (nails, staples, fasteners, etc.) created by stripped form work (scrap lumber, pallets, shipping materials, etc.) shall be eliminated or controlled by the creating Contractor.
- Immediately clean up all chemical or liquid spills.
- Where steel plates are used to bridge excavations or other similar type construction activities to provide pedestrian walkways or sidewalks, the leading edges of the steel plates must be feathered with temporary asphalt or other suitable materials to prevent trip hazards.

49.1 TRASH DISPOSAL

- Trash bins/dumpsters must be provided on site to dispose of construction debris.
- All Contractors are required to provide and maintain their own dumpsters for trash disposal. The Prime/General Contractor will be responsible for coordinating and ensuring that dumpsters are provided for trash disposal. Trash bins/dumpsters shall be replaced/rotated when full to prevent accumulation of trash/debris outside the dumpster or throughout the job site. In compliance with applicable regulatory criteria, trash bins/dumpsters shall be covered while in transport.

46. INCIDENT REPORTING

[Correlate this section with protocol in the General Conditions, Insurance Manual and OAR Manual]

- Contractors/Subcontractors shall report all injury/illness; incidents to include Contractor employee, student, faculty, public; serious near misses; environmental incidents vehicle; and fire/property damage accidents/incidents immediately to the LAUSD Owner Authorized Representative (OAR) and/or LAUSD Safety. The investigation of the incident will determine possible cause and identify corrective action required.
- A written accident investigation report signed by the Contractor senior site supervisor or their designee describing who, what, where, when, and how must be submitted within twenty-four (24) hours to the Authorized Representative (OAR). Corrective action(s) to prevent recurrence must also be documented on this report. When requested by LAUSD Safety, incident recovery meetings shall be organized by the Contractor's Safety Manager/Supervisor and shall include the responsible Contractor(s)' Safety Director, Safety Manager or Safety Representative, and the Contractor's management representative(s).
- At their discretion, LAUSD Safety will participate in the on-site accident/incident investigation process.
- **Immediate notification of major incidents will be made to the Authorized Representative (OAR). Affected areas will be secured until released by the Authorized Representative (OAR), LAUSD Safety or, if required, emergency response personnel. Major incidents include: fatalities, injury and near miss incidents having the potential to cause a fatality, fires, explosions and environmental incidents such as spills of hazardous materials or release of toxin's into the air.**

47. LADDERS - EXTENSION AND STEPLADDERS

Type II (commercial) and Type III (household) ladders are prohibited.

Always face the ladder and use both hands when ascending/descending.

Employees must maintain a 3-point contact while ascending/descending ladders.

Do not carry tools, materials, equipment up or down a ladder, use a hand line to raise and lower tools, materials, equipment, etc.

Only one (1) individual shall be on a ladder at any time.

Job-Made ladders shall be constructed in accordance with Cal/OSHA provisions contained in 8 CCR §1676.

All types of ladders must be inspected at least daily for:

- Cracks, splits, splinters, and decay.
- Protruding nails and loose rivets.
- Loose, bent or broken rungs, braces, tie rods, guide irons, locks, pulleys and strand hooks.
- Broken, worn or defective spurs and pads.

When ladders are found to be lacking in any safety device, or are found to be defective in any way, such ladders shall be removed from use immediately, tagged out and supervision notified. Ladders found to be too defective for repairs are to be destroyed.

All straight and extension ladders will be equipped with nonskid safety feet/bases.

Portable ladder feet shall be placed on a substantial base.

The top of straight or extension ladders must extend three (3) feet (36 inches) beyond the supporting object when the ladder is used for access to an elevated work area.

To prevent displacement or movement, straight and extension ladders shall be tied off at the top when in use or when left unattended. If tie-off cannot be made, ladders must be held at the foot while in use and taken down when not in use.

Contractors shall provide documented employee training in the safe use of ladders. Training and/or retraining shall cover all applicable safe use protocol and hazards associated with ladder usage.

Defects in wooden ladders may be concealed by use of paint. For this reason, ladders of this type must not be painted, except for necessary identifying marks.

Metal ladders must not be used near or for electrical service.

Ladders are not to be used for skids, braces, workbenches, or any other purpose other than climbing.

Extension ladders shall have positive stops to ensure safe overlap of the sections. Overlap requirements are:

- Ladders up to 32 feet long use a three-foot overlap.
- Ladders from 32 to 36 feet use a four-foot overlap.
- Ladders from 36 to 48 feet use a five-foot overlap.
- Ladders over 48 feet use a six-foot overlap.

Extension ladders shall not be taken apart in order to use each section separately.

Ladders shall be used at such a pitch that the horizontal distance from the top support to the foot of the ladder is about one-quarter of the working length of the ladder.

Stepladders must be fully open, set level and the spreader set to the open and locked position.

Do not work off the top two rungs. Standing or sitting on the top platform or straddling a stepladder is prohibited.

Do not lean a stepladder against a wall in the unopened position. Stepladders shall not be used as straight ladders.

Do not climb on or use the backside of a stepladder.

Do not exceed the ladders designated weight capacity. Ladders missing "capacity" labels will be removed from service or from the job site.

48. LEAD

Lead abatement, as defined, is to be performed by Contractors or Subcontractors whose workers are certified by the Department of Public Health (DPH). Lead related construction work may be performed by Contractors' or Subcontractors' workers who have been trained in Lead Awareness as described in the District's Standard Specification Section 13282 – Lead Abatement and Lead Related Construction Work. Evidence of certification and/or training is required to be provided to the District's Environmental Representative prior to the commencement of work.

It is the Contractor's responsibility to review the Assessment Report addressing the impact to Lead Based materials, Lead Containing materials or coatings, and materials assumed to contain Lead prior commencement of work and take the necessary steps to ensure the safety of students, faculty, Contractor employees, and the general public.

Contractor must identify any Lead Based Paint (LBP) or coatings and assumed lead containing coatings in or on the materials to be impacted within the proposed scope of work **PRIOR** to any construction, remodeling, maintenance, repair or demolition activities.

No lead abatement will proceed until the LAUSD's Environment Representative has given written approval of the Lead Abatement Contractor's written abatement work plan.

No work by Contractors other than the Lead Abatement Contractor will be permitted to work in regulated areas until clearance is provided by the LAUSD Environmental Representative.

The Lead Abatement Contractor or General Contractor performing monitoring of lead related construction work will be responsible for characterizing the waste stream (e.g., paint chips, components, etc.) and disposing of waste according to the characterization. Hazardous waste will be transported under a Uniform Hazardous Waste Manifest in accordance with District Standard Specification Section 13282.

49. FIRE/LIFE SAFETY

In operating/occupied LAUSD facilities or where applicable, all exits and emergency exits must be maintained clear of any obstructions at all times and available for use by the public at all times.

LAUSD and the local Fire Department will be notified when any Impairments or work activities are conducted on, or that may affect any school fire alarm/protection system(s), must be approved by LAUSD prior to beginning work.

All impalements to or work activities conducted on LAUSD fire alarm/protection systems must be approved by the local Fire Department prior to beginning work.

Do not block, obstruct or tamper with fire protection and/or alarm systems/equipment to include fire extinguishers/hoses, sprinklers, standpipe, pumps, control valves, manual pull box alarms, alarm panels, panic hardware, etc. without prior approval from LAUSD and/or the local Fire Department.

Electrical panel disconnects and other associated electrical equipment must remain unobstructed.

Walkways and sidewalks in operating/occupied LAUSD facilities must be kept free of construction materials, debris, dirt, tools, equipment, extension cords, barricades, etc.

In the event that any life safety protocol which includes any exit and/or path of travel to any exit in all occupied LAUSD buildings must be compromised for any reason(s) due to construction related activities, LAUSD and/or the local Fire Department will be notified prior to commencing work. Under no circumstances will construction activities take place until alternate life safety measures approved by LAUSD and/or the local Fire Department are implemented by the responsible Contractors.

50. LIQUIDS - CORROSIVE ACIDS AND CAUSTICS

Do not store, handle, apply or use acids or caustics until the proper safe procedure has been established and implemented.

Never add water to acid - if dilution is needed, add acid to water.

An emergency eyewash station or shower provided and maintained by the responsible Contractor must be immediately available to personnel working with acids or caustics.

Proper personal protection must include a face shield, apron, gloves and sleeve lets as well as any other safety equipment, procedures, work processes, etc. deemed necessary in order to provide maximum protection to all exposed personnel. Contractors will be responsible for reviewing the Material Safety Data Sheets (MSDS) for specific chemical handling and personnel protective equipment requirements.

51. LOCK-OUT/TAG-OUT/BLOCK-OUT

The Contractor must have a written Lock-out/Tag-out/Block-out program that meets or exceeds the OSHA standards contained in 8 CCR §1595, §2320.4, and §3314.

During servicing, cleaning, adjusting and maintenance activities all movable parts shall be mechanically blocked or locked out/tagged out as required to ensure equipment/machinery cannot be operated. Locks and tags must be used by all personnel working on or around all equipment/machinery. Basic lockout/tag out steps are as follows:

- Locate and identify all energy sources and isolating devices.
- Alert the people in the area of the lockout.
- Shut down equipment by the normal stopping procedures.
- De-energize all energy sources (electrical, hydraulic, pneumatic, steam, gravity, thermal, gravitational)
- Physically place locks and tags on energy isolating devices.
- Verify a zero energy state. In no case shall work begin before circuits and equipment and/or machinery is tested to ensure that they are, in fact, de-energized.
- Perform the work.
- Clean area of tools, parts, and personnel.
- Remove locks and tags.
- Alert the necessary personnel that the equipment will be on line.
- Restore energy and resume normal operations.

When locks and tags are required, the craft personnel working on that circuit shall notify their appropriate supervisor. The supervisor, or his designee, shall see that appropriate locks and tags are provided. When work is completed, the appropriate supervisor is also to be notified when the lock(s) and tag(s) are removed.

Lockout locks, and tags shall not be used for purposes other than lockout activities.

Each Contractor employee must affix their own lock(s)/tag(s).

The Contractor Safety Manager and OAR must be notified if a Contractor lock and tag must be removed by someone other than the employee who placed the lock/tag.

When a lock has been left on a piece of equipment and the employee has left the site, the Contractor will then contact the Construction Manager, his designated representative or the Contractor Safety Manager and OAR. The area will be walked down by Contractor supervision to ensure the area is safe prior to removing the lock/tag.

Any employee who removes a tag or lock belonging to another employee or person, or overrides a tag or lock in any way, shall be removed from site.

52. LOCATING UNDERGROUND UTILITIES BEFORE EXCAVATING

The nearest shut off valve or control point for known utilities shall be identified on a site plan to be maintained on site by the responsible Contractor.

The performing Contractor will be responsible for locating buried utilities before digging/excavation.

No excavation work will take place before verification of the existence and location of or lack of underground utilities.

Within a minimum of two days (48 hours) prior to excavation all known owners of underground facilities in the area will be notified by calling the Underground Service Alert California (also known as DigAlert) – phone number: (see below) All underground utility line location(s) identification and marking should be done by a third party via the "Underground Service Alert California (DigAlert) or contracted third-party entity or the utility company. A third-party must be contracted to locate lines on LAUSD private property as DigAlert will only locate up to the property line. Typically a minimum of two (2) days notification is required prior to beginning planned excavation work. This reduces the Contractor's liability should damage occur due to improper marking of utility line location.

The Underground Service Alert California (DigAlert) one call notification system will apply to underground utilities located on both public and private land. Contractor shall check the entire job site for visual signs of substructures. This includes such items as manhole covers, water meter boxes, ditch lines, pavement patches, previous location marks, pole risers, and the obvious absence of overhead utilities.

Contractor must expose substructure **by hand** after locations are determined.

Contractor shall be careful not to damage the utility substructure by scraping, hammering or other forms of excavation or locating efforts.

Contractors shall be aware of the possibility of joint use by other Contractors of an excavation/trench for power, telephone, gas, fiber optics, cable, etc.

UNDERGROUND SERVICE ALERT CALIFORNIA

Phone Number: 811.

Web Address: http://www.digalert.org/index.asp

53. MOTOR VEHICLES

Contractors will be responsible for claims arising from the operation of Company owned motor vehicles on the construction site.

Only vehicles meeting or exceeding LAUSD automobile insurance specifications/coverage limits (refer to the LAUSD Insurance Manual) will be permitted on LAUSD property/construction sites.

Every Contractor will be responsible for ensuring their drivers and vehicles meet or exceed any regulatory criteria whether Federal, State or local pertaining to the operation of a motor vehicle.

All Contractor employees operating motor vehicles shall have a valid driver's license for the class vehicle driven.

Drivers of vehicles over 26,000 pounds GVW or hauling EPA regulated materials are required by Federal and State Departments of Transportation regulations to possess a Commercial Drivers License (CDL).

Drivers of motor vehicles on the site shall obey all street and highway speed, traffic laws and traffic signs.

All drivers of Contractor vehicles shall check the mechanical condition of their vehicles at least daily.

Drivers are required to observe the "right of way" rule. Yield to other drivers whose driving actions demand the right-of-way.

Drive defensively. Anticipate what other driver(s) may do.

The job site speed limit is 5 mph.

Employees driving and riding in Contractor vehicles must wear seat belts.

All passengers on motor vehicles must be seated and within the confines of the vehicle.

Contractor's employees are not allowed to ride in the open bed of a pickup truck.

Pedestrians will always have the right of way.

Parking shall be in specified and authorized areas only. Do not block entrances and do not park in reserved spaces.

Block, chock, or angle vehicle wheels when parking on inclines.

All vehicles must be shut off when unoccupied.

The Contractor is responsible for the stability of any material being hauled.

54. OVERHEAD UTILITIES

The Contractor will identify all overhead utilities prior to the start of any work.

The Contractor shall identify the voltage carried by each power line, and identify the minimum required clearances prior to commencing work in the vicinity of the line.

- Identifications of all power lines and minimum clearances shall be documented on a site plan that is made available to all Employees, Subcontractors, vendors and suppliers.
- This site plan shall include identification of all power lines that are within 45 feet of the perimeter of the site.
- Temporary utilities shall be added to the site plan as required.

Proper distances must be maintained from all overhead power lines, such as by the use of a signal person.

- A minimum clearance distance of 15 feet shall be maintained by apparatus or equipment from power lines of 50Kva or less.

If ongoing work around energized overhead power lines will take place thereby increasing the probability of accidental contact, the Power Company should be requested to temporarily insulate the lines.

55. PERMITS

Unless otherwise relieved via contract provisions, each Contractor shall obtain relevant permits pertinent to the safety of employees, the public and operations.

Permits shall be available at the job site for review by LAUSD representatives.

Contractors must obtain and post Cal/OSHA Activity Permits for the following construction activities:

- Construction of trenches or excavations which are 5 feet or deeper and into which a person is required to descend.
- Construction of any building, structure, scaffolding or falsework more than 3 stories high, or the equivalent height (36 feet).
- Demolition of any building structure, or dismantling of scaffolding or falsework more than 3 stories high, or the equivalent height (36 feet).
- Erection or dismantling of vertical shoring systems more than 3 stories high, or the equivalent height (36 feet).
- Use of fixed or mobile tower cranes.

56. PERSONAL PROTECTIVE EQUIPMENT

Contractors are required to assess the workplace to determine if hazards that require the use of personal protective equipment (PPE) are present or are likely to be present.

Contractors will be responsible for supplying all necessary personnel protective equipment (PPE) to all relevant employees.

Contractors shall ensure that employees are trained in the proper use, sanitation, maintenance/care, inspection and limitations of each type of personal protective equipment prior to actual use.

Contractors must select and have affected employees use/wear properly fitted personal protective equipment (PPE) suitable for protection from existing hazards.

Contractors are responsible for enforcing employee compliance with all personal protective equipment (PPE) criteria.

Use of Personal Protective Equipment (PPE) will be in accordance with 8 CCR 1514, 1520-22, 3381-82, 5096 and 5144 (Hazard assessment for Personal Protective Equipment).

56.1 HARD HATS

It is required that all employees on the job site shall be protected by NON-METALLIC protective helmets. In order to protect employees against impact and penetration of falling and flying objects, hard hats will be worn 100% of the time while on the job site. The General Contractor, at their discretion, may designate areas on site (break areas, office trailer areas) where hard hat usage is not required. Hard hats shall meet the specifications contained in American National Standards Institute, Z89.1-Safety Requirements for Industrial Head Protection.

57.2 EYE AND FACE PROTECTION

It is required that all employees on the job site shall be protected by proper eye protection. In order to protect employees against impact and flying objects, eye protection will be worn 100% of the time while on the job site (the only exclusion is while inside the jobsite trailer or designated areas outside of the construction zones) The General Contractor, at their discretion, may designate areas on site (break areas, office trailer areas) where eye protection usage is not required. Eye protection shall meet the specifications contained in the American National Standards Institute, ANSI Z87.1 "Practice for Occupational and Educational Eye and Face Protection."

- Employees will be required to wear the proper eye and face protection for all tasks which expose them to recognized eye and face hazards.
- Safety glasses with permanently affixed side shields will be considered the minimum type of eye protection worn.

- Employees involved in welding operations will be furnished with filter lenses of the proper shade number.
- Employees will not wear shaded lens while working indoors unless they are performing task specific work that requires filtered lenses.
- Employees exposed to laser beams shall be furnished suitable laser safety goggles which will protect for the specific wavelength of the laser and be of optical density (O.D.) adequate for the energy involved.
- The eye protection required for various operations as shown in the OSHA Federal Register, Part 1926.102.

57.3 HAND PROTECTION

57.3.1 GLOVES

In order to ensure that all contractor employees working on LAUSD construction sites have suitable hand protection available in the event they are assigned job tasks that create an exposure to hand injuries, all personnel will, at all times, have/carry gloves appropriate for their work activities.

When the scope of work performed creates a potential risk of hand injuries, Contractor employees will wear the appropriate hand protection.

- Hand protection will also be worn when handling or working with chemical substances such as paint, solvents, acids, etc.
- Gloves will not be worn for close work around saws, lathes, drill presses, and similar machinery in which they are likely to become entangled.

57.4 HIGH VISIBILITY SHIRT, VEST, OR JACKET

It is required that all employees on the job site when working outside of buildings, in trenches/excavations, and around mobile equipment and vehicles, wear high visibility shirts, vests, jackets or equivalent. Protection means high visibility materials which are intended to make the user clearly visible by day through the use of high visibility material and in the dark by vehicle or equipment lights through the use of retro-reflective (fluorescent) material.

The high visibility clothing should not be worn in a manner that interferes with the safe use of other PPE items (i.e.; fall arrest systems, leather or other fire retardant garments, etc.).

For daytime work, flagmen shall be provided with and shall wear the flagger's vest, shirt, or jacket which shall be orange, yellow, yellow-green, or a fluorescent version of these colors. For nighttime work, similar outside garments shall be retro-reflective. The retro-reflective material shall be orange, yellow, white, silver, yellow-green, or a fluorescent version of these colors, and shall be visible at a minimum distance of 1,000 feet. The retro-reflective clothing shall be designed to clearly identify the wearer as a person.

56.5 RESPIRATORY PROTECTION

Approved respiratory protection will be provided to and worn by all employees subject to hazardous dust, gases, fumes, mists, or vapors. When respirators are indicated, the employer shall implement a written respiratory protection program which includes:

- A written respiratory protection program and training;
- Physical Examinations for respirator use;
- Written cartridge change out schedules; and
- Care, maintenance and disposal process.

Lack of air monitoring data does not permit/allow the assumption that hazardous air contamination thresholds are not being exceeded therefore respirators are not required. Only Industrial Hygiene air monitoring data will counteract an order given by LAUSD for the use of respiratory protection.

Contractor employees who are required to wear respiratory protection must receive a medical assessment of their physical ability to wear the equipment, be properly fit tested, and be trained in the use, care, maintenance, and limitations of the respiratory device.

The proper respirator must be selected for the particular type of air contaminant involved.

Respiratory protective devices should be approved by the Department of Health and Human Services (DHHS) or National Institute of Occupational Safety and Health (NIOSH).

57.6 HEARING PROTECTION

Hearing protection must be worn by employees who are exposed to excessive noise levels in situations where administrative or engineering controls cannot be utilized to establish acceptable noise levels.

Lack of noise monitoring data does not permit/allow the assumption that permissible noise levels are not being exceeded therefore hearing protection is not required. Only approved noise monitoring data will counteract an order given by LAUSD for the use of hearing protection.

Hearing protection used to obtain acceptable noise levels will consist of either approved ear plugs, ear muffs, or a combination of both. Plain cotton is not considered an acceptable protective devise and should not be used for hearing protection.

The following Table 2 "Permissible Noise Exposures" should be used to determine the duration of exposure permitted for various sound levels. Additional requirements concerning hearing protection can be found in the OSHA Federal Register, Part 1926.101 or Cal OSHA, Title 8, Section 5095.

When hearing protection is recommended, employees shall be trained on the proper use of the hearing protection. If the Action Level (AL) of 85 dba, 8 hour-Time Weighted Average is reached **based on personal dosimeter monitoring**, a written hearing conservation program shall be implemented for effected employees and shall include but not limited to:

- Baseline audiograms;
- Annual audiograms;
- Posting of the written program;
- Warning signs in high noise areas; and
- Training of employees.

Table 2. CAL-OSHA Permissible Exposure Levels

A-weighted sound level, L (decibel)	Reference Duration T (hour)	A-weighted sound level, L (decibel)	Reference Duration T (hour)
80	32	106	0.87
81	27.9	107	0.76
82	24.3	108	0.66
83	21.1	109	0.57
84	18.4	110	0.5
85	16	111	0.44
86	13.9	112	0.38
87	12.1	113	0.33
88	10.6	114	0.29
89	9.2	115	0.25
90	8	116	0.22
91	7.0	117	0.19
92	6.1	118	0.16
93	5.3	119	0.14
94	4.6	120	0.125
95	4	121	0.11
96	3.5	122	0.095
97	3.0	123	0.082
98	2.6	124	0.072
99	2.3	125	0.063
100	2	126	0.054
101	1.7	127	0.047
102	1.5	128	0.041
103	1.3	129	0.036
104	1.1	130	0.031
105	1		

57.7 FOOT PROTECTION

Contractors will be responsible for insuring that their employees are wearing adequate, sturdy footwear. Footwear worn on the job site should have soles which guard against punctures and slipping and uppers should be such as to protect against expected scraping and scratching from rough building materials. Where there is a frequent possibility of hard objects being dropped on the foot, proper protection should be provided in the form of safety toed (steel-toed or composite-toed) footwear.

The footwear soles should be made of slip resistant materials and not worn to the point where slip resistance is compromised.

Employees operating paving breakers/jack hammers, jumping jacks, compaction equipment and sand tamps, etc., shall wear metatarsal guards or steel toed safety shoes.

Tennis, running, casual street shoes, sandals or shoes made with thin materials are not permitted on the job site.

57.8 PERSONNEL FALL ARREST/PROTECTION

Reference FALL PROTECTION in these Safety Standards

CONTRACTORS WILL BE RESPONSIBLE FOR PROVIDING ANY OTHER TYPES OF PERSONAL PROTECTIVE EQUIPMENT WHICH MAY BE REQUIRED FOR SPECIFIC JOBS. THE PERSONAL PROTECTIVE EQUIPMENT REQUIRED AND UTILIZED/WORN WILL BE CONTINGENT ON THE EXPOSURE POTENTIAL ASSOCIATED WITH JOB TASK(S) PERFORMED.

57. POSTING REQUIREMENTS

The Contractor shall be required to construct a weatherproof job site bulletin board. Federal and State regulations require Contractors to conspicuously display all required posters at locations where employees report each day.

At a minimum, the following items shall be posted:

- Industrial Welfare Commission's Order Regulating Wages, Hours, and Working Conditions.
- OSHA "Job Safety and Health Protection".
- Contractor's "Code of Safe Practices". (?)
- Discrimination in Employment is prohibited by Law.
- Sexual Harassment Poster (if required).
- Americans with Disabilities Act (ADA).
- Notice of Worker Compensation Carrier.
- Notice to Employees of Unemployment Insurance and Disability Insurance.
- OSHA Operating Rules for Industrial Trucks.
- Emergency Telephone Numbers (yellow/black card).

58. POWDER-ACTUATED TOOLS

Powder-actuated tools must meet or exceed ANSI A10-3 standards.

Only trained workers holding a valid operator's card can use a powder-actuated tool.

Containers for powder-actuated tools must be lockable and bear the label, POWDER-ACTUATED TOOL, on the outside. The container must be kept under lock and key storage.

To prevent/protect against accidental activation all power activated tools shall be equipped with a barrel end to surface contact safety device.

The following must be provided with each tool:

- Operating and service manuals.
- Power load chart.
- Inspection-Service record.
- Repair and servicing tools.

Eye or face protection is required for operators and assistants.

Tools must be inspected prior to use. Defective tools must not be used.

Powder-actuated tools must not be left unattended.

Powder-actuated tools must be unloaded if work is interrupted. Tools must not be loaded until ready for use.

Unfired cartridges must be under the control of the operator at all times.

On misfire, the tool must be held in place for 30 seconds.

Misfires shall be placed in a can of water.

Different power loads must be kept in separate compartments.

Warning signs must be clearly posted within 50 feet of the point of use bearing the words "POWDER-ACTUATED TOOLS IN USE."

59. ROOFING HAZARDS

During roofing operations unless otherwise specified in the LAUSD Safety Standards the Contractor shall comply with the provisions contained in 8 CCR §1730.

Employees shall be protected from falls from roofs by use of one or a combination of the following methods:

- Parapets will be a minimum 39 inches high otherwise other means of fall protection will be required.
- Personnel fall arrest systems.
- Catch platforms.
- Scaffold platforms.
- Eave barriers a minimum of six (6) feet from the roof eave (i.e. Controlled Access Zone).
- Standard railings and toeboards
- Each rooftop hatch shall be equipped with railing, chains and/or swing gates and a grab bar. New construction will not be considered complete unless these requirements are met.

Also reference Fall Protection in these standards.

60. SANITATION

The Contractor must provide in a clean and sanitary condition:

- potable water for drinking,
- adequate toilet facilities (see below),
- hand wash facilities as required by the applicable Federal or State standards
- appropriate containers for disposal of garbage,
- Any necessary insect and rodent control.

A minimum of one separate toilet facility for each sex shall be provided for each 20 employees or fraction thereof.

Toilet facilities shall be kept clean, free of graffiti, maintained in good working order, designed and maintained in a manner which will assure privacy and provided with an adequate supply of toilet paper.

BREAK AREAS SHALL BE DESIGNATED FOR EATING AND DRINKING PURPOSES.

There have been several incidents of workers stepping on plastic bottles and rolling their ankles sustaining injury; therefore LAUSD has implemented the following policy:

PLASTIC BOTTLES INCLUDING WATER BOTTLES, SODA OR OTHER SOFT DRINK BOTTLES MUST BE PLASTIC AND HAVE THE LIDS REMOVED AND DISCARDED IN PROPER RECEPTACLES UPON OPENING. ABSOLUTELY NO GLASS CONTAINERS MAY BE USED ON SITE.

61. SCAFFOLDS - ERECTION, INSPECTION AND MAINTENANCE

Scaffolds utilized by Contractors, unless otherwise specified in the LAUSD Safety Standards and/or the Contractor/Suppliers Safety Standards, shall at a minimum comply with OSHA 29 CFR 1926.1053 and 1926.1060 standards.

The following procedures shall govern the erection, dismantling, maintenance, inspection, and use of scaffolds.

Note: LAUSD requires a minimum of one stair tower for structures greater than 24 feet. Straight ladders require the use of fall protection devices at heights over 24 feet such as the use of scaffold davits and self-retracting lifelines.

Note: A frame scaffolds are strictly prohibited for use on LAUSD sites unless specifically exempted in writing by the LAUSD Construction Safety Director or his/her designee.

Erection and Dismantling:

- Scaffolding shall be erected, moved, dismantled or altered only under the supervision and direction of a Competent Person specifically trained and qualified to perform these tasks for the type scaffolding utilized. The Contractor will assure that a Competent Person provides employees assigned to erect, dismantle, move, repair, maintain and inspect the scaffold with the required training and/or supervision to ensure they recognize any hazards associated with the work performed.
- All scaffolding must be provided with identification that it has been erected and dismantled by or under the supervision of a Competent Person.
- Documentation of Competent Person's certification shall be available on site for review by authorized LAUSD representatives.
- The training shall include the following topics, as applicable:
    - the nature of scaffold hazards
    - the correct procedures for erecting, disassembling, moving, operating, repairing, inspecting and maintaining the type of scaffold in question
    - the design criteria, maximum intended load-carrying capacity, and intended use of the scaffold
    - any other pertinent procedures or safety requirements
- When the Contractor has reason to believe that an employee(s) lacks the skill or understanding needed for safe work involving the erection, use or dismantling of scaffolds, the Contractor shall re-train each such employee so that the required proficiency is regained.

- The Contractor shall have a Competent Person determine the feasibility and safety of providing fall protection for employees erecting or dismantling supported scaffolds. Fall protection is required for employees erecting or dismantling supported scaffolds over six (6) feet in height where the installation and use of such protection is feasible and does not create a greater hazard.
- The Contractor shall have each employee who performs work while on a scaffold trained by a person qualified in the subject matter to recognize the hazards associated with the type of scaffold being used and to understand the procedures to control or minimize those hazards. The training shall include the following topics, as applicable:
    - the nature of any electrical hazards, fall hazards, and falling object hazards in the work area,
    - the correct procedures for dealing with electrical hazards
    - the correct procedures for erecting, maintaining, and dismantling the fall protection and falling object protection systems being used
    - the proper use of the scaffold, including the proper handling of materials on the scaffold
    - the maximum intended load and the load-carrying capacities of the scaffold
    - any other pertinent procedures or safety requirements
- The working platform height of a rolling scaffold must not exceed three times the smallest base dimension unless guyed or otherwise stabilized.
- All connections, including casters, on rolling scaffolds shall be pinned.
- The casters used with rolling scaffolding shall have an ultimate/maximum rolling load capacity/pound rating. When casters are used with scaffolding, this capacity shall be the load limiting factor.
- No rolling scaffold is to be moved with anyone on the platform regardless of the height. Care must be exercised in moving these scaffolds to prevent their upsetting. Wheels shall be locked at all times except when scaffolds are being moved.
- Scaffolds must be erected level and placed on a firm base. The scaffold platform shall be horizontal as close as the eye can detect. When the scaffold is resting on the ground, bearing plates shall be placed beneath each leaf to prevent the scaffold from settling into the earth. The bearing plate must be a minimum of two inches (2″) by ten inches (10″) timber.
- Adjusting screws utilized to level scaffold frame members are to be used with a base plate only. Adjusting screws will not be extended more than 12 inches.

Adjusting screws are not to be used in conjunction with casters or on rolling scaffolds.

- All scaffolds shall be designed to carry without failure four (4) times the maximum intended load and at no time will any scaffold be overloaded.
- Complete toprail, midrail, and toeboards shall be provided on all sides of the working platform of scaffolds six (6) feet or higher. If utilized, wood guardrails shall be two inches by four inches (2" x 4") or the equivalent, between 39 inches to 45 inches high with a midrail. Supports shall be at intervals not to exceed eight (8) feet. Toe-boards shall be a minimum of four inches (4") in height.
- If the guardrail system is missing or incomplete personnel fall protection is required.
- Detachable "X" braces must be fastened securely. Where obstructions prevent the use of "X" braces, other means to secure bracing shall be used.
- All scaffolds over two lifts high are to be tied off to an independent structure or guyed securely beginning at the third lift and at every lift thereafter. Such scaffolds which extend horizontally are to be tied into the building every 12 feet. Each lift is to be secured to the lifts above and below it.
- Do not use the scaffold rails or braces for climbing. Use the provided ladder access. Ladders, if not an integral part of the scaffold, shall be attached securely to the scaffold so as to provide safe access to the working platform.
- A stair tower or built-in stair/ladder system shall be provided for access to all scaffolds four frames or more in height.
- Scaffolds will not be placed in front of doors unless the doors are blocked, locked or guarded.
- Scaffold planks must extend over their end support not less than six inches (6") or more than twelve inches (12").
- Scaffold planks, unless they are cleated, are to be wired down securely so they will not shift or tip when under a load.
- Scaffolds are not to be bridged between with scaffold plank or stages unless the scaffolds are secured to each other by adequate bracing or tied off to an independent structure.

Inspection and Maintenance:

- Handrail, midrail and cross bracing shall be inspected for nicks, especially near the center of the span and for indications where a welding arc has been struck. Such pieces shall be removed from use immediately.
- No scaffolding member will be altered by welding, burning, cutting, drilling or bending.

- Manufactured Frames
    - Checks shall be made around the frame weld zone for crack indications and the tubing checked for splitting or cracking at leg ends.
    - The three main areas of inspection are for rust, straightness of members and welds. When rust appears, wall thickness of tubing shall be checked for thinning. All members or parts of all steel scaffold components shall be straight and free from bends, kinks or dents. Any pieces of a scaffold found having any of these defects shall be removed from service immediately.
- Daily scaffold inspection is to be a visual examination supervised and/or conducted, by the designated Competent Person.
- All scaffolds must be tagged noting their status whether complete or incomplete. The tag will designate whether the scaffold is safe to use (green tag) or cannot be used (red tag). Prior to scaffold use on each shaft, the Competent Person will sign the inspection tags.

62.1 SUSPENDED SCAFFOLDS

Suspended scaffolds must have adequate anchorage points. Prior to stepping out onto any suspended scaffold, the occupants must be provided with a full body harness, lifeline and deceleration device that must be attached to a separate anchorage point.

The set up, maintenance, inspection and use of suspended scaffold will be under the supervision of a Competent Person and will be in compliance with all applicable Federal and State regulatory standards.

62. STEEL ERECTION

Steel erection activities shall comply with all facets of 29CFR1926 Subpart R, except where superseded below:

- Steel erection Contractors shall implement a Site-Specific Steel Erection Plan in accordance with the OSHA Steel Erection Standards "Guidelines for Establishing the Components of a Site-Specific Erection Plan.
- All site preparation shall comply with Subpart R. LAUSD has extended the site preparation requirement to treat rebar the same as structural steel regarding site preparation, loading and off-loading.
- When connecting beams at the periphery or interior of a building or structure where the fall distance is greater than six (6) feet, the Connector shall be provided with and use appropriate personal fall protection equipment in accordance with OSHA requirements and these Standards.
- Connector means an employee who, working with hoisting equipment, is placing and connecting beams or other structural members.
- When performing work other than connecting, Employees shall be provided and use personal fall protection equipment in accordance with these Standards and Federal OSHA requirements where the fall distance is greater than six (6) feet.
- Where applicable erection Contractor employees working in excess of six (6) feet in height shall utilize personnel fall protection equipment tied off to beam clamps, approved anchorage, or other approved anchoring device(s) or work in Mobile Elevated Work Platforms (MEWPs) (i.e., manlifts).
- Any deviations from this steel erection fall protection policy will require a minimum three weeks advance written approval from authorized LAUSD Safety representatives prior to commencing work.
- Before the commencement of steel erection, the steel erection Contractor must receive written notification that the concrete in the footings, piers, and walls, as well as the mortar in the masonry piers and walls has attained, on the basis of an appropriate ASTM standard test method of field-cured samples, either 75 percent of the intended minimum compressive design strength or sufficient strength to support the loads imposed during steel erection.
- No building, structure, or part thereof, or any temporary support shall be loaded in excess of its designed capacity.
- The Contractor shall provide an erection plan and procedure prepared by a registered civil engineer for the erection of trusses and beams over 25 feet long.
- Trusses and beams shall be braced laterally and progressively during construction to prevent buckling or overturning.

- Open web steel joists shall not be placed on any structural steel framework unless such framework is safely bolted or welded.
- Permanent Flooring
    - Permanent floors shall be installed as soon as practical following the erection of structural members.
    - At no time shall there be more than four floors or 48 feet of unfinished bolting or welding above the foundation or upper most secured floor.
- Temporary Flooring
    - Where skeleton steel is being erected, a tightly planked and substantial floor shall be maintained with two stories or 30 feet, whichever is less, below and directly under that portion of each tier of beams on which any work is being performed.
    - The erection floor shall be solidly planked over its entire surface except for access openings. Planking shall not be less than 2 inches thick, full size undressed, and shall be laid tight and secured against movement.
    - On structures not adaptable to temporary floors or static lines, safety nets shall be installed and maintained whenever the potential fall distance exceeds two stories or 25 feet.
    - Employees working above grade or any surface and exposed to protruding reinforcing steel or other similar situations shall be protected against the hazard of impalement by the use of guardrails, or approved fall protection systems, and protective cover SHALL BE PLACED ON ALL IMPALEMENT HAZARDS as specified in 8 CCR §1712.
    - Exposed edges of all temporary planked or temporary metal decked floors at the periphery of the building, or at interior openings, such as stairways and elevator shafts shall be protected by a single 3/8-inch minimum diameter wire rope located between 39 and 45 inches above design finish floor height. The erection Contractor shall install turnbuckles no less that every 100 feet to allow for re-tightening of cables. A midrail and toeboard shall be installed at the completion of the installation of decking.
    - Covers for roof or floor openings shall be capable of supporting, without failure, twice the weight of employees, equipment and materials that may be imposed on the cover at any one time.
    - All covers shall be secured when installed to prevent accidental displacement by wind, equipment or employees.
    - All covers shall be painted with high visibility paint or shall be marked with the word “HOLE” or “COVER” to provide warning of the hazard.

- Decking gaps around columns shall be protected with wire mesh, exterior plywood, or equivalent to provide protection from objects falling through.
- Metal decking shall be laid tightly and immediately secured upon placement to prevent accidental movement or displacement.
- Bundles of decking shall be placed on a minimum of three steel joists.
- Bundle packaging and strapping shall not be used for hoisting unless designed for that purpose.
- Loose items such as dunnage, flashing, or other materials, which are placed on the top of metal decking bundles to be hoisted, shall be secured to the bundles.
- Containers shall be provided for storing or carrying rivets, bolts, and drift pins, and secured against accidental displacement when aloft.
- When bolts or drift pins are being knocked out, means shall be provided to keep them from falling.
- Impact wrenches shall be provided with a locking device for retaining the socket.
- Connections of equipment used in plumbing-up shall be properly secured.
- Turnbuckles shall be secured to prevent unwinding while under stress.
- Plumbing-up guys shall be removed only under the supervision of a Competent Person.
- Openings in metal decking shall not be cut until equipment installation is ready to commence.

63.1 GENERAL REQUIREMENTS

The crane headache ball, hook, or load shall not be used to transport personnel.

During placing of structural members, the load shall not be released from the hoisting line until the members are secured with not less than two bolts drawn up wrench tight.

All columns shall be anchored by a minimum of 4 anchor rods (anchor bolts).

- Anchor rods (anchor bolts) shall not be repaired, replaced or field modified without the approval of the site Structural Engineer of record and/or in accordance with CDR 1926.755(b).
- Prior to the erection of a column, the Prime Contractor or steel fabricators shall provide written notification to the steel erector if there has been any repair, replacement or modification of the anchor rods (anchor bolts) of that column.

When loads are being hoisted, avoid walking under the load or permitting an employee to be exposed to the swing of the lift/load. Where applicable, tag line(s) shall be used to control all loads.

Secure loose items aloft. All materials, equipment, and tools, which are not in use while aloft, shall be secured against accidental displacement.

The steel erecting Contractor shall pre-plan all overhead hoisting operations to ensure that no individual is required to work directly below a suspended load.

For protection from falling objects the steel erecting Contractor shall bar other construction activities below steel erection unless overhead protection for the employees below is provided.

For additional protection of other crafts on the site, barricades shall be installed around overhead work and signs shall be posted in the erection area, "Danger Men Working Overhead".

Material should not be hoisted to a structure unless it is ready to be put into place and secured.

63. TAR AND MELTING POTS

Any melting chamber must be vented and must have a working thermometer.

No melting pots or tar kettles may be located on roof surfaces. All melting pots must be on the ground, and a minimum 25 feet from any building.

Barricades must be provided when hot liquids are present overhead on a roof or upper floor.

Buckets containing hot asphalt or pitch shall not be carried on ladders. Whenever possible, pumps shall be utilized to pump asphalt to the roof.

A fire extinguisher shall be kept near each kettle in use. Extinguisher capacity shall be at least:

- Less than 150 gallon kettle – 8:B.C.
- 150 to 350 gallon kettle – 16:B.C.
- Larger than 350 gallon kettle – 20:B.C.

For emergency purposes, kettle and tanker pumps shall be provided with a means of stopping the flow of hot asphalt or pitch manually from the rooftop.

Pumper pipelines shall be securely fastened at roof top and shall not be supported by ladders used for access.

Pipelines shall be adequately braced or supported to prevent collapse.

64. UTILITY HOLES - PUMPING WATER

Contractors shall ensure employee awareness of potential contaminants in utility holes, and water and remediation procedures.

Contaminants can enter a utility hole from numerous sources:

- Leaking underground storage tanks and pipelines.
- Storm water run-off.
- Spills, dumping, or migration from the water table.

All utility holes must be tested for the presence of gases prior to pumping.

Prior to entry, contaminated water or sewage must be removed by an authorized environmental consultant for proper disposal.

All utility hole or access points' work will be subject to compliance with applicable Confined Space safety protocol.

All confined spaces shall have permanent marking identifying them as confined spaces. New construction will not be considered complete if confined spaces do not contain appropriate signage or marking,

65. WARNING SIGNS

Signage/traffic control devices shall be maintained in legible condition and cleared, repaired or replaced as necessary to maintain legibility.

In accordance with applicable codes and regulations, Contractor(s) shall post site access and warning signage including emergency contact information.

Contractor employees will obey all warning signs.

In order to protect Contractor employees and the public, traffic warning signs, barricades, cones, lights, etc. will be utilized in accordance with all applicable Federal and State standards and criteria outlined in the "Work Zone Traffic Control" section in these Safety Standards.

All Contractor employees will wear high visibility traffic vests when work activities are located adjacent to or on roads.

If necessary and/or required, a flagman will be utilized to direct vehicle traffic.

All Contractors installed warning signs, signals and barricades must be removed when the hazard no longer exists. The responsible Contractor shall monitor conditions to ensure timely removal of these devices.

66. WORK ZONE TRAFFIC CONTROL

Contractors shall establish work area protection zones necessary to protect employees and the public when work is performed in areas where pedestrians or vehicles have access.

Traffic control shall be established in compliance with the U.S. Department of Transportation, Part VI, Manual on Uniform Traffic Control Devices (MUTCD), State and local traffic control regulations, the WATCH Handbook (where referenced by contract) and/or other contract referenced documents/standards.

The responsible Contractor shall establish Work Area Protection in consideration of the location of the worksite, pedestrian and traffic conditions, and the time of day (daylight or dark).

All Contractor employees working in areas subject to being struck by vehicular traffic and/or heavy equipment will wear a high visibility reflective garment/vest in accordance with the requirement of the MUTCD and those Safety Standards.

When placing or removing Work Area Protection the Contractor shall:

- Be consistently alert to traffic conditions.
- Face oncoming traffic.
- Wear the required personal protection (e.g. traffic warning vest, hard hat, eye protection).

Place the initial warning sign (e.g., Construction Ahead) first and remove last.

Work sites must be made safe for pedestrians by using:

- Rope or vinyl warning tape.
- Fencing or other barricades.
- Cones and signs.
- Pedestrian crossing (designated and painted).
- Other appropriate means, methods and devices.

All night work requires adequate illumination to light the work area and warn public vehicular traffic.

For night work the illumination used to light the work zone shall be aimed such that it does not create glare, or blind, the public driving through the work zone.

Flagging operations shall be conducted in accordance with the following unless a more specific standard applies.

- The responsible Contractor shall ensure adequate protection to passing vehicles on a roadway by providing a flagger(s) when barricades, signs and signals may be insufficient.
- The flagger shall be trained in the proper fundamentals of flagging (signaling) traffic before being assigned as flagger.
- The flagger must be protected and the motorist forewarned by use of advance warning signs and cones.
- Use cones before the flaggers position to mark the traffic lane.
- All flaggers shall be required to wear a high visibility orange/yellow traffic vest.
- During the hours of darkness the flaggers shall be outfitted with a reflective garment, and the flagger's position shall be illuminated.
- To Stop Traffic - The flagger shall face traffic and hold the "Stop" paddle in a vertical position at arms length.
- When It Is Safe For Traffic To Proceed - The flagger shall stand parallel to the traffic movement, and with the "Slow" paddle held in a vertical position at arms length.
- Flags shall be a minimum of 18" x 18" in size, and orange in color.

67. PLATE BRIDGING

Trenches, excavations, or other surface openings or significant depressions must be covered with a bridge plate to permit safe and unobstructed flow of traffic.

Bridging plates must be secured from movement by a holding device(s) such as cleats, angles, bolts, tack welding, etc.

Bridging plates should be installed to produce a minimum amount of noise.

Bridging plates must extend a minimum of one foot beyond the edges, with pavement materials feathering the edges for a reasonably smooth transition.

Advance warning signs shall be posted when steel plates are used in a travel path.

- Refer to the WATCH Manual (where applicable) for specific requirements.

68. JOB SITE ORIENTATION FOR CONTRACTOR EMPLOYEES

Contractors/Subcontractors shall ensure employees new to the site receive a safety orientation that will address the exposure potential associated with all job tasks(s) performed and the safety procedures required to eliminate or at a minimum reduce the accident/loss potential.

The orientation will, at a minimum, review the LAUSD Safety Standards and all other safety standards applicable to their scope of work.

All orientations shall be documented. Records shall be maintained on the job site available for review upon request by LAUSD representatives and/or any regulatory entities.

Topics may include, but are not limited to:

- Explanation of LAUSD's Safety Philosophy
- Contractors' Safety Rules, Policies and Procedures
- LAUSD Safety Standards and any site specific safety rules, policies and procedures.
- Site map, including entrances, exits, and parking areas
- Emergency procedures
- Evacuation procedures
- Fire protection and prevention procedures and practices – initial site-specific training
- Accident/incident reporting procedures
- Near-miss Incident reporting procedures
- Procedures to report unsafe acts and/or conditions
- Location of First-Aid kits, medical treatment clinic(s) and hospital
- Drug and alcohol policy
- Location of site Bulletin Board
- Day, time and location of Safety Meetings
- Personal Protective Equipment requirements, including how, when and where to obtain/replace PPE
- Site dress code, site access identification, code of conduct
- Hazard Communication training (site-specific)
- Fall Protection – initial site-specific training
- Confined Spaces – initial site-specific training
- Electrical Safety – initial site-specific training

- Ladder safety – initial site-specific training
- Scaffold safety – initial site-specific training
- Hot work safety – initial site-specific training
- Control of hazardous energy (including Lockout-Tagout) – initial site-specific training
- Site vehicle safety requirements
- Housekeeping requirements
- Site-Specific Public Safety requirements
- MPN Form B Letter

69. PUBLIC PROTECTION PLAN

The protection of students, LAUSD employees, visitors and the public from potential hazards created by construction activities on or adjacent to all LAUSD construction sites is a critical component of the LAUSD Safety Standards. Minimum Public protection shall comply with ANSI/ASSE A10-34-2001 (R2005).

The Contractor shall develop a Public Protection Plan prior to the commencement of work. The Public Protection Plan shall be reviewed and revised as necessary throughout the site.

- The Plan shall be in writing and available at the job site for review upon request.
- For the purposes of this section, "Public" refers to parties not involved in the execution of work related to the construction site.

70.1 CONSIDERATIONS

The Public Protection Plan shall consider and include at a minimum the following items as they apply to the site: (NOTE: this is neither intended nor represented to be a complete list.)

- Noise
- Dust, Fumes, Mists, Smoke, Vapors
- Traffic hazards
- Pedestrian hazards
- Radiation (including lasers, x-rays, and welding rays)
- Machinery and vehicles
- Falling objects
- Wind-borne objects
- Security
- Utilities
- Hazardous Materials and Hazardous Substances (including use and storage)
- Response to accidents/incidents involving the public
- Accident/Incident reporting and investigation protocol
- Public demonstrations or protests
- Job site perimeter protection (fencing, barricades, etc.)

70.2 COMPONENTS

The Public Protection Plan shall at minimum include the following components:

- Policy statement

- Assignment of responsibilities
- All LAUSD public safety standards/criteria outlined in these Safety Standards and other LAUSD contract documents.
- Identification of existing and predictable public concerns
- Provisions to monitor and inspect the implementation of the provisions of the Public Protection Plan
- Provisions for incident investigation
- Hazard abatement procedures

The following links include, but are not limited to, a Summary of Federal, State, Local and National Consensus Standards. National Consensus Standards subscriptions or documents are available for purchase through several sources.

Federal OSHA Standards

General Industry:

http://www.osha.gov/pls/oshaweb/owasrch.search_form?p_doc_type=STANDARDS&p_toc_level=1&p_keyvalue=1910

Construction:

http://www.osha.gov/pls/oshaweb/owasrch.search_form?p_doc_type=STANDARDS&p_toc_level=1&p_keyvalue=Construction

Environmental:

http://www.epa.gov/regulations/

State Standards

Cal-OSHA

http://www.dir.ca.gov/samples/search/query.htm

Cal-EPA

http://www.calepa.ca.gov/LawsRegs/

Local Standards

LA County: http://portal.lacounty.gov/wps/portal/lac/directory

National Consensus Standards

Includes but not limited to those found at the following links:

http://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=STANDARDS&p_id=10125

http://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=STANDARDS&p_id=10919

The following national Consensus Standards sites maybe useful for obtaining standards:

Techstreet: http://www.techstreet.com/

IHS: http://aec.ihs.com/products/standards/safety-standards-collection.htm

ANSI/ASSE:
http://www.webstore.ansi.org/RecordDetail.aspx?sku=ANSI%2FASSE+A10+Construction+Package

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