CONSTRUCTION SAFETY

Safety and Health

The **Construction Safety Policy Guidelines** have been developed by the Los Angeles World Airports (LAWA) to promote safety, by assisting in minimizing the hazards and risks associated with the construction projects, and are considered part of this Design and Construction Handbook.

LAWA expects the Contractor to place the highest importance and priority on safety, health and the protection of the environment during performance of work and abide by these policies. In addition, LAWA and its agents shall have the right but not the obligation, to inspect the worksite and appropriate work records in order to ascertain Contractor and subcontractor compliance with safety and health requirements. However, neither the existence nor exercise of such right shall relieve the Contractor of its responsibility for monitoring its own and its subcontractor's compliance with the safety, health and environmental requirements of their contract and applicable laws, rules, regulations and statutes.

ADG Construction Safety Policy Guidelines

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Job Hazard Analysis	OSHA 3071 (Revised 2002)
Construction Safety Inspection Report	SA-001
Safe Clearance Schedule	SA-004
Safe Clearance Log	SA-005
Construction Safety Violation Report	SA-006
Safety on Airports during Construction	FAA Advisory Circular 150/5370-2F (September 2011)

CONSTRUCTION SAFETY POLICY GUIDELINES

REVISION 2

OCTOBER 30, 2009

Los Angeles World Airports
AIRPORTS DEVELOPMENT GROUP
™

LOS ANGELES WORLD AIRPORTS | ADMINISTRATION WEST BUILDING
7301 WORLD WAY WEST, 9TH FLOOR | LOS ANGELES, CA 90045

Los Angeles World Airports
AIRPORTS DEVELOPMENT GROUP

SAFETY POLICY
FOR
LAWA Airports Development Group

The Construction Safety Policy Guidelines provides general information to the Project Construction Delivery Team (Construction Managers, Contractors Construction Managers at Risk, and Design/Builders) on the policies and guidelines for accident prevention, safety, and loss control for the Los Angeles World Airport's Airport Development Group projects and other related construction, repair, or services required by the Owner (LAWA) and its tenants. LAWA's safety objective is to achieve accident-free construction projects.

Project Construction Delivery Team Members are charged with the responsibility for conducting their operations in a manner that will provide safe working conditions for all employees, and the protection of the public and all others who may come in contact with, or be exposed to, this project. Nothing contained in these guidelines is intended to relieve any Contractor, sub-contractor, Construction Manager at Risk, Design-Builder or supplier of the obligations assumed under their contract with the Owner or required by law.

Safety must be an integral part of each job. Full participation, cooperation, and support is necessary and required to ensure the safety and health of all persons and property involved in the project.

Approved By

10/30/09

Roger Johnson, Deputy Executive Director

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Los Angeles World Airports
AIRPORTS DEVELOPMENT GROUP

APPENDICES

1.0 DEFINITIONS

1.1 Air Operations Area (AOA) – The area of the airport used or intended to be used for landing, taking off, surface maneuvering, loading, unloading, or servicing the aircraft. This is a security area requiring security badging and compliance with security regulations.

1.2 Airport Operations Superintendent - A representative from the Airport's Operation Division with the authority to intervene if the Contractor's actions on the airport are detrimental to the Airport's operational safety or security. Telephone 310-646-4265

1.3 Airports Development Group (ADG) – The LAWA management group of all construction projects.

1.4 ADG Construction Safety Policy Guidelines - The safety and loss prevention guidelines established by the Owner to provide guidance to the contractors in the recognition and correction of hazards and risks associated with the ADG construction projects.

1.5 ADG Program Safety Manager (PSM) - ADG representative responsible for oversight of the implementation of the ADG Construction Safety Policy Guidelines.

1.6 Authorized Representative-Party that is authorized by LAWA to represent LAWA in the management of LAWA contractual obligations and includes LAWA Inspectors.

1.7 California Division of Occupational Safety and Health (Cal/OSHA) - The state agency responsible for the rules and regulations concerning the occupational safety and health requirements for the job site, including construction work.

1.8 Capital Improvement Program (CIP) – A LAWA major redevelopment program to upgrade the facilities of Los Angeles International Airport (does not include LAXDP), Van Nuys and Ontario Airports.

1.9 Claims Coordinator - The on-site representative of the OCIP insurance program responsible for processing all claim reports and initial follow-up.

1.10 Construction Management Team (CMT) - In general, refers to the team assigned to coordinate and oversee construction activities.

1.11 Construction Safety Advisory Committee or "Committee" – The committee responsible for the coordination, direction and management of the Construction Safety Policy Guidelines.

1.12 Consultant(s) - Firm(s) employed by the Owner under contractual agreements for engineering design, construction management, technical support, testing, or other related services.

1.13 Contract - A written agreement by and between LAWA and a Contractor, Construction Manager at Risk, and/or Design-Builder.

1.14 Contractor - The term used to refer to all Contractors, Construction Managers at Risk, Design-Builders, Subcontractors, and Sub-subcontractors.

1.15 Contractor's Project Manager - The Contractor's employee for a given project or task who has the overall responsibility to see that the work or job is satisfactorily completed. The Contractor's Safety personnel report directly to him/her.

1.16 Contractor's Safety Manager - A full time safety professional hired to manage the contracted safety efforts. This person must have a minimum of 10 years heavy construction safety experience. Safety Superintendents/Supervisor report directly to him/her.

1.17 Contractor's Safety Superintendent – A ful time safety professional, having a minimum of five 5 years heavy construction safety experience, employed by the Contractor to manage the Contractor's safety efforts.

1.18 Contractor's Safety Supervisor (As specified via the Contract) - A Contractor's Employee, separate from the job superintendent or supervisor, who must have 5 years heavy construction experience, hired to perform various tasks including safety and other related duties such as traffic control, utility coordination, at the direction of the Safety Manager or Safety Superintendent.

1.19 Executive Director Designee - A LAWA employee or a LAWA Authorized Representative with the authority to enter into, administer, and terminate contracts.

1.20 Federal Aviation Administration (FAA) - The federal branch of the government responsible for the regulations and procedures related to air transportation.

1.21 Fire Inspector - The Owner's Representative from the Public Safety Division responsible for the fire safety of all facilities and operations at the Airport.

1.22 Insurance Administrators (Broker) - Representatives from the insurance brokerage firm(s).

1.23 Insured - The Owner, Consultants, Contractors, Architects, Engineer, Subcontractors, Sub-Subcontractors and any other party named as Insureds on the Certificates of Insurance signed by a duly authorized representative of the Insurance Carrier(s).

1.24 Insurer - Company(s) providing (underwriting) coverage for the included risks associated with the Owner-Controlled Insurance Program (OCIP).

1.25 Job Site - The area within the limits of construction or portions of such area defined within the Contract or as directed by the Engineer.

1.26 LAX Development Program (LAXDP) - The LAWA major redevelopment program to upgrade the facilities of Los Angeles International Airport.

1.27 Loss Control Coordinator- A representative from the Owner, Consultants, the Insurance Administrator, or the Insurer.

1.28 Manager, Engineering Division - The LAWA Division Manager responsible for the implementation of the planning, design, overall construction, and safety programs related to the LAWA ADG.

1.29 Los Angeles World Airports (LAWA) - The public body responsible for the operations and management of Los Angeles International Airport (LAX), Ontario, and Van Nuys Airports and also known as "The Owner."

1.30 Owner Controlled Insurance Program (OCIP) - The insurance coverage which are purchased by the Owner to cover the insured for such on-site exposures as general liability, builder's risk, excess auto and/or workers' compensation.

1.31 Owner - Los Angeles World Airports (LAWA). Includes LAX, Ontario and Van Nuys Airports.

1.32 Project - The term used to describe the specific construction work packages under the ADG to be performed at LAX, Ontario and Van Nuys Airports.

1.33 Manager, Public Safety - The Owner's Representative that is responsible for the direction and supervision of the Fire Department and/or Airport Police Department activities, and the overall public safety and enforcement of security at LAX, Ontario and Van Nuys Airports.

1.34 Risk Manager or OCIP Manager - The Owner's Representative responsible for the administration of the Owner's OCIP and insurance programs.

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2.0 CONSTRUCTION SAFETY PROGRAM

2.1 PROGRAM OBJECTIVES

The Airports Development Group (ADG) Construction Safety Policy has been developed by the Los Angeles World Airports (LAWA) to promote safety minimizing the hazards and risks associated with the construction projects. If this policy is implemented effectively, it will minimize, with a goal of eliminating, personal injuries and property damage associated with construction activities.

The effectiveness of the Construction Safety Program depends upon the active participation of the Contractor and recognizes dependency on active participation and cooperation of Contractor's staff in carrying out the following basic procedures:

2.1.1 Plan safety into all work activities to minimize the potential for personal injury, property damage, and loss of productive time.

2.1.2 Comply with federal, state and local laws, ordinances, and regulations; industry standards; and Airport regulations and requirements.

2.1.3 Maintain a system of prompt detection and correction of unsafe practices and conditions.

2.1.4 Establish and conduct an educational program to stimulate and maintain interest and cooperation of all employees through safety meetings and safety training programs, through the use of personal protective equipment and mechanical guards, and through prompt notification and investigation of all accidents, incidents or claims to determine the causes and to take necessary corrective action.

2.2 CONSTRUCTION SAFETY RESPONSIBILITIES

2.2.1 Program Safety Manager (PSM)

The Program Safety Manager is responsible for overseeing and monitoring the implementation of the ADG Construction Safety Policy Guidelines.

The PSM will perform the following:

2.2.1.1 Work with all parties to provide for the effective implementation of the ADG Safety Policy Guidelines

2.2.1.2 Update the ADG Construction Safety Policy, as appropriate

2.2.1.3 Provide guidance to the Construction Management Team on safety matters.

2.2.1.4 Coordinate with LAWA's Risk Manager and OCIP Broker/Insurer

2.2.2 Construction Manager when contracted by LAWA or LAWA Construction Contract Project Manager

The Construction Manager is responsible for the direct oversight and monitoring the contractor's implementation of the project specific safety program.

The Construction Manager will monitor the Contractor's implementation of their approved site specific safety plan to include the accident prevention procedures for personnel working at the construction site, including the LAWA personnel and/or Authorized Representative, Consultant, Sub-contractors, visitors, and equipment suppliers and vendors. The Construction Manager on the project has the responsibility to perform the following:

2.2.2.1 The Construction Manager is authorized to stop any construction activity or task which, in his judgment, constitutes an immediate or evolving situation of imminent danger.

2.2.2.2 The Construction Manager has the authority to require removal of any Contractor personnel from the job site for cause.

2.2.2.3 Review applicable contract documents for safety related compliance and issues.

2.2.2.4 Review and accept or reject Contractor's project specific safety plans and programs, descriptions of the hazards peculiar to their work, and their nominees for the Contractor's Safety Manager and Contractor's Safety Superintendent or Supervisor positions.

2.2.2.5 Facilitate meetings with bidders and contractors (such as preconstruction conferences) to outline and explain the Construction Safety Program. After the Pre-Construction meeting, facilitate a separate mandatory Safety Pre-construction meeting prior to construction start up.

2.2.2.6 See that Contractor provides effective safety enforcement on the project. This may be achieved through LAWA inspectors, LAWA or City Staff and/or safety consultants provided by the OCIP broker / carrier.

2.2.2.7 Report directly, or assign another person to report, any unsafe working condition to the Contractor.

2.2.2.8 Promptly notify the Contractor and Program Safety Manager in writing of noncompliance/violations with any of the safety requirements. This includes, but is not limited to, compliance with CAL/OSHA (Title 8,), FAA and Airport and other laws, rules and regulations as set forth in the ADG Safety Policy Guidelines and contract documents.

2.2.2.9 Maintain written documentation of communications with the Contractor concerning accident prevention in the program document control files.

2.2.2.10 Receive and review copies of the Contractor's Daily Reports, Safety Inspection Records, Equipment Maintenance Log, Accident Report Forms, and other forms as they apply. These reports are to be continually monitored to see that the Contractor takes prompt action to correct all safety deficiencies within an appropriate time frame.

2.2.2.11 Enforce the requirements of the contract related to construction safety.

2.2.3 Contractor:

THE CONTRACTOR HOLDING THE PRIME CONTRACT FOR CONSTRUCTION WITH THE OWNER OR CONSTRUCTION MANAGER AT RISK IS SOLEY RESPONSIBLE FOR ENSURING JOBSITE ACCIDENT PREVENTION AND JOB SITE SAFETY. This responsibility can not be delegated to subcontractors, suppliers, LAWA, or other persons.

The Owner expects the Contractor to place the highest importance and priority on safety, health and protection of the environment during performance of work.

The Contractor shall be responsible for safety related to and during the performance of work at work site and shall take all reasonable measures to ensure that it and its subcontractors provide and maintain a safe working environment and properly protect (i) all persons in proximity of work site, employed or otherwise, from risk of injury and danger to health, and (ii) property from damage or loss.

The Contractor shall regularly inspect the work site and become familiar with the safety, health and environmental conditions at the site(s) where the work is to be performed.

Before starting work on work site, Contractor shall effectively communicate to all of its employees, its subcontractors, and the subcontractors' employees all safety, fire, environmental and other health rules and requirements necessary to comply with applicable laws, rules and regulations. In addition, Contractor shall comply with any health, safety and environmental rules or regulations furnished to Contractor in writing by LAWA, or its agents or provided by reference in this document. Such rules or regulations shall be considered a part of the contract. Contractor also shall establish, publish and enforce additional safety, health and environmental rules or regulations, including construction methods and procedures, embodying its own requirements and those of LAWA or its agents.

Contractor shall ensure that its employees and employees of its subcontractors, before they begin and throughout their employment at work site, are made aware of safety, health and

environmental rules and regulations and are notified that compliance therewith is a condition of their continued employment at work site. Contractor shall remove from worksite any of its employees or subcontractors' employees that refuse to abide by safety, health and environmental rules and regulations, unless prohibited by union agreement or applicable law. Neither compliance with these safety, health and environmental rules and regulations by Contractor nor LAWA or its agent's approval of any actions or procedures of Contractor as provided therein shall relieve Contractor of its obligations to always use due care in safely performing work hereunder.

The Contractor's Project Manager is responsible and will be directly accountable for Contractor's and subcontractor's compliance with safety and health rules and regulations imposed by applicable law or contract. Contractor's Project Manager or an alternate, approved by CM, shall be available at work site at all times during performance of work to assure that all activities are being performed in accordance with safety, health and environmental rules and regulations and to consult with the Owner or its agents on matters relating to safety, health, and the environment.

Contractor shall not permit a hazardous, unsafe, unhealthful or environmentally unsound condition or activity over which it has control to be conducted at work site. If Contractor becomes aware of any hazardous, unsafe, unhealthful or environmentally unsound condition or activity at work site, it shall promptly take all necessary steps to eliminate, terminate, abate or rectify the condition or activity and notify the Owner or its agents both verbally and in writing at the earliest possible moment. If Owner or its agents becomes aware of any such condition or activity prior to notice from Contractor, it shall promptly notify Contractor's designated Safety Manager or Safety Superintendent of the condition or activity.

The Contractor shall ensure that construction tools, construction equipment, temporary facilities and other items used in performance of work, whether purchased, rented, or otherwise provided by Contractor or subcontractors, or the Owner or its agents are in a safe condition and capable of performing the functions for which they are intended.

The Contractor shall keep work site and the adjoining premises and AOA areas clear of construction materials and rubbish caused by Contractor's performance of work and promptly, after completing date, shall remove all remaining materials from and about the premises and shall leave work site safe, clean and ready for use including AOA areas.

The Owner and its agents shall have the right, but not the obligation, to inspect the work site and appropriate work records to ascertain Contractor's and subcontractors' compliance with the safety, health and environmental requirements of Contract; however, neither the existence nor exercise of such right shall relieve Contractor of its responsibility for monitoring its own and its subcontractors' compliance with the safety, health and environmental requirements of Contract and for fulfilling all its other obligations there under with respect to health, safety and the environment.

Should Contractor fail to observe the requirements of this section, or fail to abate a hazardous condition after being so instructed by the Owner or its agents, The Owner or its agents shall have the right to stop all work performed by Contractor at work site and to take any other affirmative action necessary to correct the condition on behalf of and with the cost of such correction from Contractor's account.

In compliance with these provisions, the Contractor shall perform the following:

2.2.3.1 Upon notification of the contract award, the Contractor will prepare for submittal in writing at the pre-construction meeting a Site Specific Safety Plan an Injury and Illness Prevention Program (IIPP) and Code of Safe Practice in accordance with CAL/OSHA requirements (Section 3203, 1509 and 1510) to the Construction Manager. The IIPP and Code of Safe Practice must comply with the ADG Safety Policy Guidelines and Cal/OSHA requirements before the Construction Manager will accept the document. Delay in submitting the IIPP will not constitute grounds for a contract schedule extension or delay claim. Work may not begin until the Site Specific Safety Plan IIPP and Code of Safe Practice as well as the required and safety personnel are accepted and in place. Should a difference in requirements exist between Cal/OSHA requirements and this document the most stringent requirement must be adhered to. Any such differences shall be brought to the attention of the Construction Manager.

2.2.3.2 Ensure all subcontractors, suppliers, etc. are informed of their obligations regarding safety.

2.2.3.3 Plan and execute all work to comply with the stated objectives and safety requirements contained in the contract documents and provisions; federal, state and local laws and regulations; and industry standards. This includes compliance with CAL/OSHA, FAA and Airport rules and regulations as set forth in the ADG Safety Standards, this Policy, and other laws, regulations and applicable safety standards as stated in this specification.

2.2.3.4 Submit a resume of the experience and qualifications for the proposed Contractor's Safety Manager and Safety Superintendent and/or Safety Supervisor to the Construction Manager for review and acceptance, as required by contract. A personal interview will also be required. Only qualified personnel will be accepted as a Contractor's Safety Manager and Safety Superintendent and/or Safety Supervisor. The Safety Representatives may not be removed from the job by the Contractor without written acceptance by the Construction Manager. The accepted Safety Representatives shall be responsible and report directly to the Contractor Project Manager.

2.2.3.5 Maintain an orientation program for project workers which will include as a minimum a review of (a) hazards present in the area in which they will be working and (b) the personal protective equipment and apparel workers will be required to use or wear as specified under the approved site specific plan. Written documentation of all orientation sessions must be submitted to the Construction Manager and PSM. Documentation must include an outline of topics, name and signature of instructor, date, time and duration of training. Orientation program must include vendors and visitors. Documentation must be submitted within seven (7) calendar days of training.

2.2.3.6 Hold safety meetings on a weekly basis that all Sub-Contractors will also attend. Documentation of topics discussed and attendees, including signatures, shall be maintained and copies forwarded to Construction Manager and PSM within seven (7) calendar days of being conducted.

2.2.4 Contractor's Project Manager

The person who is charged with ensuring compliance with all provisions of the contract, including the Construction Safety Policy Guidelines, CAL/OSHA and other agency and industry safety requirements and standards. Additional duties of the Project Manager include:

2.2.4.1 Review and direct immediate action to correct all substandard safety conditions brought to their attention.

2.2.4.2 Comply with the LAWA ADG Construction Safety Policy Guidelines as it may be amended.

2.2.4.3 Will stop any construction activity or task which constitutes an immediate or evolving situation of imminent danger.

2.2.4.4 Coordinate along with the Contractor's Safety Manager, the public relations aspects of the contractor's safety plan with LAWA and/or LAWA's Authorized Representative.

2.2.4.5 Lead or take an active part in all supervisory safety meetings, including the discussion of observed unsafe work practices and/ or conditions; a review of current losses and corrective action(s) and encouragement of safety suggestions from project employees.

2.2.4.6 Cooperate with all LAWA Authorized Representatives, Consultants, and Safety Representatives of the Insurance Administrators or the Insurers.

2.2.4.7 Provide the Construction Manager copies of all CAL/OSHA or environmental citations. Call for job site stand down to direct corrective action on recordable injuries, near misses and serious violations, when directed.

2.2.4.8 Upon request, attend special safety meetings held or sponsored by LAWA and/or LAWA's Authorized Representative.

2.2.5 Contractor's Safety Manager *(or Safety Superintendent or Safety Supervisor if required by the Contract)*

The Contractor's Safety Manager *(or Safety Superintendent or Safety Supervisor if required by the Contract)* will, at a minimum, perform daily and/or once-per-shift safety inspections of the project job sites to eliminate unsafe acts and/or conditions. The Contractor's Safety Manager *(or Safety Superintendent or Safety Supervisor if required by the Contract)* will see that all project workers are made aware of the steps to take in the event of an accident and the location of first aid facilities. Will stop any construction activity or task which constitutes an immediate or evolving situation or imminent danger The position requires this person to perform the following:

2.2.5.1 Provide timely reports documenting any observed unsafe conditions, practices, or violations of job security; and the corrective actions taken. Submit weekly safety (compiled daily) reports (Appendix B) to the CM and PSM within seven (7) calendar days or week's end. (Friday to Friday)

2.2.5.2 Thoroughly investigate all incidents and implement immediate corrective action. Written incident investigation reports must be submitted to the CM and PSM within 24 hours after occurrence. Upon request, convene, within 72 hours of initial notification, a formal investigation review meeting. Attendees must include: Construction Manager or LAWA Project Manager, Program Safety Manager, LAWA Inspections, Contractor Project Manger, Contractor Project Superintendent, Contractor Safety Manager, Subcontractor Safety Representative and Competent Person (if applicable), OCIP Manager, Insurance Administrators and Insurers Representatives, any craft person involved with the incident.

2.2.5.3 Report all injuries and accidents in a timely manner in accordance with all laws, rules and regulations to include Airport orders, insurance requirements and this manual. Follow notification procedures as per Airport orders, insurance requirements and this manual.

2.2.5.4 Provide Job Foremen with appropriate training materials to conduct weekly "tool box" safety meetings, attend at least one per month, and evaluate the effectiveness of the meetings.

2.2.5.5 Review safety meeting reports submitted by all Job Foremen and take necessary action to ensure that meaningful weekly safety meetings are held.

2.2.5.6 Assist in the preparation of all accident investigation and reporting policies and procedures.

2.2.5.7 Implement safety training programs for all supervisors and employees applicable to their specific responsibilities.

2.2.5.8 Be responsible for the availability and use of necessary safety equipment, including personal protective equipment and apparel for all project workers.

2.2.5.9 Coordinate safety activities with the LAWA and/or LAWA's Authorized Representative(s), and take necessary steps to promptly implement safety recommendations.

2.2.5.10 Respond in writing to any received safety violation notices or loss control surveys within the time frame specified on the document, or 48 hours, whichever is less.

2.2.5.11 Attend special safety meetings held or sponsored by LAWA and/or LAWA's Authorized Representative. The Contractor's Safety Manager *(Contractor's Superintendent or Safety Supervisor if required by the Contract)* are required to attend and participate in these meetings.

2.2.5.12 Ensure that adequate first-aid supplies are available at the work site and that an appropriate number of personnel are qualified to administer first-aid and CPR as required in the contract or this manual.

2.2.5.13 Facilitate return to work status for any injured project employee as per site specific safety program.

2.2.5.14 Ensure that all injured workers receive medical treatment if needed, including follow-up visits. In addition, will escort or ensure that any injured project worker is escorted, by their supervisor, to off-site medical treatment for at least the first visit following an injury or report of injury. Assist, as requested, insurance representatives regarding incident investigation, medical treatment and return to work for injured project workers.

2.2.6 Job Superintendent and Subcontractors Superintendent

This person shall be required by the Contractor to perform the following:

2.2.6.1 Plan and execute all work in compliance with the Site Specific Safety Plan and applicable requirements.

2.2.6.2 Take immediate action to correct unsafe practices or conditions when discovered or reported.

2.2.6.3 Provide and enforce at all times the use of required personal protective equipment.

2.2.6.4 Complete supervisory investigation reports on all accidents and incidents, with the assistance of Contractor's on site safety personnel.

2.2.6.5 Attend supervisory personnel safety meetings scheduled by the Contractor.

2.2.6.6 Schedule and attend weekly "tool box" safety meetings to be led by Job Foremen for all workers.

2.2.6.7 Report immediately any observed unsafe conditions, hazardous practices or violations of job security to the Contractor's Safety Manager, *(*Contractor's Safety Superintendent and *Safety Supervisor if required by the Contract)* and the Contractor's Project Manager.

2.2.6.8 Cooperate with the LAWA and LAWA's Authorized Representative, Consultants and *(and the insurance safety representatives if OCIP is included in the Contract.)*

2.2.6.9 Upon request, attend special safety meetings held or sponsored by LAWA and/or LAWA's Authorized Representative.

2.2.7 Job Foreman

The Contractor's Job Foremen are an integral part of an effective safety program, and the amount of effort they put into accident prevention on their daily assignments determines whether or not a good accident record is established.

A Job Foreman's responsibilities shall include the following:

2.2.7.1 Conducts at least daily "briefings" with all personnel under his/her supervision, prior to the commencement of any work activities, to ensure that workers are familiar with work processes, potential hazards, protective and safety measures to be taken or utilized, and emergency procedures.

2.2.7.1.1 This briefing will include, at a minimum, a review of all applicable JHA(s) with all supervised workers and include their original signatures on copies of the reviewed JHA(s) along with date, time of review and the signature of the supervisor conducting the review.

2.2.7.1.2 Hard copies of these records will be maintained on file, at the project site, by the Contractor and will be available for review upon request by LAWA or LAWA's Authorized Representative.

2.2.7.2 Seeing that his/her assigned staff have and use the proper protective equipment and suitable tools for the job. Will ensure that only trained and authorized personnel operate equipment and machinery.

2.2.7.3 Continuous monitoring to ensure that no unsafe practices or conditions are allowed to exist on the job sites.

2.2.7.4 Correcting and reporting immediately to the Contractor's Site Superintendent any unsafe conditions, practices or violations of job security.

2.2.7.5 Performing a thorough investigation of all incidents with the assistance of Contractor Safety personnel and taking corrective actions to prevent a recurrence.

2.2.7.6 Setting a good example for personnel by complying with the Site Specific Safety Plan.

2.2.7.7 Holding weekly "tool box" safety meetings with work crews to (a) discuss any observed unsafe work practices or conditions, (b) to review the accident experience of the crew and discuss corrective action to prevent future accidents, and (c) to encourage safety suggestions from the employees and report their recommendations to the Contractor's Safety Manager (or Safety Superintendant or Safety Supervisor if required by the Contract.)

2.2.7.8 Ensure that first-aid is administered promptly to an injured employee.

2.2.7.9 Upon request, attend special safety meetings held or sponsored by LAWA and/or LAWA's Authorized Representative.

2.2.8 Risk Manager

The Owner's Risk Manager shall assist and advise all Owner's Divisions, Consultants, Contractors, the Insurance Administrators, and the Insurers in the areas of loss control and insurance.

Whether the following items are performed by LAWA or LAWA's Authorized Representative or Contractor, the LAWA's Risk Management Group has the responsibility to perform the following:

2.2.8.1 Evaluate exposures of potential loss and monitor the safety performance of all operations within and under contract to the Owner's Areas of evaluation including personnel safety, liability exposure, public safety, emergency planning, fire protection, and other related areas.

2.2.8.2 Monitor the LAWA ADG Construction Safety Policy Guidelines and make recommendations as required.

2.2.8.3 Ensure the provision of insurance coverage required under the Owner Controlled Insurance Program (OCIP) should an OCIP be used on the project.

2.2.8.4 Coordinate and maintain regular communication with all parties involved in the safety and loss control efforts.

2.2.8.5 Ensure the preparation of safety and loss control reports, including an analysis of accident frequency, severity, causes, and trends. Provide recommendations to increase the effectiveness of the LAWA ADG Construction Safety Policy Guidelines.

2.2.9 Insurance Administrators (Broker) *(When an OCIP is in place via the Contract)*

The Insurance Administrators are an extension of the LAWA Risk Management Branch. Their Loss Control Department will perform the following:

2.2.9.1 Loss Control Surveys, which will be based on the needs of the LAWA ADG Program.

2.2.9.2 Interact with the Risk Management Branch, Insurers, PSM, and others involved in the project as needed, and assist in the explanation and acceptance of the LAWA ADG Construction Safety Policy Guidelines.

2.2.9.3 Attend and participate in safety meetings as requested.

2.2.9.4 Bring to the attention of the Contractor, LAWA Inspectors, Project Manager, Construction Manager, Risk Manager and PSM those safety issues or recurring problems which must be resolved.

2.2.9.5 Review loss control surveys and be available for any discussion of recommendations as may be proposed during project construction. Provide copies of loss control survey reports directly to the PSM, Construction Manager, LAWA Inspectors and LAWA Risk Manager.

2.2.9.6 Provide Safety Personnel for regular on-site loss control surveys and prepare reports to the LAWA Risk Manager, Consultants, PSM the Insurers and other personnel as required.

2.2.9.7 Develop safety training programs and assist with the preparation and delivery of the training courses for project workers.

2.2.10 Insurers *(When an OCIP is in place via the Contract)*

The representatives of Loss Control Departments from the Insurers and/or Broker will provide the following services to supplement the safety activities provided by LAWA , LAWA Authorized Representative or Consultants.

2.2.10.1 Analyze accidents to determine causes, trends, areas for additional safety training, and corrective measures to prevent recurrence.

2.2.10.2 Attend and participate in safety meetings as requested.

2.2.10.3 Supply safety posters, accident prevention signs and other safety literature to the LAWA Risk Manager or Consultants as needed.

2.2.10.4 Bring any problem related to safety that cannot be resolved at the project level to the LAWA's Risk Manager's attention and provide technical assistance related to the resolution of safety issues.

2.2.11 LAWA ADG Construction Safety Advisory Committee

The LAWA ADG Construction Safety Advisory Committee shall have three primary functions:

2.2.11.1 Provide coordination, leadership and direction for the LAWA ADG Construction Safety Policy Guidelines.

2.2.11.2 Monitor the management of the LAWA ADG Construction Safety Program to see that the program is maintained and enforced by all responsible personnel.Recommend resolutions to safety problems which cannot be routinely resolved by the LAWA ADG Program Safety Manager.

2.2.11.3 The Committee shall meet quarterly, or as required by the Chairman. Members may request the Chairman to call a meeting when the need arises. The membership of the Committee is as follows:

- LAWA Airports Development Group, Deputy Executive Director (Chairman)
- LAXDP Assistant Program Manager
- CIP Assistant Program Manager
- LAWA ADG Program Safety Manager
- LAWA Risk Manager (Construction)
- LAWA Chief Inspector, Construction Inspection Program
- Other Airports Department or Construction Team Personnel, as may be required

See Appendix D for LAWA ADG Construction Safety Program Organization Chart

3.0 SAFETY GUIDELINES

3.1 General Safety Provisions

3.1.1 The Contractor shall protect the health and safety of employees, the public and other persons; prevent damage to property, materials, supplies, and equipment; and avoid interrupting the normal operation of the airport. To achieve this, the Contractor shall perform the following:

3.1.2 Comply with all federal, state and local laws, regulations and industry standards (See Appendix A) including, but not limited to, the application of CA/OSHA; "Operational Safety on Airports with Emphasis on Safety During Construction" (FAA: AC 150/5370-2E); FAA Order "Safety Requirements on Airports During Agency Funded Construction and Maintenance Activities" (EA 5210.1C latest addition); and the LAWA ADG Construction Safety Policy Guidelines and shall require compliance of the foregoing by all Subcontractors, suppliers and vendors at every tier.

3.1.3 Prevent employees, Subcontractors, suppliers, and vendors or equipment from intruding upon the Air Operations Area (AOA), without the knowledge and concurrence of the Airport Operations Supervisor. The Airport Operations Supervisor will establish the procedures to be followed during such operations and issue appropriate user notices of changes to standard airport facilities.

3.1.4 Prevent trash, water, dirt, dust, debris, or other transient materials with foreign object damage (FOD) potential from entering into or remaining in construction and/or maintenance areas, whether on runways, taxiways, aprons, or in related safety areas. Further, the Contractor shall not allow any material or equipment to obscure pavement markings, pavement edges, or detract from the visibility of runway/taxiway markings or lighting.

3.1.5 Not use any vehicles, equipment, excavations, stockpiles, or other materials which could degrade or otherwise interfere with the electronic signals from radios or electronic navigational aids. (See Appendix J)

3.1.6 Establish a Fire Prevention Plan referencing CAL/OSHA and NFPA standards, as well as, City of Los Angeles and/or LAWA ADG requirements. Approved metal safety cans with self closing lids shall be used for flammable and combustible liquids. Smoking by personnel is prohibited on the AOA. Use of any device that produces open flames shall require approval of the Los Angeles City Fire Department or applicable Fire Authority and Airfield Operations prior to use with a copy submitted to the Construction Manager and Program Safety Manager.

3.1.7 The Contractor's Fire Prevention Plan shall be submitted to the Los Angeles City Fire Department or applicable Fire Authority and Airfield Operations for acceptance.

3.1.8 Ensure proper radio communication coordination between the construction and maintenance vehicles and air traffic control tower or other on-field communications facility as required in the AOA.

3.1.9 Ensure all tools and equipment used on airport job sites comply with CAL/OSHA and applicable industry standards. Concrete and metal drills one half inch or larger shall be equipped with an auto shut-off, should the drill bind.

3.1.10 Use electrical tools, cords, appliances, etc., which comply with applicable CAL/OSHA and the National Electrical Code standards.

3.1.11 Prevent construction/maintenance activities or materials from hampering any Crash-Fire-Rescue (CFR) vehicle access to any part of the airport.

3.1.12 Remove all bird attractions, such as edibles (food scraps, etc) or other miscellaneous garbage, trash, or pooled water while on or near the airports.

3.1.13 Secure all material and equipment, such as lightweight construction materials, to prevent displacement from wind or jet blast.

3.1.14 Have all temporary electrical service equipped with ground fault current interrupters (G.F.C.I.), as well as, any permanent power sources used for construction activities. The use of Assured Equipment Grounding Program as the sole means of worker protection will not be allowed on the Project.

3.1.15 Provide and monitor adequate and proper fencing, barricading, marking, and lighting of construction, maintenance or other sections that are temporarily closed to normal airport use.

3.1.16 Inspect all ladders prior to use. Defective ladders must be removed from service immediately and properly tagged or destroyed. All ladders shall have firm footing, shall be made secure at the top and shall extend at least 36 inches above the landing level. Step ladders shall be fully open at all times when in use. Metal ladders are not allowed to be used.

3.1.17 All outdoor temporary electrical wiring within the construction area will be a minimum of Type SO direct burial type romex, or installed in rigid conduit. If installed outside the limits of the construction area it shall meet the requirements set forth by the Airport.

3.1.18 Ensure that no hot work welding or cutting operations which may provide an open flame or hot surface are performed until the Owner's or the jurisdictional Fire Marshal has been notified and a permit obtained to conduct such operations. The Fire Marshall reserves the right to inspect the area in which the work is to be performed and determine that adequate fire and safety precautions have been taken before a permit is issued.

3.1.19 Have anti-flashback devices installed on the fuel side of all fuel gas and oxygen cutting torches. Propane torches must be equipped with proper valves and gauges specifically for propane use.

3.1.20 Secure compressed gas cylinders in upright position at all times. Value caps shall be in place when not in use. They shall be transported and stored in accordance with federal and state standards.

3.1.21 Provide safety devices on all compressors with hoses exceeding a half inch inside diameter at the source of supply or branch line to reduce pressure in case of hose failure. Hose sections must be secured with both pins and whip checks.

3.1.22 Do not allow cut-off piles to free fall if the cut on the pile is above knee high. Pile holes shall be kept free of cut-off piles.

3.1.23 Monitor and control dust, as per contract documents, by using water trucks, sweeping and other additional means to prevent any exposures above OSHA or Cal OSHA recognized limits or which could interfere with airport operations. Develop monitoring and control policies and procedures and include them in the Contractor Site Specific Safety Program.

3.1.24 Ensure that material is not dropped outside the exterior wall of the building where the drop distance is more than twenty (20) feet high, unless contained in a chute enclosed on all sides. If the drop distance is less than twenty (20) feet high, the landing area must be fully barricaded. Material may be dropped through openings in the building, but must be barricaded at least forty-two (42) inches high and back six (6) feet or more from the edge of the open area at the landing.

3.1.25 Implement any additional measures the LAWA Inspector or LAWA Authorized Representative determines to be reasonably necessary to ensure project safety.

3.1.26 Shall follow Appendix E regarding the Orders &Instructions (O&I) establishing the procedures to be followed when welding, cutting or other open flame work is conducted at Los Angeles International Airport. The appropriate O&I shall be followed at either Ontario or Van Nuys Airports.

3.1.27 Shall follow Appendix F regarding the Orders & Instructions establishing the procedures for coordinating fire system shutdowns to prevent unauthorized shutdown of the Fire Protection System. The appropriate O&I shall be followed at either Ontario or Van Nuys Airports.

3.1.28 Shall follow Appendix G regarding the establishment of safe clearance procedures for utilities.

3.1.29 Shall follow Appendix H regarding potholing for establishing and confirming utility location and depth of utilities that are not shown on the plans, or for potholing requested by the Engineer.

3.1.30 Shall follow Appendix K, United States Department of Transportation, Federal Aviation Administration Advisory Circular No. 150/5370-2E or as updated regarding guidelines for operational safety on airports during construction. It contains major changes to the following areas: “Runway Safety Area,” paragraph 3-2; “Taxiway Safety Areas/Object-Free Areas,” paragraph 3-3; “Overview.” Paragraph 3-4; “Marking Guidelines for Temporary Threshold,” paragraph 3-5; and “Hazard Marking and Lighting,” paragraph 3-9.

3.1.31 The Contractor shall not receive additional payment or reimbursement for safety items and procedures which have been identified as required or potentially required by LAWA ADG Construction Safety Policy Guidelines, Owner's Contracts and contract documents, and all applicable laws, rules and regulations and orders.

3.1.32 Upon completion of work within the AOA, the Contractor shall return all areas to the conditions required by the Contract and notify the Airport Operations Officer, the Construction Manager and the LAWA Inspector that work is ready for final inspection.

3.1.33 All security violations shall be challenged by the individual who observes it. All workers shall be trained, as part of the Contractor's orientation, on what to do when a security violation is noted, whether air or land side of the Project.

3.1.34 Contractor will ensure that all Project workers who are exposed to a potential fall hazard of six (6) feet or greater will one hundred percent (100%) protected by guardrails, hole covers, safety nets, or a Personal Fall Arrest System (PFAS). Only a full body harness will be allowed as a component of a PFAS or a "positioning device" system as defined by OSHA or Cal OSHA. The use of body belts for fall protection, fall restraint or "positioning" is not allowed.

3.1.35 Contractor will ensure that Project workers climbing or working on rebar structures who are exposed to a potential fall hazard of 6 feet or greater will be 100% protected from falls by a PFAS. A "positioning device" may also be used by these workers, only when stationary, however a PFAS must be used at all times or in addition to any positioning system.

3.1.36 Workers operating from a scissor lift device, which is equipped with a PFAS or "positioning device" anchor point must be secured with a full body harness and lanyard or recognized deceleration device attached to the anchor point at all times.

3.1.37 The use of "Controlled Access Zones", "Safety Monitor Systems", "Controlled Decking Zones" and "Fall Protection Plans", as defined by OSHA and/or Cal OSHA, are not allowed for fall protection.

3.1.38 Walking of steel beams (even with fall protection), "cooning" of steel beams (without fall protection) and sliding or climbing of steel columns is not allowed. All steel work with a fall exposure of 6 feet or greater will be 100% protected by guardrails, hole covers, safety nets, or a Personal Fall Arrest System (PFAS).

3.1.39 The use and/or storing of any blasting or explosives is not allowed without prior written approval from the Construction Manager and Fire Inspector having jurisdiction, as well as, obtaining and submitting all required permits in advance." "If seeking approval, Contractor must submit a "Blasting Plan" including a "Shot Plan" for each shot as part of the submittal. In addition, Contractor must follow all applicable rules, laws, standards and policies which apply to the use and/or storage of blasting or explosive materials. If approved, a copy of the approved plan will be forwarded to the ADG Program Safety Manager by the Construction Manager.

3.1.40 Fork Lift Operators must be trained and certified as per OSHA/Cal OSHA. All Project forklift operators must have proof of training on their person at all times while operating, and must have a decal on their hardhat indicating that they are a certified operator. Contractors must submit proof of training for each operator who will be utilized on the Project, prior to their operation of any forklift. Forklifts may not be used as a lifting device by utilizing rigging in any form to move, carry or support a load unless specifically allowed (through written verification) by the machine Manufacturer and utilizing only Manufacturer means and methods. The Contractor must submit appropriate written documentation to the Construction Manager for approval, prior to any forklift being used in this manner.

3.2 Work Preparation

3.2.1 Before commencing with the work, the Contractor shall perform the following:

3.2.2 Meet with the Construction Manager and representatives of the Design Team and Inspections to discuss and develop a written Contractor's Site Specific Safety Plan which must be reviewed and accepted by the Construction Manager. (See Appendix C for items to be included.)

3.2.3 Submit resumes for the proposed Contractor's Safety Manager/Superintendent (or Contractor's Safety Supervisor) as required by the Airports Development Group Construction Safety Policy Guidelines and/or contract documents indicating their verifiable work experience and qualifications. The resumes for the Contractor's Safety Manager, Safety Superintendent or Safety Supervisor will be reviewed and accepted or rejected by the Construction Manager. On-site construction work cannot begin until the required safety personnel positions have been filled by approved persons.

3.2.4 Establish and include in the Site Specific Safety Plan a Respiratory Protection Program, as required by Cal OSHA, including project worker voluntary use provisions as referenced in Title 8.

3.2.5 Establish and include in the Site Specific Safety Plan a written Return-to-Work/Modified Work/Transitional Duty Program which covers project workers and is a condition of employment, unless specifically prohibited by the terms of a labor agreement. The program must contain a written policy for assigning alternate work or adjusting "regular" work for injured project workers who have sustained a job related injury or illness which results in a Workers' Compensation claim. The policy must identify how the Contractor will facilitate work modifications and/or adjustments in order to comply with any medical restrictions that may be placed on the worker as part of their recognized medical treatment.

3.2.6 Establish and include in the Site Specific Safety Plan a Fall Protection Program which complies with OSHA, Cal OSHA and the Airport Development Group Construction Safety Policy Guidelines Manual including the requirements listed in 3.1.33 through 3.1.37.

3.2.7 Establish and include in the Site Specific Safety Plan a Scaffolding Program which complies with OSHA, Cal OSHA and the Airport Development Group Construction Safety Policy Guidelines Manual including the requirements for fall protection during scaffold erection and dismantling activities. The use of concrete blocks as base material, support or counterweight on any scaffolding is not allowed. Base plates must be used on all frame and tube-and-coupler scaffolds. Mobile scaffolds must have four operable wheels which must be completely locked whenever workers are on the scaffold. Scaffolding must be inspected, prior to use by a competent person, and a system implemented by the Contractor for communicating the safety status of each scaffold to workers. All scaffolds between 4 to 6 feet in height, with a platform dimension of less than 45" in any direction shall be equipped with a guardrail or other means of fall protection for workers as referenced in 3.1.33 (e.g., Baker Scaffold).

3.2.8 Establish and include in the Site Specific Safety Plan a Confined Space Entry Program (including the written Entry Permit which will be utilized) which complies with OSHA, Cal OSHA and the Airport Development Group Construction Safety Policy Guidelines Manual. All confined space entry and work operations are to be conducted as per OSHA and Cal OSHA's "Permit Required Confined Space" requirements. A written permit must be utilized for all entries and work operations and must be posted close to the entry point and available for review at all times by LAWA and/or LAWA Authorized Representatives. Atmospheric testing of confined spaces must be conducted prior to entry and continuously throughout the work process. Atmospheric testing readings must be recorded on the Entry Permit at least once each hour for the duration of the entry and work operation. At the conclusion of each entry the completed Permit is to be submitted to the Construction Manager.

3.2.9 Establish and include in the Site Specific Safety Plan a training program which will require, at a minimum, that all field supervisory staff for project workers have completed, within the past 4 years, a 30-Hour OSHA Construction Outreach Training. Proof of this training in the form of copies of original training cards must be submitted to the Construction Manager prior to the employee beginning work on the project.

3.2.10 Establish and include in the Site Specific Safety Plan a training program which will require, at a minimum, that at least 20% of on-site field staff project workers have completed, within the past 4 years, a 10-Hour OSHA Construction Outreach Training. The Contractor must also include a system of verification that can be utilized at any time to verify, to LAWA or LAWA representatives, that the Contractor is in compliance with this requirement. Proof of this training in the form of copies of original training cards must be submitted to the Construction Manager prior to the beginning of construction and on an ongoing basis.

3.3 Project Worker Requirements

It is the Owner's desire to maintain a healthy and safe place to work. To do this the\ Owner must have the active participation and cooperation of all Contractors, Subcontractors and their employees. The Contractor and Subcontractor are responsible for orienting employees on the specific safety rules that must be followed by all persons working on the project. A list of minimum requirements is as follows:

3.3.1 The Contractor shall be responsible for providing and requiring the use of required personal protective equipment for all project workers.

3.3.2 Approved hard hats shall be worn at all times while on the construction site. Hard hats shall be worn properly with the bill forward unless the wearing of eye protection prevents this, as in the case of welders. The bill is designed for facial and eye protection from falling objects, dust, etc. Cowboy and other novelty hats are not permitted.

It is required that each contractor and subcontractor use a hard hat that is distinguishable from other contractors on the airport projects. This shall be accomplished by using company identification labels, hat color, or tape color put across or around the hat. If used, this tape should be at least one (1) inch wide. Each employee's proper name shall be affixed to the front of the hard hat. The minimum name requirement is first initial and last name.

3.3.3 Hearing protection shall be worn when exposed to noise levels above 85 decibels (dB). Establish and include in the Site Specific Safety Plan a Hearing Conservation Program (including noise level monitoring) which complies with OSHA, Cal OSHA and the Airport Development Group Construction Safety Policy Guidelines Manual.

3.3.4 A serviceable pair of work boots made of leather or similar material shall be worn. Tennis shoes (including ANSI-compliant), sandals and other similar shoes are not permitted.

3.3.5 Eye protection in the form of safety glasses or goggles, as recognized by OSHA and Cal OSHA, shall be worn at all times while on the construction site. Face shields are required in addition to glasses or goggles when workers are performing (or exposed to) cutting, grinding, welding, cad-welding, utilizing powder actuated tools or performing other work tasks where the potential for facial injury exists or the use is recommended by manufacturers or distributors of equipment or products being used.

3.3.6 Reflective garments meeting ANSI 107-2004, Class 2 or better must be worn at all times while on the construction site

3.3.7 Full length pants without excessive holes, length or flared bottoms will be required. Shirts must cover the entire mid-section and the sleeves must cover the entire shoulder or be 4" in length, whichever is greater. Sleeveless shirts, tank-tops, net shirts, halter tops, etc., shall not be worn on the construction site. All workers are required to wear high visibility vests (ANSI Class II or III) when working on the project site.

3.3.8 Long hair shall be contained under a hard hat or net if the individual is working where hair may become entangled.

3.3.9 Gambling, fighting or horseplay shall not be tolerated.

3.3.10 No employee shall possess, use, or be under the influence of drugs or alcohol while on the project.

3.3.11 Any Contractor/Subcontractor employee who is found to be in violation of these safety rules or other Owner's policies or procedures shall be removed from the job site as referenced in Section 2.2.2.2.

3.3.12 Fall protection shall be used when exposed to a fall hazard of six (6) feet or more in height.

3.3.13 When working around underground utilities the utilities shall be located, marked and pot holed. Marks are to be maintained as required in the contract.

3.3.14 Job Hazard Analysis (J.H.A.) are to be developed by Contractor for each work task. Each crew member is to review the J.H.A. and acknowledge with signature. Job Hazard Analyses shall be submitted for all work processes and signed by Contractor Safety Manager and Contractor Project Manager and sent to the Construction Manager and the LAWA ADG PSM.

3.3.14.1 Additional J.H.A.'s shall be required at the direction of the Construction Manager.

3.3.15 Cell phone and texting device use is prohibited while engaged in work tasks. In addition, the use of music or video players in construction areas is prohibited.

3.4 Trenches, Excavations and Stockpiled Materials

Excavations are required to comply with Cal/OSHA Subchapter 4, Article 6 and the following guidelines required for all trenches, unmarked or unlit holes and excavations:

3.4.1 Open trenches or excavations exceeding three inches (3") in depth and three inches (3") in width and stockpiled material will not be permitted within the limits of restricted areas of operational runways, taxiways, or ramps.

3.4.2 All trench banks more than five (5) feet high shall be sloped to proper angle of slope. If the angle of the slope cannot be achieved, the trench shall be shored. All shoring system shall be sheathing, tight planking, a trenching box or shoring platform approved by the Construction Manager. This requirement does not apply to trenches in sound rock as defined by OSHA.

3.4.3 All underground utilities shall be located marked and pot holed as per contract documents and applicable laws and regulations.

3.4.4 Open trenches, excavations, and stockpiled material at the construction site shall be prominently marked with red flags and lighted during hours of restricted visibility and/or darkness. Open trenches shall be substantially barricaded with orange “safety fence”. Safety fence will be maintained so as to be plainly visible, maintain original color and construction.

3.4.5 Barricades around open holes, trenches, drop-offs, etc. shall be weighted or secured to the ground to prevent displacement by wind or jet blast.

3.4.6 Coverings for open trenches or excavations shall be of sufficient strength to support the weight of the heaviest aircraft or vehicle operating on the runway, taxiway, apron or roadway.

3.4.7 Materials and equipment shall be stored in approved areas when not in use and where they will not constitute a hazard to airport operations. The Contractor shall inspect all construction and storage areas as often as necessary to be aware of conditions and identify potential hazards and implement corrective actions. All stockpiled materials shall be prominently marked as directed by the Construction Manager and Air Operations.

3.4.8 All trench spoil shall be trucked from airside when excavated unless storage is approved by the Construction Manager, and Air Operations.

3.5 Construction Near Runways and Taxiways

3.5.1 The Contractor shall take all necessary steps to prevent the following hazards.

3.5.1.1 Mounds or piles of earth, construction materials, temporary structures, or other objects in the vicinity of any operational runway, taxiway, taxi lane, or in a related safety approach or departure area.

3.5.1.2 Pavement drop-offs or pavement-turf lips in excess of three inches (3”) (either permanent or temporary).

3.5.1.3 Vehicles or equipment (whether operating or idle) on any open runway, taxiway, taxi lane, or in any related approach, departure, or safety area.

3.5.1.4 Objects, especially tall cranes or drills that are not properly lighted or flagged, or activities on or anywhere in the vicinity of active runways, approaches or departures which could be distracting, confusing or alarming to pilots during aircraft operations.

3.5.1.5 Barricades not properly highlighted for easy visibility by flight crews and airport support personnel. Survey tape or other plastic tape shall not be used on the AOA, unless required by contract.

3.5.1.6 Elongated/unmarked obstructions and misleading or malfunctioning obstruction lights in the approach to any open runway, approach or departure surface. The Contractor must provide adequate clearances for takeoffs and landing over obstructions or work or storage areas.

3.5.1.7 Night work lighting directed in such a manner that it interferes with airport operations.

3.5.2 In the event a hazardous condition does exist, the Contractor shall immediately coordinate the corrective action with LAWA Inspections and the Airport Operations Officer who will issue the proper notices to the airport users.

3.5.3 The Contractor shall provide or maintain the following:

3.5.3.1 Temporary runway and taxiway threshold marking and lighting as required.

3.5.3.2 An employee on twenty-four hour call (and another person as back-up) to maintain construction barricades and signal flashers at airside. Contact numbers shall be provided to the Construction Manager prior to start of work and updates submitted upon any change.

3.5.3.3 Daily inspections of temporary airside fencing. Repairs shall be given top priority to deter human and animal intrusion into the Airport Operations Areas.

3.5.3.4 Lunch and other breaks for Contractors and other employees working on the Air Operations Area (AOA) only in areas approved by the Construction Manager.

3.5.3.5 All Flag Persons shall be trained to DOT, State and AOA requirements. Contractor shall provide proof (including dates) of such training to the Construction Manager and ADG PSM prior to the use of any persons.

3.6 Cranes

3.6.1 The Contractor shall provide the Construction Manager and Program Safety Manger with a copy of a Crane Safety Certification for each crane brought on the job. A crane must be certified by an individual who is California Department of Occupational Safety and Health (DOSH) certified. All crane operators shall be DOSH certified. A copy of all certifications will be provided to the Construction Manager at least 24 hours in advance of use.

3.6.1.1 Contractor shall submit approved copies of all FAA form 746O for any crane operations at least 24-hours prior to use.

3.6.2 Lighting, flagging, raising and lowering of crane booms shall be done in accordance with FAA rules and airport policies and procedures. (See Appendix I)

3.6.3 All sling and crane load line hooks shall have safety latches installed or shall be moused. (This does not apply to specialty slings and hooks, such as sorting or shake out slings or self adjusting pipe slings.) Specialty slings and hooks shall not be used to set steel or move materials over workers. Fiber slings shall not be used on sharp edged metal. Steel slings with softeners shall be used. All crane loads are to be "tight-choked" when using slings (other than specialty slings.)

3.6.4 Operating times and crane boom heights shall be reported to the Airport Operations Officer and the LAWA Inspector and crane operations coordinated with both entities.

3.6.5 Multi-lift rigging of crane loads is not allowed.

3.6.6 All out rigger cranes in use shall be blocked to the following requirements:

3.6.6.1 All blocking boards shall be 8" x 8" minimum for fixed boom cranes, and 4" x 4" shall be used for hydraulic cranes under 30 tons capacity.

3.6.6.2 Size of float pad blocking shall be a minimum of 3 feet x 3 feet and be sized in accordance with the following formula:

Size of float pad blocking = crane capacity tons / 5

Size of float pad blocking shall be determined by the following formulas.

Size of float pad blocking = crane capacity tons ⁄ 5

Example $\frac{\text{60 ton crane}}{5}$ = 12 square feet

3.6.6.3 All outrigger cranes shall only be operated with outriggers fully extended and wheels are not in contact with the ground. No lifts "on rubber" will be allowed. Exception is a pick and move lift or when an intermediate load chart is provided by the manufacturer. Pick and move lifts shall not be made on hydraulic cranes with the jib attached. The jib must be stowed. Any pick and lift move must be approved in advance by the Construction Manager.

3.6.6.4 Crane suspended work platforms shall not be used without the Superintendent, Contractors Safety Manager, Construction Manager and the Engineer all agreeing that there is not another practical method to complete the work.

3.6.6.5 The swing radius of all cranes must be barricaded with rope, chain, or a similar material. Plastic tape of any kind as a component of such a barricade is not allowed.

3.6.6.6 Chains cannot be used for rigging and lifting.

3.6.6.7 Daily crane inspections must be conducted and documented. Documentation must be submitted within 7 days of the inspection being conducted and copies submitted to the Construction Manager and the Airports Development Group Program Safety Manager.

3.6.6.8 Any “critical lift” as defined by OSHA and/or Cal OSHA or LAWA or LAWA’s Authorized Representatives will not be allowed until a critical lift plan has been submitted and approved by the Construction Manager. Upon approval a copy of the plan will be forwarded to the Airports Development Group Program Safety Manager.

3.6.6.9 All crane lifting operations must include at least one qualified rigger and signal person. The crane operator cannot function as either the rigger or the signal person, however the rigger and the signal person functions may be combined if the individual is qualified. The Contractor must submit documentation of persons who are qualified as riggers and/or signal persons and are authorized to perform those duties. This documentation must be submitted to the Construction Manager at least 24 hours prior to the use of such persons and updates must be submitted whenever changes are made.

3.6.6.10 Whenever there is any doubt as to safety, the crane or derrick operator shall have the authority to stop and refuse to handle loads until safety concerns have been resolved.

3.6.6.11 No crane or equipment outriggers may be set up over fueling/hydrant pits, electrical/communications handholds or similar structures.

3.7 Equipment on Airport

3.7.1 Spoil covers shall be used whenever trucks are loaded and operating on the Owner’s property. All vehicles and equipment with obstructed view to the rear shall have a functional back up alarm and spotters shall be used.

3.7.2 The Contractor shall provide means for cleaning haul vehicles as needed or required by contact documents, to prevent mud or other deleterious materials from accumulating on ramps, taxiways, runways and airport roads.

3.7.3 Employee parking shall be as designated in the contract documents.

3.7.4 All construction equipment windshields and side windows shall be clean and unbroken. Safety equipment such as head, tail, brake, and clearance lights, etc., shall be kept clean and tested daily, or at the beginning of each shift while operating in the AOA. Equipment deficiencies that interfere with the safe operation of equipment on the AOA must be repaired immediately.

3.7.5 Heavy equipment with rotating superstructure such as back hoes and power shovels shall be guarded in such a manner that rotation of the superstructure shall not present danger to pedestrians or infringe into any traffic lane.

3.7.6 Access to the construction sites and haul roads shall be as shown and described in the contract documents.

3.7.7 Prior to the start of construction on the AOA, the Contractor's Safety Representative shall tour airside with an air operations officer. The Contractor must verify to the Construction Manager, in writing, that this has occurred.

3.8 Reporting Accidents and Other Hazards

All accidents and incidents including "near misses" which occur from operations or work performed under the LAWA ADG Program, must be verified, investigated, reported and analyzed as prescribed by this manual.

3.8.1 All Contractors and others involved in the programmed construction shall instruct their employees and other personnel to follow these procedures if someone is injured:

3.8.1.1 Seek medical assistance for anyone who is injured. The injured person's supervisor is to see that first-aid or CPR is administered. The injured person's supervisor will also arrange to have the employee transported and will accompany the injured employee to the first visit for medical treatment following a reported injury or illness. An injured employee will not transport himself/herself to the first visit for medical treatment.

3.8.1.2 Except for rescue and emergency procedures, secure the area tightly and quickly. The accident scene shall not be disturbed until it has been released by the investigating officials.

3.8.1.3 Immediately report all accidents or hazards resulting in a fatality or injury which receives off-site medical treatment, or property damage estimated in excess of $1,000 to LAWA Inspections, Construction Manager, PSM and Insurance Representatives.

3.8.1.4 The Contractor's Safety Manager, *(Safety Superintendent or Safety Supervisor if required by the Contract)* or other designated person, must notify all other parties and report the event as outlined in the Contractor's Site Specific Safety Plan, these guidelines and OCIP requirements.

3.8.1.5 Every Contractor (Employer) must notify Cal/OSHA immediately (within 8-hours) in the event of an accident involving the death of an employee, or serious injury to a worker. Refer to Sections 342a and 330h of Cal/OSHA Standards for further detail and requirements.

3.8.1.6 Employees are responsible for reporting all injuries or occupational related illnesses as soon as possible to their employer or immediate supervisor, but no later than the end of shift.

3.8.1.7 The immediate Contractor supervisor, or other designated person, is responsible for reporting all accidents, incidents and injuries to the Contractor's Safety Representative and Construction Manager and PSM. No supervisor shall decline to accept a report of injury from a subordinate.

3.8.1.8 Copies of the Contractor's written incident investigation report shall be delivered to the Construction Manager, LAWA Inspections and PSM within twenty-four (24) hours of the occurrence of any accident, incident, near miss or hazard.

3.8.1.9 Except in cases of emergencies, when the injured person is employed by the Contractor, the Contractor must provide the injured person with written authorization to seek medical treatment as required by OCIP.

3.8.1.10 <u>All accident exposures and hazards incident to the work shall be reported</u>. These records are to be maintained and submitted in writing to the Construction Manager and PSM, and shall include:

3.8.1.10.1 All in-depth investigation to identify all causes and to recommend hazard control measures in the form of a "Corrective Action Plan".

3.8.1.10.2 The total number of man-hours worked by the 10th of each month with a log of occupational injuries and illnesses (OSHA Form No. 300 or equivalent as prescribed by 29 CFR 1904).

3.8.1.10.3 A list of the first aid treatments not reported on the OSHA Form No. 300.

3.8.1.10.4 In the event an employee is exposed to toxic materials or harmful physical agents, the Contractor shall notify the Construction Manager as outlined in 3.8.1.7 of the incident and the corrective action taken to eliminate further exposures as outlined in 3.8.1.10.1.

3.8.1.10.5 Only LAWA Authorized Representatives or other governmental agencies administering OSHA or CAL/OSHA, shall be given information pertaining to any accident, near miss, incident or event. Questions from the media and others shall be referred to the LAWA's Public Relations Division at 424-646-5260 or ncastles@lawa.org.

3.8.2 The Contractor's emergency procedures should be continually reviewed and adjusted to provide maximum effectiveness. All such procedures are to be included in the

Contractor's Site Specific Safety Plan and coordinated with the Construction Manager, LAWA Inspectors and Operations. Initial emergency procedures and any subsequent amendments must be submitted in writing to the Construction Manager and PSM upon completion.

3.8.3 The Contractor will develop procedures to contact the following LAWA offices for the events listed below:

3.8.3.1	Operations	All Incidents
3.8.3.2	Fire Department	Injuries Medical Emergencies Fires
3.8.3.3	Police Department	Bomb Threats Public Demonstrations Accidents Injuries
3.8.3.4	Risk Management	Insurance/Claim Issues Property Damage

3.8.4 Emergencies must be handled by the ranking individual present. In order that necessary emergency services are supplied promptly, each Contractor shall maintain a list of emergency telephone numbers and shall delegate responsibility for making emergency calls.

3.8.5 First-aid supplies approved by a licensed physician or as listed in Cal/OSHA Section 1512 shall be accessible for immediate use. One first-aid kit (16 unit or better equivalent) and a certified person in First Aid/CPR shall be provided for each twenty-five (25) workers, or fraction thereof. Certified person must be designated by a sticker on his/her hardhat.

3.8.6 Contractor shall see that at least one person shall be available at all times at the work site while work is being conducted to render first-aid and CPR who has a current and valid certificate in first-aid and CPR training from the American Red Cross, or any equivalent training program that can be verified. Copies of current certifications must be submitted to the Construction Manager and PSM prior to the start of construction and updated as new certificates are obtained. This person can cover up to 25 persons. Further, a minimum ratio of one such qualified person for every twenty-five (25) employees shall be maintained throughout the course of the construction. Said persons shall affix suitable emblems to the rear of their hard hats for identification.

3.8.7 Actions to be taken during emergencies should be discussed at orientation and regularly with the Contractor's supervisory personnel and at "tool box" safety meetings. Copies of these safety meeting notes and signatures of attendees must be submitted to the Construction Manager and PSM within 7 days of occurrence.

3.8.8 A telephone or other means of two-way emergency communication shall be made available at the site before construction begins. Telephone numbers and locations of emergency facilities including, but not limited to, hospitals, physicians, fire and emergency medical services, and police shall be posted in conspicuous locations at the job sites and at all telephone locations. Contractor must ensure that emergency communication means is readily available to all project workers at any time work is being conducted.

3.9 Protection of the Public and Property

3.9.1 For the purpose of this Section, "public" shall be construed as including all persons not employed by the Contractor/Subcontractor, Consultant, or the LAWA employees; however, LAWA employees not directly involved with the Project, facilities or other related construction contracts shall be considered members of the public.

3.9.2 In addition to the regulations identified within the specific contract documents, the following precautions are required.

3.9.2.1 The Contractor shall take all necessary action to prevent injury to the public or property damage.

3.9.2.2 Work shall not be performed in any area occupied or in use by the public unless specifically permitted by the contract or in writing from the Construction Manager.

3.9.2.3 When it is necessary to maintain public use of work areas involving sidewalks, entrances to buildings, lobbies, corridors, aisles, stairways, and vehicular roadways, the Contractor shall protect the public and property with appropriate guardrails, barricades, temporary fences, overhead protection, temporary partitions, shields, and adequate visibility. Such protection shall guard against harmful radioactive rays or particles, flying materials, falling or moving materials and equipment, hot or poisonous materials, explosives and explosive atmospheres, flammable or toxic liquids and gases, open flames, energized electric circuits, or other harmful exposures.

3.9.2.4 Protective devices shall be designed to protect the public and others on or adjacent to the Site from potential exposures created by the work. Such protective devices shall include, but not be limited to; the use of welding screens to protect against welding flash; the use of solid barricades or tarps to protect against flying objects created by cutting, chipping or grinding; or the use of full sealed enclosures to protect against exposures to hazardous vapors, fumes, mists or dusts. Protective devices shall comply with contract documents and applicable laws, rules and regulations.

3.9.2.4.1 Protective devices shall be designed to withstand the reasonably anticipated forces in or around the work area, including but not limited to, wind, vibration, runoff, and other natural or man-made conditions.

3.9.2.4.2 Protective devices shall be maintained in a clean and smooth condition so as not to cause cuts, nicks, splinters, or snag clothing.

3.9.2.4.3 Contractor shall remove each protective device when the device is no longer required.

3.9.2.4.4 Each protective device shall be constructed of properly identified fire-rated materials.

3.9.2.5 Sidewalks, entrances to buildings, lobbies, corridors, aisles, doors, or exits that remain in use by the public shall be kept clear of obstructions to permit safe ingress and egress of the public at all times.

3.9.2.6 Appropriate warnings, signs and instructional safety signs shall be conspicuously posted where necessary. In addition, a Contractor designated signalman shall control the moving of motorized equipment in areas where the public might be endangered.

3.9.2.7 Sidewalk sheds, canopies, catch platforms, and appropriate fences or barricades shall be provided when it is necessary to maintain public pedestrian traffic adjacent to the erection, demolition or structural alteration of any structure of outside walls on any structure. Demolition plans will be submitted to the Construction Manager for review and acceptance prior to the demolition start-up. Once accepted the Construction Manager will forward a copy to the PSM.

3.9.2.8 A temporary fence shall be provided around the perimeter of above-ground operations adjacent to public areas except where a sidewalk shed or fence is provided by the contract or as required by 3.9.2.4. Perimeter fences shall be at least six (6) feet high. They may be constructed of wood or metal frame and sheathing, wire mesh or a combination of both as required in contract documents.

3.9.2.8.1 When the fence is adjacent to a sidewalk near a street intersection, at least the upper section of the fence shall be open wire mesh from a point not over four (4) feet above the sidewalk and extending at least twenty-five (25) feet in both directions from the corner of the fence.

3.9.2.9 Warning signs and lights, meeting Airport and FAA requirements, shall be maintained from dusk to sunrise along the guardrails, barricades, temporary sidewalks, and at every obstruction to the public. They shall be placed at both ends of such protection or obstruction and not over twenty (20) feet apart alongside of such protection or obstructions.

3.9.2.10 Temporary sidewalks shall be provided when a permanent sidewalk is obstructed by the Contractor's operations. They shall be in accordance with the requirements of the local ordinances. Guardrails shall be provided on both sides of temporary sidewalks. All temporary covered walkways shall be lighted as required by applicable laws, rules or regulations.

3.9.2.11 Guardrails shall be provided on both sides of vehicular and pedestrian bridges, ramps, runways, and platforms. Pedestrian walkways elevated above adjoining surfaces, or walkways within six (6) feet of the top of excavated slopes or vertical banks shall be protected with guardrails, except where sidewalk sheds or fences are provided as required by 3.9.2.4. Guardrails shall be made of rigid materials capable of withstanding a force of at least two hundred (200) pounds applied in any direction at any point in their structure. Their height shall be approximately forty-two (42) inches plus or minus 2 inches. Top rails and posts may be two inches by four inches (2 x 4 dressed wood or equal materials) and posts shall not be over eight (8) feet apart.

3.9.2.12 Barricades meeting Airport requirements shall be provided where sidewalk sheds, fences or guardrails as referenced above are not required between work areas and pedestrian walkways, roadways or occupied buildings. Barricades shall be secured against accidental displacement and shall be maintained in place except where temporary removal is necessary to perform the work. When a barricade is temporarily removed, a watchman shall be placed at all openings until barricade(s) are replaced.

3.9.2.13 Fuel-burning types of lanterns, torches, flares, or other open-flame devices are prohibited, except when covered under a valid welding/ cutting "hot work" permit.

3.10 Safety Guidelines for Tours

3.10.1 It is of the utmost importance that a high degree of protection be afforded to all persons touring any LAWA construction site. The following guidelines have been prepared as general instructions for those individuals responsible for the organization, direction and safe conduct of such tours:

3.10.2 Large groups should be accompanied at all times by a member of the Construction Manager's staff while on the job site.

3.10.3 Community relations tours are coordinated through the Airport's Community Relations Office and specific rules will be given prior to the tours.

3.10.4 Airport staff or authorized contractual employees who are escorting technical and/or other official visitors in hazardous work areas will comply with the safety precautions required under the contract for that site. The number of escorted persons on such tours should be proportionate to the degree of hazards and operating space involved.

3.10.5 Personnel tours that do not involve technical inspections need to be cleared through the Owner, allowing maximum advance notice. The Construction Manager will be consulted to coordinate the tour plan and to assure that necessary safety precautions are taken.

3.10.6 Immediately prior to entering a job site, all visitors shall be briefed about the need for careful and orderly conduct, including mention of any special hazards they may encounter. All visitors and tour groups must be accompanied by a LAWA employee or other authorized representative familiar with the job site.

3.10.7 All visitors will be properly dressed. Hard hats, low heel walking shoes, eye protection, safety vests and long pants are required.

3.11 Construction Safety Inspection Report (Appendix B)

3.11.1 The LAWA ADG Construction Safety Inspection Report form is required for recording any unsafe conditions and/or acts noted. The form will be used by the Contractor's Safety Manager *(and Safety Superintendent or Contractor's Safety Supervisor if required by the Contract)*; however, the Construction Manager or other LAWA staff or LAWA's Authorized Representatives, inspectors, and Insurance Administrator or Insurer personnel may also use this form when inspecting the job sites.

3.11.2 The following instructions apply to the use of the form:

3.11.2.1 Number each item, beginning with #1 on each report.

3.11.2.2 Print or write legibly with ball point pen on a hardcopy form or enter into Construction Safety Inspection Report in Prolog.

3.11.2.3 Be specific under "Safety Violations." Descriptions such as, "Safety rails need repair" are adequate, but a better description would be, "Broken top rail in safety rail, 8' long at head of Smith Avenue escalator entrance needs repair." Give exact locations of safety violations. Violations that are not serious and are corrected immediately should be reported, but noted on the form as having been corrected.

3.11.2.4 When unsafe conditions or unsafe acts are discovered that have the potential to cause bodily injury or property damage, the hazard should be classified as either "imminent danger" or "serious." In either case immediate action should be taken to correct the hazard even before the hazard is reported as instructed in the Construction Safety Policy Guidelines.

3.11.2.5 The last item in the column will indicate the abatement action and the deadline date, for example, “Repair or replace rail immediately. Clean-up accumulated trash, 9/27. Relocated flammable storage, 9/25.”

3.11.3 Inspections performed by the Contractor’s Safety Manager *(or Safety Superintendent or Safety Supervisor if required by the Contract)* require the following:

3.11.3.1 The person conducting the inspection must sign and date the form in the space marked “Report Prepared by:” after the inspection is completed.

3.11.3.2 The violations or comments marked on the inspection report will then be reviewed with the Contractor’s Project Manager and Contractor’s Safety Manager, *(Safety Superintendent or Safety Supervisor if required by the Contract.)*

3.11.3.3 The Contractor’s Project Manager will note in the “Contractor’s Corrective Action” column the corrective action that will be taken, such as, “Defective regulator will be removed from service this date” and this person will then sign and date the report.

3.11.3.4 The Contractor’s Safety Manager *(or Safety Superintendent or Safety Supervisor if required by the Contract)* will then review the report with the Construction Manager. The Construction Manager or a designated inspector will follow-up and see that the Contractor’s corrective action is completed as stated. If corrective action is not completed or is substantially delayed, the Construction Manager will promptly notify the Engineer and PSM.

3.11.4 Inspections performed by the Construction Manager, LAWA employee or an authorized inspector may utilize the Construction Safety Inspection Report (Appendix B) and will require the following:

3.11.4.1 The report form must be signed and dated in the space marked, “Report Prepared By:” after the inspection is completed. This should be followed by a review of the report with the Contractor’s Project Manager, Safety Manager *(or Safety Superintendent, or Safety Supervisor if required by the Contract)*, who will indicate the corrective action to be taken.

3.11.5 A follow-up must be enacted to ensure corrective action is taken and documented. A written response is required within the amount of time noted on the form or 48 hours from receipt whichever is less. Any undue delay or a failure to correct the hazard is to be reported to the Construction Manager and the Airports Development Group Program Safety Manager by the author of the form.

3.11.6 All forms after being generated will be distributed in the following manner:

3.11.6.1 Contractor
3.11.6.2 Construction Manager
3.11.6.3 Project Manager
3.11.6.4 Program Safety Manager

3.12 Construction Safety Violation Report (Appendix B)

3.12.1 The LAWA ADG Construction Safety Violation Report form is required for recording any unsafe conditions and/or acts noted. The form will be used by the LAWA Inspector; however, the Construction Manager or other LAWA staff or LAWA's Authorized Representatives, inspectors, and Insurance Administrator or Insurer personnel may also use this form when inspecting the job sites

3.13 Non-compliance

3.13.1 If the Construction Manager or his representative notes any non-compliance with these safety requirements, or is advised of such non-compliance by the insurer, LAWA, or by a governmental agency with the authority to enforce safety regulations, the Construction Manager shall perform the following:

3.13.1.1 Notify the Contractor of the non-compliance and of the corrective action required. This notice, when delivered to the Contractor or the Contractor's representative at the site of the work, shall be deemed sufficient notice of the non-compliance to immediately implement corrective action.

3.13.1.2 Advise the Owner to exercise the right to issue a suspend-work order stopping all or part of the work if the Contractor fails or refuses to take corrective action within the time specified in the notice. If issued, the suspend-work order will remain in effect until satisfactory corrective action has been taken.

3.13.1.3 Deny any claim or request from the Contractor for equitable adjustment for additional time or money on any suspend-work order issued under these circumstances.

3.13.1.4 Require the removal from airport property of any employee or piece of equipment that is deemed to be unsafe.

3.13.2 The Contractor's Safety Manager *(or Safety Superintendent or Safety Supervisor if required by the Contract)*, or other personnel shall be replaced by the Contractor at the direction of the Owner or Construction Manager for their non-performance of his or her safety/security duties at no additional cost to the Owner.

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APPLICABLE GOVERNMENTAL AGENCY AND INDUSTRY SAFETY STANDARDS

- American Concrete Institute
- American National Red Cross
- American National Standards Institute (ANSI)
- American Petroleum Institute
- American Society of Testing Materials
- American Society of Mechanical Engineers
- American Welding Society
- Associated General Contractors of America
- Building Officials Conference of America
- State of California Department of Labor
- California Department of Transportation (Caltrans)
- Federal Aviation Administration
- Federal Safety & Health Council
- Industrial Hygiene Foundation of America, Inc.
- Institute of Makers of Explosives
- Interstate Commerce Commission
- Los Angeles Department of Airports Construction Project Labor Agreement
- Manual on Uniform Traffic Control Devices (MUTCD)
- Mine Safety & Health Administration
- National Institute of Standards and Technology
- National Institute of Occupational Safety and Health
- National Fire Protection Association
- National Safety Council
- Underwriters Laboratories, Inc.
- U.S. Army, Corp of Engineers
- U.S. Atomic Energy Commission
- U.S. Dept of Labor, OSHA
- CA Dept. of Industrial Relations, CAL OSHA
- U.S. Environmental Protection Agency
- U.S. Fire Administration
- U.S. Government, General Services Administration
- U.S. Standards Institute
- Work Area Traffic Control Handbook 2006 WATCH Manual, Current Edition

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Los Angeles World Airports
AIRPORT DEVELOPMENT GROUP

CONSTRUCTION SAFETY INSPECTION REPORT

CONTRACTOR : _____

CONTRACT NO. : _____

PLEASE NOTE: Fill this form out electronically. In order to "SAVE", *please PRINT to PDF.*

ITEM NUMBER	SAFETY VIOLATIONS	REFERENCE	CONTRACTOR'S CORRECTIVE ACTION	DATE ITEM CORRECTED

REPORT PREPARED BY : _____
(PLEASE PRINT)

TITLE : _____

SIGNATURE : _____

DATE : _____

CONTRACTOR PROJECT MANAGER

SIGNATURE : _____ DATE : _____

CONSTRUCTION MANAGER : _____

SIGNATURE : _____ DATE : _____

ORIGINAL: CM PROJECT FILE

CC: PROJECT SAFETY MANAGER CONTRACTOR PROJECT MANAGER CONSTRUCTION MANAGER

Los Angeles World Airports
AIRPORTS DEVELOPMENT GROUP

CONSTRUCTION SAFETY VIOLATION REPORT

PLEASE NOTE: Fill this form out electronically. In order to "SAVE", *please PRINT to PDF.*

TO: _____ **ATTENTION:** _____

JOB TITLE: _____ **CONTRACTOR :** _____

VIOLATION NUMBER: _____

You are directed to comply with contract documents as follows:

_____

_____

_____

_____

_____

_____

_____

THE SPECIFIC RECORD DOCUMENT(S) RELATED TO THESE CONDITIONS OR INSTRUCTION ARE LISTED BELOW.

_____

_____

_____

_____

ISSUED ON: _____ **at** _____ **REVIEWED BY:** _____
(DATE) (TIME) SENIOR INSPECTOR

ISSUED BY: _____ _____
INSPECTOR'S SIGNATURE INSPECTOR'S PRINTED NAME

FOLLOW-UP: _____
DATE AND ITEM CORRECTED

CONTRACTOR'S CORRECTION ACTION : _____

_____

_____

CONTRACTOR PROJECT MANAGER SIGNATURE: _____

CC: Construction Manager, Contractor, ADG Program Safety Manager, OCIP

SA-006_Rev1 *Construction Safety Violation Report | 10,09*

CONTRACTOR'S SITE SPECIFIC SAFETY PLAN

The Contractor's Safety Plan is to include, but is not limited to, the following guidelines. The Contractor is responsible to review the specific requirements of the contract, analyze the planned methods of operation, and incorporate any additional specific or unique safety requirements in the written plan. The Contractor is responsible to ensure that all applicable safety regulations are addressed as a part of the Site Specific Safety Plan. The Safety Plan must address the potential hazards which may be encountered on the job site by any Project worker.

General Provisions

1. The Safety Plan is to acknowledge that the contractor (inclusive of subcontractors) is totally responsible for compliance with OSHA and Cal OSHA requirements, as well as, all relevant FAA, Owner or other applicable rules and orders which require a place of employment that is free of unsanitary or hazardous conditions which could harm any Project worker's health or safety.

2. The Contractor's proposal for compliance with the specific safety requirements identified in the Construction Safety Policy Guidelines, including the procedures for completing and forwarding to the Construction Manager and PSM a written report on all on-site accidents or incidents within 24 hours of occurrence or reporting.

3. A layout drawing of the site indicating access roads, fire/ambulance and police access points, location of first-aid stations, locations of required warning or danger alarm systems, location of offices, parking for private vehicles, parking for equipment, and storage of all flammable/ combustible liquids, gases or other hazardous materials including estimated quantities.

4. State plans for providing medical service including first-aid and CPR. A copy of the emergency plan is to be posted at the work site first-aid station or bulletin board and the following emergency telephone numbers, at a minimum, shall be included in the given work area:

   Fire and Ambulance,
   Police and
   local designated clinic and hospital

5. State the name of the approved Contractor's Safety Manager, Safety Superintendent or Safety Supervisor, his/her qualifications and a copy of their most recent resume. In addition, delineate his/her authority to direct work stoppage, initiate and/or personally direct corrective actions, and expend funds to eliminate imminent hazardous conditions.

6. The Contractor's Safety Plan must specifically address, but is not limited to, the following:

   a. The frequency at which formal documented safety inspections will be conducted by the Contractor's Safety Manager, Safety Superintendent or Safety Supervisor. Also included must be the system utilized for hazard identification and correction.

   b. All construction areas that shall be designated "Hard Hat Areas" and where (entry points), as well as, what type of warning signs will be posted at these points.

   c. The greatest number of employees to be working at any one time during peak construction periods.

d. Company policies and procedures for initial safety orientation for all Project workers.

e. Company program for continuing safety education for all Project workers including pre-work "safety huddles" and/or "take 5s", as well as, mandatory weekly safety "toolbox" meetings. Information must include the date, time and location where training will be conducted.

f. Company housekeeping rules or regulations and Code of Safe Practices as required by Cal OSHA.

g. Specific provisions for assessing, providing and enforcing compliance with lighting, ventilation, noise control and personal protective equipment requirements.

h. Return-to-Work plan for injured workers.

i. Progressive Disciplinary Policy for safety infractions.

j. Job Hazard Analysis (or Activity Hazard Analysis) process including documentation, revision and training.

k. Emergency Plans and Procedures including employee notification procedures and site evacuation.

l. Safety Plan responsibilities for contractor supervision and management, as well as, subcontractor supervision and management.

m. Substance Abuse Prevention and Testing Policies and Procedures including compliance enforcement and disciplinary action. Policy and Procedures must comply with the requirements of the Drug Free Workplace Act of 1988, and mirror or exceed US Department of Transportation (USDOT) parameters and protocols. Procedure must include provisions for drug and alcohol testing:

- After any incident or accident
- In any case where reasonable suspicion of drug and/or alcohol use exists
- Testing must occur whenever an Accident or Safety Incident occurs as defined in this section. An Accident or Safety Incident is any incident which results in any injury which is treated at an off-site medical facility and/or incurs any equipment or property damage which is estimated in excess of $ 1,000.00 by LAWA or LAWA's Authorized Representatives. The Contractor's Project Safety Personnel will be responsible for escorting and ensuring that all project workers who are involved in such incidents are tested in accordance with their policy within no more than 4 hours of the incident. Such testing is to be conducted by a laboratory that meets or exceeds the USDOT requirements as noted above and must include alcohol and drugs. The Contractor will submit to the Construction Manager, on Contractor Company letterhead, a Pass/Fail result for each person tested within 24 hours of the incident. Any worker who has a Fail result of the test will not be allowed to return to the Project or work on any project on LAWA property for a period of not less than 1year.

- Testing must occur whenever reasonable suspicion exists. The reasonable suspicion incident must be documented by at least a Supervisor and a Contractor Supervisor or Safety Personnel. The Construction Manager must be notified by the Contractor Project Manager and Contractor Safety Manager prior to reasonable suspicion testing being conducted. The Contractor's Project Safety Personnel will be responsible for escorting and ensuring that all project workers who are involved in such incidents are tested in accordance with their policy within no more than 4 hours of the incident. Such testing is to be conducted by a laboratory that meets or exceeds the USDOT requirements as noted above and must include alcohol and drugs. The Contractor will submit to the Construction Manager, on Contractor Company letterhead, a Pass/Fail result for each person tested within 24 hours of the incident. Any worker who has a Fail result of the test will not be allowed to return to the Project or work on any project on LAWA property for a period of not less than 1year.

- If any project worker refuses to be tested they will not be allowed to return to the Project or work on any project on LAWA property for a period of not less than 1year.

- If any project worker becomes physical or, in the opinion of the Contractor Safety Personnel and Contractor Superintendent or Supervisor, combative or uncooperative regarding submitting to testing they shall immediately notify LAWA Police.

Special Provisions

1. Depending on the type of construction, additional items must be incorporated into the Contractor's Safety Plan. When applicable, these include, but are not limited to, the following:

   a. Where the illustration of crane operation signals shall be posted on the Project site and the training that will be utilized for signal persons.

   b. Traffic control and marking of hazards (i.e., haul routes, highways and intersections, utilities, prohibited areas), including training programs for the certification of flagger personnel.

   c. Fire protection and security systems interruption which include, but are not limited to, automatic detection devices and alarms, automatic sprinkler systems, fire pumps, fire hydrants, applicable water supplies and reservoirs.

   d. Trenching and Excavation policies and procedures including slope protection, shoring, guarding, barricades, excavation access and excavated material storage. Potholing procedures must also be included in this section, as well as, required designation, training and documentation of "competent" persons as required by OSHA. Documentation of training and designation is required to be submitted at least 24 hours prior to work activities.

   e. Scaffolding policies and procedures including planking size, cleating procedures, toe-boards, anchor points, putlogs, section pins and scaffold access, as well as, required designation, training and documentation of "competent" persons, erectors and users as required by OSHA. Documentation of training and designation is required to be submitted.

f. Ladder and stairways policies and procedures including types to be used, construction of "job-built" units, inspection and anchoring procedures as well as, required designation, training and documentation of "competent" persons as required by OSHA.

g. Crane policies and procedures including location, erection/dismantling, inspections, operator certification, FAA Form 7460 completion and submission and designation of critical lift processes.

h. Heavy equipment policies and procedures including testing and inspecting, back up alarm testing and maintenance, operator training and training for backing spotter personnel.

i. Fire Prevention and Hot work policies and procedures including hot work permits, fire watch, storage and use of flammable and/or combustible liquids or gases or other hazardous materials. Welding protection, as well as, all types of anticipated welding exposures (including cad welding) must be addressed.

j. Submittal of formwork and falsework drawings for review and approval. This item should also be indicated on the Contractor's progress schedule to prevent submittal delay which could hold up the Project.

k. Provision and number of toilets and handwashing facilities including frequency at which toilet will be cleaned with soap and water and sanitized.

l. Electrical protection policies and procedures including the checking and testing of electrical tools, cords and appliances for required grounding, as well as the installation of electrical circuits and equipment accordance with the National Electric Code, OSHA and Cal OSHA.

m. Fall Protection Policies and Procedures including the covering of floor holes and barricading wall and floor openings, maintaining and enforcing the 6 foot fall exposure rule for all work activities, use of safety nets if utilized, harness, lifeline and lanyard use and inspection, as well as, training documentation and designation of "competent", "qualified" and "authorized" individuals (including submission of documentation) as required by OSHA and Cal OSHA.

n. Hazard Communication Policies and Procedures including the gathering, maintaining, updating and submitting of Material Safety Data Sheets (MSDSs) for all hazardous substances, marking of containers, and training of all Project workers as required by OSHA and Cal OSHA.

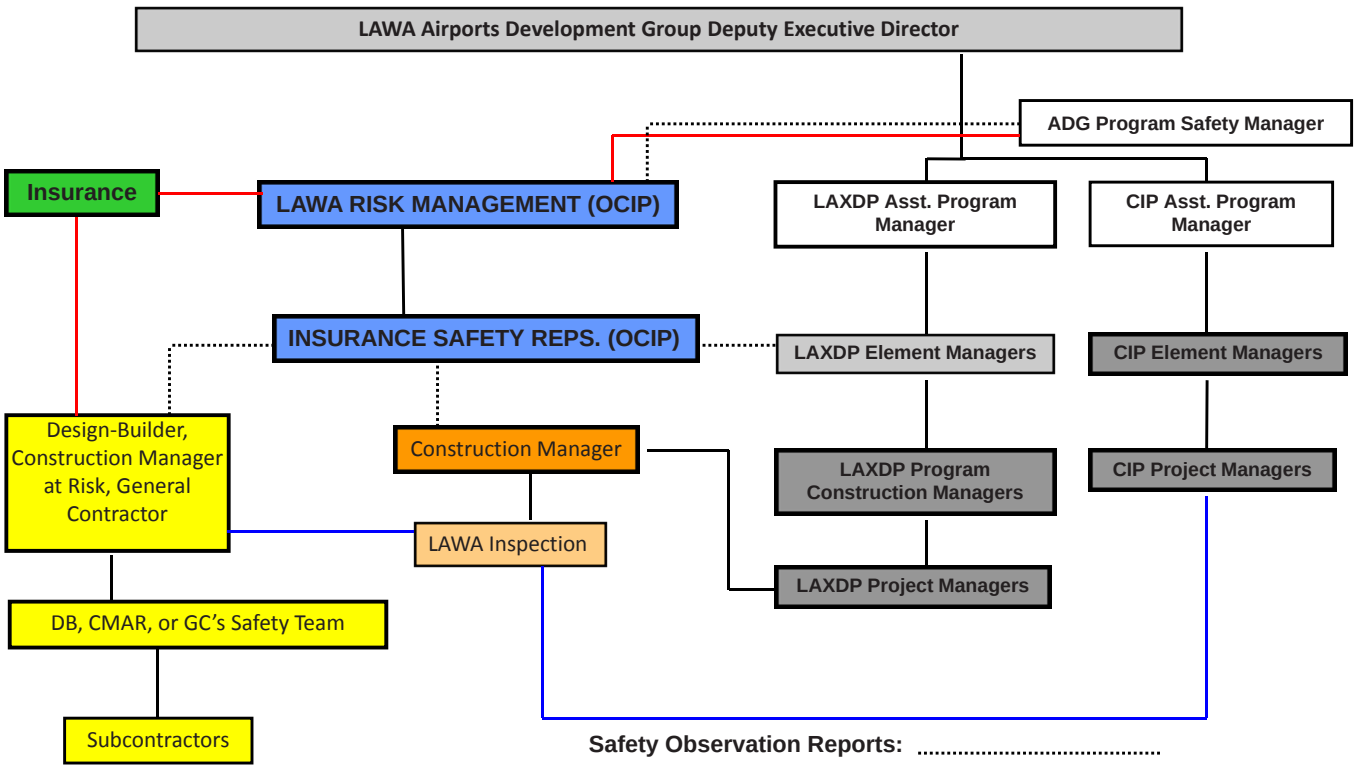
o. Confined Space Policies and Procedures including classification of all confined spaces as "Permit Spaces" until evaluated, entry and work procedures, hazard identification and written permit, emergency procedures and rescue, as well as, training documentation and designation of "competent", "qualified" and "authorized" individuals (including submission of documentation) as required by OSHA and Cal OSHA.

p. Respiratory Protection Policies and Procedures including identification and classification of identified and anticipated exposures, equipment selection, testing procedures, medical clearances as well as, training documentation and designation of "competent", "qualified" and "authorized" individuals (including submission of documentation) as required by OSHA and Cal OSHA. "Voluntary use" and/or "nuisance dust" exposures must also be addressed.

q. Lockout/Tagout Policies and Procedures including identification of potential exposures, interface with other entities, multiple-person lockouts, emergency removal and communication procedures as well as, training documentation and designation of "competent", "qualified" and "authorized" individuals (including submission of documentation) as required by OSHA and Cal OSHA.

r. Demolition Policies and Procedures as required by OSHA and Cal OSHA.

CONSTRUCTION SAFETY PROGRAM ORGANIZATION CHART



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ORDERS & INSTRUCTIONS (O&I) WELDING, CUTTING AND OTHER OPEN FLAME WORK

1.0 PURPOSE

1.1 This Orders & Instructions (O&I) establishes the procedures to be followed when welding, cutting or other open flame work is conducted at LAX, Van Nuys and Ontario Airports. No one shall perform welding, cutting or other open flame work without first obtaining a permit from

1.1.1 LAX Airport go to Fire Inspector Braxton Clark, 7301 World Way West, 3rd Floor, Los Angeles, CA 90045 fax 310-782-6949

1.1.2 Van Nuys Airport go to the office of Fire Inspector Eric McGlover, 6262 Van Nuys, Suite 451, Van Nuys, CA 91401 phone 818-374-1110

1.1.3 Ontario Airport go to City of Ontario, Station I, Fire Prevention and Inspection, 425 East “B” St., Ontario, CA 91764

2.0 DISTRIBUTION

2.1 This O&I is distributed to LAX, Van Nuys and Ontario Airport personnel at branch level and above, tenants, concessionaires, and air carriers.

3.0 WELDING, CUTTING, AND OTHER OPEN FLAME WORK INCLUDING CADMIUM (CAD) WELDING

3.1 All welding, cutting and other open flame work shall be performed in accordance with the International Fire Code, OSHA and CAL OSHA requirements, NFPA 51B Standards and other requirements.

4.0 DEFINITIONS

4.1 Welding/Cutting - Welding or cutting shall include any gas, electric arc or flammable liquid welding or cutting or any combination thereof.

4.2 Personal Protection Equipment - Safety glasses, ear plugs, safety vests, hard hats, face protection, gloves, “leathers”, etc.

5.0 PROCEDURES

5.1 General Requirements

5.1.1 No one shall perform welding, cutting or other open flame work without first obtaining a permit from LAX Airport Fire Inspector, Van Nuys Airport Fire Inspector or the City of Ontario. Fire Prevention Bureau personnel may inspect the area in which the cutting, welding or other open flame work is to take place before issuing a permit and shall establish additional fire safety requirements if needed.

5.1.2 Conditions of Work under a Welding-Cutting (Hot Work) Permit

5.1.2.1 A copy of this permit must be on the jobsite until applicable work finish date.

5.1.2.2 A minimum of one (1) 2A 10BC Fire Extinguisher must be provided at the site.

5.1.2.3 No hot work may be performed within fifty (50) feet of any aircraft.

5.1.2.4 After hot work has been completed, the area must be checked periodically for thirty (30)- minutes for possible fire hazards.

5.1.2.5 Shielding or separation in hazardous areas must be used at all times.

5.1.2.6 All requirements of L.A.F.D Standard 51 (NEPA51) must be followed.

5.1.3 LAX Airport

5.1.3.1 The Contractor must fully complete all fields on the Welding/ Cutting Permit (Attachment 7.1 for LAX Airport).

5.1.3.2 The Welding/Cutting Permit form must be sent to Braxton Clark, LAX Airport Fire Inspector

5.1.3.2.1 E-mailed to at bclark@lawa.org
5.1.3.2.2 Deliver to 7301 World Way West, 3rd Floor, Los Angeles, CA 90045
5.1.3.2.3 Fax to 310-782-6949
5.1.3.2.4 Incomplete forms will not be processed

5.1.3.3 The Contractor must submit a copy of the permit signed by the LAX Fire Inspector to the Construction Manager before any hot work can begin at the job site. A copy of the valid permit must be posted in the immediate area where work is being performed.

5.1.3.3.1 It is the responsibility of the Contractor to make all required notifications to and with the LAX Fire Inspector as well as obtain, post and submit the required permit(s).

5.2 Approved Welding Shop Areas

5.2.1 One year permits may be issued for welding, cutting or other open flame work performed in “approved” shop areas. “Approved: is defined as any designated shop area specifically designed for welding, cutting and other open flame work and approved by the LAX Airport, Van Nuys Airport or Ontario, as applicable, City Fire Code Official for that purpose.

5.3 Construction Sites

Permits for welding, cutting and other open flame work for construction or renovation projects may be issued for the duration of the Project as allowed by the LAX Airport, Van Nuys Airport or Ontario, as applicable, City Fire Authority.

5.4 Personal Protection Equipment

5.4.1 Personal Protection Equipment must be worn when performing hot work.

6.0 COMPLIANCE

6.1 Compliance with all requirements established in this document shall be the responsibility of all personnel performing welding, cutting and other open flame work at the airports. Informational documents containing requirements and standards for welding, cutting and other open flame work may be obtained from the LAX Airport, Van Nuys Airport and Ontario, as applicable, City Fire Department.

7.0 ATTACHMENTS

7.1 Welding/Cutting Permit

Appendix E, Attachment 7.1: Welding Cutting Permit

Los Angeles World Airports
AIRPORTS DEVELOPMENT GROUP

WELDING CUTTING PERMIT

PLEASE NOTE: Fill this form out electronically. In order to "SAVE", *please PRINT to PDF*.

All welding/cutting operations shall be performed in accordance with the requirements established by the Prevention Code, OSHA, NFPA 51B Standards, and other requirements established in the documents listed above shall be the responsibility of all personnel performing welding/ cutting operations.

1. A copy of this permit must be on the jobsite until applicable work finish date
2. Provide a minimum of one (1) 2A 10BC Fire Extinguisher at site
3. No hot work within fifty (50) feet of any aircraft
4. After hot work has been completed, check area periodically for thirty (30)- minutes for possible fire hazards.
5. Use shielding or separation in hazardous areas at all times.
6. Follow all requirements of L.A.F.D Standard 51 (NEPA51)

Fire Department Emergency Phone Number: 911

Date Work to Begin	Today's Date	Intended Date of Completion / Expiration
Project Name		
Contractor Name		Contractor's Emergency Contact Name and Number
Supervisor / Foreman	Cell	Fax
Office Telephone	Hours of Hot Operation	
Location of Site where work is to be performed *(please note building and lfoor if applicable)*		
Description of work to be performed		
Equipment to be used		
Fire System Shutdown Required		
Person(s) Performing Hotwork	Name of Firewatch *(Cannot be same as person(s) perfoming work)*	
Fire Watch Completed *(Date & Time)*	Signature of Firewatch at Completion	
Fire Department Representative Name and Date	Contractors On-Site Supervisors Name and Date	
Fire Department Representatives Signature	Contractors On-Site Supervisors Signature	

SA-002_Rev1 *Welding Cutting Permit Application | 10,09*

ORDERS & INSTRUCTIONS (O&I) - FIRE SYSTEM SHUTDOWN PROCEDURE

1.0 PURPOSE

These Orders and Instructions (O&I) establish the procedures to be followed when a fire system is required to be shut down at Los Angeles, Van Nuys and Ontario Airports.

The purpose of this document is to establish procedures for coordinating fire system shutdowns to prevent an unauthorized shutdown of the Fire Protection System.

A shutdown is any situation in which all or part of a fire system is turned off, or otherwise temporarily rendered inoperable. An impairment of any and all fire system shall invoke a Fire Watch.

Fire system shutdowns shall be coordinated and scheduled by the Construction Manager, if contracted by LAWA, or through the Project Manager/LAWA Inspection to minimize life and property risks and inconveniences to the affected tenants.

Fire systems shall include automatic fire sprinklers, fire detection and alarm systems, pre-engineered fire systems, under/above ground water supply mains, etc.

2.0 DISTRIBUTION

2.1 This O&I is distributed to all LAX, Van Nuys and Ontario Airports personnel at branch level and above; tenants, concessionaires, and air carriers.

3.0 NON-OWNER MAINTAINED FIRE SYSTEM

3.1 Fire System Shutdowns Not Maintained by the LAX, Van Nuys or Ontario Airports

3.1.1 Whenever a fire system is required to be shut down for any reason and the maintenance of the system is not the responsibility of the LAX, Van Nuys or Ontario Airport, the Los Angeles Fire Department or Ontario Fire Department Prevention Bureau shall be notified before the system is shut down and upon completion of work and restoration of the system to operational status.

4.0 OWNER MAINTAINED FIRE SYSTEM

4.1 Any person, and his/her organization, who performs fire system installation, maintenance, testing, repair or other operation which requires shutdown of a fire system shall be responsible for compliance with the procedures established in the Los Angeles (LAFD) and Ontario Fire (OFD) Departments, the Building Officials Conference of America (BOCA) Fire Prevention Code and this O&I.

5.0 LOS ANGELES (LAX & VAN NUYS) AND ONTARIO FIRE DEPARTMENT NOTIFICATION AND COORDINATION

5.1 Unauthorized Shutdown

5.1.1 The LAX Fire Inspector's Office 213-359-8053

5.1.2 Van Nuys Fire Inspector's Office 818-374-1110
Eric.mcglover@lacity.org

5.1.3 Ontario Fire Inspector's Office 909-933-5611

5.1.3.1 shall be notified immediately for all emergency discovered unauthorized shutdowns.

5.1.4 Any discovered unauthorized fire system shutdown shall be reported to the Fire Prevention Bureau for immediate follow-up and initiation of legal action, if appropriate.

5.1.5 Fire Department personnel required to perform emergency shutdown of a fire system shall implement the provisions specified in this document.

5.1.6 The Los Angeles Fire Department 13 Fire Watch (Attachment F-9.2) states (LAX and Van Nuys Airports)

5.1.6.1 "This division shall set forth the requirements of a fire watch when the Chief determines that a building or premise presents a hazard to life or property as the result of a fire or other emergency, or when it is determined that any fire protection equipment or system is inoperative, defective, or has been take out of service."

5.1.7 The 2007 California Fire Code 901.7 Systems Out of Service (Attachment F-9.3) states

5.1.7.1 "901.7.5 Emergency Impairments. When unplanned impairment occur, appropriate emergency action shall be taken to minimize potential injury and damage. The impairment coordinator shall implement the steps outlined in Section 901.7.4"

5.2 Authorized Shutdown

5.2.1 "Contractor's Utility Shutdown Request"

5.2.1.1 The Contractor will request a fire system shutdown through the Construction Manager, if contracted by LAWA, or through the Project Manager/LAWA Inspection by use of the "Contractor's Utility Shutdown Request" form (Attachment F- 7.1)

5.2.1.2 Written notification of fire system shutdowns is required when substantial risk to life or property is involved, critical operations are affected, numerous tenants are affected or the shutdown is for an extended period of time (in excess of 48 hours).

5.2.1.3 Coordination of fire system shutdowns shall start at a minimum of 7 days prior to the anticipated shutdown date. All coordination and scheduling of shutdowns shall be completed a minimum of 72 hours prior to the shutdown, except for minor and emergency outages which are addressed below.

5.2.1.3.1 Minor and emergency fire system shutdowns may be accomplished with less than 96 hours notice, provided that all notifications and coordination is complete. Fire system shutdowns considered to be minor in nature include fire system testing, maintenance and repairs which are of a short duration, of (24 hours or less), do not impact critical operations and do not include substantial risk for life or property loss.

5.2.2 The Construction Manager, if contracted by LAWA, or the Project Manager/LAWA Inspection shall notify, coordinate and schedule fire system shutdowns with all tenants and organizations that will be affected.

5.2.2.1 LAX

5.2.2.1.1	LAX Fire Inspector	213-359-8053
5.2.2.1.2	LAX Construction and Maintenance	310-977-7045
5.2.2.1.3	LAX Airport Operations	310-646-4265
5.2.2.1.4	LAX Airport Police	310-646-9272

5.2.2.2 Van Nuys

5.2.2.2.1	Van Nuys Fire Inspector Eric.mcglover@lacity.org	818-374-1110
5.2.2.2.2	Construction and Maintenance	818-909-5327 (24 hrs)
5.2.2.2.3	Van Nuys Airport Operations	818-909-3527 (24 hrs)
5.2.2.2.4	Van Nuys Airport Police	818-989-1747 (24 hrs)

5.2.2.3 Ontario

5.2.2.3.1	Ontario Fire Inspector	909-975-5570
5.2.2.3.2	Construction and Maintenance	909-933-5611
5.2.2.3.3	Ontario Airport Operations	909-933-5611
5.2.2.3.4	Ontario Airport Police–Dispatch	909-933-5611 (24 hrs)

5.3 The Fire Inspector shall determine the appropriate level of occupancy or activity that may take place in a building or area during fire system shutdown.

5.3.1 Buildings requiring fire system shutdown shall be evaluated by Fire Prevention Bureau personnel to determine if any temporary fire protection measures need to be implemented during the shutdown.

5.3.2 At the discretion of the Fire Code Official, any shutdown to a fire system may be cancelled if the required temporary fire protection measures have not been fully implemented, or at the discretion of the Fire Code Official the building may be ordered vacated if fire system shutdown renders a building unsafe for occupancy.

6.0 IMMEDIATELY BEFORE THE SCHEDULED SHUTDOWN OF ANY FIRE SYSTEM

6.1 Immediately before the scheduled shutdown of any fire system, the Fire Department Communication Center shall be notified:

6.1.1	LAX Fire Inspector	213-359-8053
6.1.2	Van Nuys Fire Inspector	818-374-1110 Eric.mcglover@lacity.org
6.1.3	Ontario Command Center – Dispatch	909-933-5611

7.0 PERFORMANCE OF THE WORK

7.0.0.1 All work on a fire system shall be continuous, when possible, until the system is restored to operational status.

7.0.0.2 All work on a fire system shall be completed as quickly as possible to minimize downtime.

7.0.0.3 In the event of interruptions or lengthy delays in excess of 48 hours, the Fire Code Official shall use discretion to exercise the powers and authority granted under the LAFD (LAX and Van Nuys) and OFD Fire Prevention Code to alleviate a fire hazard.

8.0 TAGGING THE SHUTDOWN SYSTEM

8.1 Fire Sprinkler

8.1.1 When a fire sprinkler or standpipe system or any portion is shut down for testing, maintenance, repair or other reason, the personnel working on the system shall attach impairment tags to the exterior fire department connection for that system and to the affected valve(s) at the point of work (or any other location required by applicable procedures) to indicate that the system is inoperative.

8.1.1.1 The exterior fire department connection should not be tagged out if only a portion of the system is shut down and use of the exterior connection would not affect the shutdown portion of the system.

8.1.2 The personnel performing the work shall remove the impairment tags attached to any connection then the system is placed back into service.

8.2 Fire Alarm/Detection System

8.2.1 Whenever a fire alarm/detection system is shut down for testing, maintenance, repair, or any other reason, a tag shall be attached to the annunciation panel for that system and at any other location, as required by other applicable procedures, to indicate the inoperative status of the system.

8.2.2 The personnel performing the work shall remove the impairment tags attached to any connection when the system is placed back into service.

8.3 Bringing a shutdown system back on line

8.3.1 Upon completion of all fire system work, all affected components of the system shall be inspected and tested by personnel from the Fire Prevention Bureau or other applicable LAX, Van Nuys or Ontario Airport personnel.

8.3.2 All fire systems shall be mechanically secured when they are placed back in service (fire alarm system panels shall be locked, fire sprinkler system valves shall be locked open, etc.).

8.3.3 When a fire system is placed back in service, all personnel who were previously notified of the system shutdown shall be notified that the fire system is back in service.

8.3.3.1 Responsibility for notifying tenants and other agencies when the fire system is placed back in service shall rest with the Construction Manager, if contracted by LAWA, or the Project Manager/LAWA Inspection.

8.3.3.1.1 This notification may be verbal.

8.3.3.2 In addition, the fire department dispatch shall be notified immediately by telephone or in person when the system is back in service.

8.3.3.3 Responsibility for this notification shall rest with the Construction and Maintenance Division or Construction Manager, if in contracted by LAWA, or the Project Manager/LAWA Inspection on construction work.

9.0 ATTACHMENTS

9.1 Contractor's Utility Shutdown Request
9.2 City of Los Angeles Fire Department 13 Fire Watch
9.3 City of Ontario Fire Department follows the 2007 California Fire Code Fire Watch 901.7 Systems Out of Service

Attachment F-9.1 Contractor's Utility Shutdown Request

Los Angeles World Airports
AIRPORTS DEVELOPMENT GROUP

CONTRACTOR'S UTILITY SHUTDOWN REQUEST

PLEASE NOTE: Fill this form out electronically. In order to "SAVE", *please PRINT to PDF.*

Contract No. _____ Construction Manager Office: _____

1. Email one (1) form for each utility being requested for shutdown. You must fill out separate forms for multiple shutdown request.
2. Email completed form to the Construction Managers Office.
3. Requests must be received **7 DAYS** PRIOR TO THE UTILITY SHUTDOWN TIME – **NO EXCEPTIONS**
   Utilities will be shutdown and restored by LAWA Construction & Maintenance personnel ONLY.
4. The shutdown will not occur unless the Contractor is present at the shutdown location and work area.
5. Please complete the form in its entirety. INCOMPLETE FORMS WILL NOT BE PROCESSED.

SHUTDOWN REQUESTS WILL ONLY BE ACCEPTED BETWEEN THE HOURS OF 7:00 AM TO 1:00 PM
All emails received on SATURDAY, SUNDAY, or after 1:00 PM will be marked as "RECEIVED" on the following day.

SHUTDOWN TIMES MAY CHANGE WITHOUT NOTICE DUE TO AIRPORT OPERATIONAL PRIORITES

Water	Electrical	Gas	Fire Alarm	Security / ACAMS
Sewer	Sprinkler	Communications	HVAC	

Specific Location: _____

Work Area Adjacent To: _____

Possible Affected Buildings: _____

Purpose: _____

Airfield ? YES NO Terminal ? YES NO Floor/Level: _____

CONTACT INFORMATION: Contract Name _____ W.O. Number _____

Company Name: _____ Contact Person: _____

Phone Numbers: Office: _____ Cellular: _____
Fax: _____ Email: _____

SHUTDOWN INFORMATION: 1st Choice Day: _____ 1st Choice Date: _____

SHUTDOWN TIME: _____ AM PM RESTORE TIME: _____ AM PM

Contractor Requestor's Signature: _____ Date: _____

DO NOT WRITE BELOW THIS LINE, FOR CONSTRUCTION MANAGEMENT OFFICE USE ONLY

Date Received: _____ Time: _____ AM PM Approved by: _____
CM Utility Shutdown Coordinator
CC: Construction Inspector

APPROVED NOT APPROVED Rejected Use new form to Re-apply

Comments: _____

Confirmation of Scheduled Shutdown.

_____	_____	_____	_____
LAWA Shop	Name of Supervisor Contacted	Date	Time

CONSTRUCTION & MAINTENANCE 24-HR INCIDENT DESK: LAX 310-646-3276 • VAN NUYS 818-909-3527 • ONTARIO 909-933-5611

SA-003_Rev1 *Contractor's Utility Shutdown Request | 10,09*

Attachment F-9.2 City of Los Angeles Fire Department 13 Fire Watch

SOURCE: CITY OF LOS ANGELES FIRE DEPARTMENT 13 FIRE WATCH

DIVISION 13
FIRE WATCH

Section

SEC. 57.13.01. SCOPE.

This division shall set forth the requirements of a fire watch when the Chief determines that a building or premises presents a hazard to life or property as the result of a fire or other emergency, or when it is determined that any fire protection equipment or system is inoperable, defective, or has been taken out of service.

SEC. 57.13.02. DEFINITION.

Fire Watch: The assignment of a qualified person or persons having the responsibility for the continuous patrol of a building or premises for the purpose of detecting fires and transmitting an immediate alarm to the building occupants and Fire Department.

SEC. 57.13.03. AUTHORITY TO REQUIRE FIRE WATCH.

A. The Chief may require implementation of a fire watch whenever it is deemed necessary by the Chief to assure minimum fire/life safety as regulated by this article. The Chief shall specify the number of fire watch personnel and duties to be performed.

B. Whenever the owner or person in charge does not provide fire watch personnel as required, the Chief shall have the authority to assign uniformed Department members until such time as required fire watch personnel are provided.

C. A fire watch shall be maintained until such time that the Chief determines that the building or premises is safe from hazard to life or property, or when fire protection equipment or systems are restored to service.

D. (Added by Ord. No. 170,954, Eff. 4/16/96.) Any person who violates this section shall be punishable by at least a mandatory minimum fine of $500.00, up to and

Division 13 Firewatch

not exceeding $1,000.00 or by imprisonment in the County Jail for a period of not more than six (6) months, or by both such fine and imprisonment. Each person shall be guilty of a separate offense for each and every day, or portion thereof, during which a violation of any provision of this section is committed, continued, or permitted by such person and shall be punishable accordingly.

SEC. 57.13.04. RESPONSIBILITY FOR INSTRUCTION.

The owner, manager, or person in charge or control of the building or premises shall assign to the fire watch as many personnel as are required by the Chief and shall instruct fire watch personnel as to:

1. The procedure for notifying the Fire Department.

2. The area to be patrolled.

3. A method of alerting building occupants and an evacuation procedure. Note: When two or more fire watch personnel are required, two-way radios may be required by the Fire Department to facilitate communication and evacuation.

4. A procedure shall be provided for reactivating sprinkler valves in the event of fire when the sprinkler system has been taken out of service and any other instruction required by the Chief.

SEC. 57.13.05. LOG BOOK.

A. The owner, manager, or person in charge or control of the premises shall provide a log book which contains a directory of names, telephone numbers, and other information to assist in making emergency calls and calls to key management personnel, and which shall be used to record a history of patrol rounds.

B. The log book shall be maintained on the premises and be available for inspection by the Department.

SEC. 57.13.06. SPECIFIC DUTY REQUIREMENTS.

Assigned fire watch personnel shall:

A. Be thoroughly familiar with the area they are patrolling.

B. Perform patrol operations according to instructions from management.

C. Patrol their designated area at least once each half hour.

D. Make reports as instructed. A written record of patrol rounds and any significant information shall be recorded in a log book provided by management.

Division 13 Firewatch

E. Relay any special orders or pertinent information to relief personnel.

F. Remain on duty until properly relieved.

Division 13 Firewatch

SOURCE: ATTACHMENT F-9.3 CITY OF ONTARIO FIRE DEPARTMENT FOLLOWS THE CALIFORNIA FIRE CODE FIRE WATCH 901.7 SYSTEMS OUT OF SERVICE

901.6.2 Records. Records of all system inspections, tests and maintenance required by the referenced standards shall be maintained on the premises for a minimum of three years and shall be copied to the fire code official upon request.

901.6.2.1 Records information. Initial records shall include the name of the installation contractor, type of components installed, manufacturer of the components, location and number of components installed per floor. Records shall also include the manufacturers' operation and maintenance instruction manuals. Such records shall be maintained on the premises.

901.7 Systems out of service. Where a required fire protection system is out of service, the fire department and the fire code official shall be notified immediately and, where required by the fire code official, the building shall either be evacuated or an approved fire watch shall be provided for all occupants left unprotected by the shut down until the fire protection system has been returned to service.

Where utilized, fire watches shall be provided with at least one approved means for notification of the fire department and their only duty shall be to perform constant patrols of the protected premises and keep watch for fires.

901.7.1 Impairment coordinator. The building owner shall assign an impairment coordinator to comply with the requirements of this section. In the absence of a specific designee, the owner shall be considered the impairment coordinator.

901.7.2 Tag required. A tag shall be used to indicate that a system, or portion thereof, has been removed from service.

901.7.3 Placement of tag. The tag shall be posted at each fire department connection, system control valve, fire alarm control unit, fire alarm annunciator and fire command center, indicating which system, or part thereof, has been removed from service. The fire code official shall specify where the tag is to be placed.

901.7.4 Preplanned impairment programs. Preplanned impairments shall be authorized by the impairment coordinator. Before authorization is given, a designated individual shall be responsible for verifying that all of the following procedures have been implemented:

1. The extent and expected duration of the impairment have been determined.
2. The areas or buildings involved have been inspected and the increased risks determined.
3. Recommendations have been submitted to management or building owner/manager.
4. The fire department has been notified.
5. The insurance carrier, the alarm company, building owner/manager, and other authorities having jurisdiction have been notified.
6. The supervisors in the areas to be affected have been notified.
7. A tag impairment system has been implemented.
8. Necessary tools and materials have been assembled on the impairment site.

901.7.5 Emergency impairments. When unplanned impairments occur, appropriate emergency action shall be taken to minimize potential injury and damage. The impairment coordinator shall implement the steps outlined in Section 901.7.4.

901.7.6 Restoring systems to service. When impaired equipment is restored to normal working order, the impairment coordinator shall verify that all of the following procedures have been implemented:

1. Necessary inspections and tests have been conducted to verify that affected systems are operational.
2. Supervisors have been advised that protection is restored.
3. The fire department has been advised that protection is restored.
4. The building owner/manager, insurance carrier, alarm company and other involved parties have been advised that protection is restored.
5. The impairment tag has been removed.

901.8 Removal of or tampering with equipment. It shall be unlawful for any person to remove, tamper with or otherwise disturb any fire hydrant, fire detection and alarm system, fire suppression system, or other fire appliance required by this code except for the purpose of extinguishing fire, training purposes, recharging or making necessary repairs, or when approved by the fire code official.

901.8.1 Removal of or tampering with appurtenances. Locks, gates, doors, barricades, chains, enclosures, signs, tags or seals which have been installed by or at the direction of the fire code official shall not be removed, unlocked, destroyed, tampered with or otherwise vandalized in any manner.

901.9 Recall of fire protection components. Any fire protection system component regulated by this code that is the subject of a voluntary or mandatory recall under federal law shall be replaced with approved, listed components in compliance with the referenced standards of this code. The fire code official shall be notified in writing by the building owner when the recalled component parts have been replaced.

SECTION 902
DEFINITIONS

902.1 Definitions. The following words and terms shall, for the purposes of this chapter and as used elsewhere in this code, have the meanings shown herein.

ALARM NOTIFICATION APPLIANCE. A fire alarm system component such as a bell, horn, speaker, light, or text display that provides audible, tactile, or visible outputs, or any combination thereof.

ALARM SIGNAL. A signal indicating an emergency requiring immediate action, such as a signal indicative of fire.

ALARM VERIFICATION FEATURE. A feature of automatic fire detection and alarm systems to reduce unwanted alarms wherein smoke detectors report alarm conditions for a minimum period of time, or confirm alarm conditions within a

901.6.2 Records. Records of all system inspections, tests and maintenance required by the referenced standards shall be maintained on the premises for a minimum of three years and shall be copied to the fire code official upon request.

901.6.2.1 Records information. Initial records shall include the name of the installation contractor, type of components installed, manufacturer of the components, location and number of components installed per floor. Records shall also include the manufacturers' operation and maintenance instruction manuals. Such records shall be maintained on the premises.

901.7 Systems out of service. Where a required fire protection system is out of service, the fire department and the fire code official shall be notified immediately and, where required by the fire code official, the building shall either be evacuated or an approved fire watch shall be provided for all occupants left unprotected by the shut down until the fire protection system has been returned to service.

Where utilized, fire watches shall be provided with at least one approved means for notification of the fire department and their only duty shall be to perform constant patrols of the protected premises and keep watch for fires.

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901.7.3 Placement of tag. The tag shall be posted at each fire department connection, system control valve, fire alarm control unit, fire alarm annunciator and fire command center, indicating which system, or part thereof, has been removed from service. The fire code official shall specify where the tag is to be placed.

901.7.4 Preplanned impairment programs. Preplanned impairments shall be authorized by the impairment coordinator. Before authorization is given, a designated individual shall be responsible for verifying that all of the following procedures have been implemented:

1. The extent and expected duration of the impairment have been determined.
2. The areas or buildings involved have been inspected and the increased risks determined.
3. Recommendations have been submitted to management or building owner/manager.
4. The fire department has been notified.
5. The insurance carrier, the alarm company, building owner/manager, and other authorities having jurisdiction have been notified.
6. The supervisors in the areas to be affected have been notified.
7. A tag impairment system has been implemented.
8. Necessary tools and materials have been assembled on the impairment site.

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2. Supervisors have been advised that protection is restored.
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4. The building owner/manager, insurance carrier, alarm company and other involved parties have been advised that protection is restored.
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901.8 Removal of or tampering with equipment. It shall be unlawful for any person to remove, tamper with or otherwise disturb any fire hydrant, fire detection and alarm system, fire suppression system, or other fire appliance required by this code except for the purpose of extinguishing fire, training purposes, recharging or making necessary repairs, or when approved by the fire code official.

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901.9 Recall of fire protection components. Any fire protection system component regulated by this code that is the subject of a voluntary or mandatory recall under federal law shall be replaced with approved, listed components in compliance with the referenced standards of this code. The fire code official shall be notified in writing by the building owner when the recalled component parts have been replaced.

SECTION 902
DEFINITIONS

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ALARM SIGNAL. A signal indicating an emergency requiring immediate action, such as a signal indicative of fire.

ALARM VERIFICATION FEATURE. A feature of automatic fire detection and alarm systems to reduce unwanted alarms wherein smoke detectors report alarm conditions for a minimum period of time, or confirm alarm conditions within a

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SOURCE: SECTION 13.01 CONSTRUCTION MANAGEMENT GUIDLINES UTILITY SHUTDOWN COORDINATION INCLUDING LOCK OUT / TAG OUT

1.0 PURPOSE AND OVERVIEW

Each Construction Manager (CM) for each Construction Project is responsible to schedule and to obtain clearance to shutdown of any and all utilities that are within the project envelope. Also each Construction Manager, if contracted by LAWA, or through the Project Manager/LAWA Inspection is to notify any and all interfacing operations and/or construction contracts that are affected by the scheduled shutdown.

This procedure standardizes the process to be followed by each Construction Manager, if contracted by LAWA, or through the Project Manager/LAWA Inspection and establishes a centralized clearinghouse for the scheduling of the limited shop resources as managed by the LAWA Construction and Maintenance Division.

The overall objective of this procedure is to facilitate efficient and effective communication and coordination regarding utility shutdowns among LAWA, LAWA Airports Development Group (ADG), the Construction Manager, if contracted by LAWA, or through the Project Manager/LAWA Inspection, the Contractors and LAWA Construction Inspection Division.

2.0 SCOPE

This procedure applies to all projects managed under the LAWA Airports Development Group.

This procedure is to be followed in the scheduling of LAWA managed and/or maintained utility shutdowns. The contract documents will govern the required backup documentation or duty that is required for any stage of preparation prior to the work being performed. Scheduling with the LAWA Construction and Maintenance Division will be by the standard practice of that Division.

Electrical Safe Clearance Procedures (ESCP) (Lock-out/Tag-out) provide for the blocking, tagging and grounding of electrical switching and controlling devices to clear lines and equipment for the safety accomplishment of work in the de-energized condition

Utility shutdowns for utilities that are included in the project envelope but are not managed and/or maintained by LAWA are the responsibility of the Construction Manager, if contracted by LAWA, or through the Project Manager/LAWA Inspection to schedule and coordinate and will be managed per the Contract Documents.

3.0 REFERENCES

3.1 Contract Documents
3.2 Section 3.0 Prolog Manager, LAWA ADG Construction Management Guidelines
3.3 Section 11.0 Inspection of Work and Code Inspection, LAWA ADG Construction Management Guidelines
3.4 Section 13.0 Utility Coordination and Emergencies, LAWA ADG Construction Management Guidelines

4.0 DEFINITIONS

4.1 Airports Development Group (ADG) – A division of LAWA that manages all of the construction work at LAX, Van Nuys and Ontario Airports.

4.2 Blocking - Blocking is a method of preventing a switch or other circuit opening device from becoming accidentally altered. This is best accomplished by lock-out through the use of padlocks which will be controlled by the person receiving the safe clearance.

4.3 Construction Manager (CM) – The duties of a CM generally include the overseeing of the performance of the construction work which includes inspection, scheduling, quality control (testing), budget, request for payment processing, management of RFI's, Submittals, change management, etc. LAWA ADG may or may not contract this role to a CM firm.

4.4 Electrical Safe Clearance Approval Authority - The Director of Construction and Maintenance at each LAWA airport or a safe clearance manager appointed in writing is the approval authority for safe clearances for electrical system energizing and de-energizing.

4.5 Electrical Safe Clearance Procedures (ESCP) (Lock-out/Tag-out) provide for the blocking, tagging and grounding of electrical switching and controlling devices to clear lines and equipment for the safety accomplishment of work in the de-energized condition.

4.6 Lock Out/Tag Out – A process that addresses the practices and procedures necessary to disable machinery or equipment, thereby preventing the release of hazardous energy while employees perform servicing and maintenance activities of electrical, mechanical, hydraulic, pneumatic, chemical, thermal, and other energy sources.

4.7 Project Manager – The ADG manager of a construction contract and also performs as a Construction Manager if the CM role is not contracted to a CM firm.

4.8 Requestors - Requestors for system de-energizing may include Airport construction contractors, Airport tenants and concessionaires, and in-house Airport Construction and Maintenance Division Managers.

4.9 Safe Clearance Schedule - The Safe Clearance Schedule is a record of an approved sequencing of all switching, blocking, grounding, testing and tagging actions required to safely de-energize and re-energize electrical circuits.

4.10 Tagging - Tagging is the placement of a red tag, "Danger-Hold," directly on a circuit opening and blocking device.

4.11 Underground Utility Locator – A specialized firm called to locate and identify utilities within the project limits.

4.12 Utility Services - Existing, operating or new systems, such as

4.12.1 Water (potable or non-potable) systems
4.12.2 Heating, air conditioning, ventilation and/or cooling (HVAC) systems
4.12.3 Sewer (storm, industrial waste or sanitary) systems
4.12.4 Electrical power, lighting and grounding systems
4.12.5 Communications, telephones, computer, navigational and other control devices.
4.12.6 Gas
4.12.7 Fire Alarm
4.12.8 Sprinkler
4.12.9 Mechanical Conveying systems
4.12.10 Elevators/Escalators, People Movers
4.12.11 Security/ ACAMS

4.13 Utility Shutdown – The partial or full non-operational state of a utility service.

5.0 RESPONSIBILITIES

5.1 Construction Manager (CM)

5.1.1 Ensures that the Contractor is fully aware of the contract requirements regarding utility shutdowns.

5.1.2 Responsible to schedule planned utility interruptions and/or shutdowns for contract work following the approval methods written in this procedure.

5.1.3 Responsible to work with the LAWA Construction Inspection Program in scheduling the appropriate LAWA Construction and Maintenance Division shops.

5.1.4 Coordinates the establishment of site specific procedures for planned utility shutdowns including impact evaluations of affected building tenants/operations and adjacent construction contracts.

5.1.5 Notifies all affected inter-contract and LAWA operations of planned shutdowns using the standard LAWA ADG guidelines.

5.1.6 Ensures utility repairs are completed as scheduled.

5.1.7 Ensures that contract work is inspected by LAWA inspectors prior to restoring the utility to service.

5.1.8 Coordinates the restoration of utility service with cognizant Airport tenants and Airport Divisions, making them aware that the utility is returning to service.

5.2 Contractor

5.2.1 Becomes thoroughly aware of its responsibilities regarding the coordination of utility outages.

5.2.2 Does not proceed with any planned utility interruptions or shutdowns until completely approved by LAWA through the CM.

5.2.2.1 Initiates the Contractor's Utility Shutdown Request (Attachment).

5.2.3 Responsible for all contract work to the utility systems by the contractor or by a subcontractor who specializes in work of the specific type of utility work.

5.2.4 Procures Utility Locator to locate and mark all locate and identify utilities within the project limits.

5.2.5 Responsible for the implementation of safe clearance procedures. Representatives of the requestor shall be knowledgeable of implementation of these safety procedures.

5.2.6 Responsible for submitting the name(s) of the personnel to the Construction Manager to be forwarded to the Director of Construction and Maintenance at LAX Airport (and as determined for Van Nuys and Ontario Airports) for ESCP training of their representatives assigned to work at or near equipment requiring clearance procedures.

5.3 LAWA Construction and Maintenance Division

5.3.1 The responsible party to shut down and restore LAWA maintained utilities.

5.4 LAWA Construction Inspection Division

5.4.1 Responsible to review the Contractor's planned utility shutdown process with the CM.

5.4.2 Responsible to work with the CM in planning adequate levels of Construction Inspection staffing for an approved utility shutdown.

5.4.3 Responsible to work with the CM in scheduling the appropriate LAWA Construction and Maintenance Division personnel.

5.4.4 Monitor the utility shutdown and re-energizing of the utility.

5.5 Underground Utility Locator

5.5.1 Locates and identifies all utilities and shut-off means existing in area of excavation.

5.5.2 Marks, stakes/flags, and maintains markings for duration of project.

6.0 PROCEDURE

Civil and Structural Planned Utility Shutdowns

6.1 Contractor locates all utilities

6.1.1 If required, the Underground Utility Locator service

6.1.1.1 Locates and Identifies all utilities and shut-off means existing in area of excavation.

6.1.1.2 Marks, stakes/flags, and maintains markings for duration of project.

6.2 Contractor assigns a manager of the work to be at the site during the shutdown and/or restoration

6.3 Contractor completes Contractor's Utility Shutdown Request and delivers the CUSR to the CM with a sketch/drawing of the excavation or area of work.

6.3.1 The CM will review the form, review the plans related to the planned shutdown, and review the planned work schedule.

6.3.2 The CM immediately schedules joint site investigation with the Contractor, subcontractor(s) and the appropriate LAWA Construction Inspectors and, if required, a representative of utility company.

6.3.3 The CM is responsible to have the planned shutdown scheduled with the LAWA Construction and Maintenance Division Utility Shop and/or LAX Fire Department and, if required, the utility company.

6.3.3.1 Once viability of the schedule is determined, the CM will schedule or delegate to the LAWA Construction Inspector the scheduling of the shutdown with the LAWA Construction and Maintenance Division.

6.3.3.1.1 All communications with the LAWA Construction and Maintenance Division and/or shops must be by e-mail or confirmed by e-mail for record purposes.

6.3.3.2 The scheduling of all shutdowns will be on a first come – first serve basis.

6.3.3.2.1 If there are any schedule conflicts with the scheduling of any services whatsoever it is the responsibility of the CM to manage the resolution between and among other LAWA ADG contracts. The Project Manager and/or Element Construction Manager may be brought in to assist decision making between or among contracts.

6.3.3.3 If, for any reason at any time the Contractor's Utility Shutdown Request cannot go forward at the current time, the request will be REJECTED and Closed.

6.3.3.3.1 To reschedule the same work a new application must started. There is no provision, by intent, to place a revision number on an open Contractor's Utility Shutdown Request.

6.3.3.4 Once the CUSR is approved a copy of the scheduled CUSR will be e-mailed to the LAWA Construction Inspection Office.

6.3.4 The CM verifies all notifications to the impacted entities using the standard LAWA notification process and forms.

6.3.5 The CM reminds all parties involved just prior to the scheduled activity.

6.4 The LAWA Construction Inspector inspects the Contractor's preparation prior to the commencement of the planned shutdown work.

6.4.1 The LAWA Construction Inspection maintains a full-time representative present at the shutdown site during the shutdown process, during the work and during the re-energizing of the utility.

6.4.2 The LAWA Construction Inspector immediately reports any irregular scheduling situations to the CM.

6.5 All notifications are the responsibility of the CM up until the time of the work.

6.6 All notifications including non-performance by LAWA Construction and Maintenance Shops and/or utility company at the time of the scheduled work are the responsibility of the LAWA Construction Inspector.

Lock-out Tag-out (LO/TO) Safe Clearance

6.7 The establishment of safe clearance procedures for electrical work requiring opening/closing of switches for electric transmission or distribution lines have been developed to help protect life and property.

6.8 Electrical Safe Clearance Procedures (ESCP) (Lock-out/Tag-out) provide for the blocking, tagging and grounding of electrical switching and controlling devices to clear lines and equipment for the safety accomplishment of work in the de-energized condition.

6.8.1 All Construction staff performing the Electrical Safe Clearance Procedures will be given instruction by the Director of Construction and Maintenance at the respective LAWA airport (LAX, Van Nuys or Ontario.)

6.8.1.1 The Contractor will submit the name(s) of the personnel to the Construction Manager to be forwarded to the Director of Construction at the respective LAWA airport for ESCP instruction of their respective assigned work at or near equipment requiring clearance procedures.

6.8.1.2 The Contractor will submit the Contractor's Utility Shutdown Request (CUSR) to schedule a shutdown.

6.8.1.2.1 On the CUSR the Contractor is required to identify the electrical circuits and equipment to be de-energized and the type of work to be performed.

6.8.1.2.2 All parts of 6.1 through 6.6 above will apply to the Electrical Safe Clearance Procedures.

6.9 Training

6.9.1 Contractors will submit the name(s) of the personnel to the Construction Manager to be forwarded to the Director of Construction and Maintenance at LAX Airport (and as determined for Van Nuys and Ontario Airports) for ESCP training of their representatives assigned to work at or near equipment requiring clearance procedures.

6.10 Execution of Work

6.10.1 The Electrical Safe Clearance Approval Authority will develop the Safe Clearance Schedule, in accordance with the requestors approved outage requirement. If appropriate, the designated power company will be advised of the outage. If the power company switches/circuits need to be de-energized, the power company's safety policies/procedures shall be coordinated with the district offices associated with the particular project.

6.10.2 The Electrical Safe Clearance Approval Authority will complete Safe Clearance Schedule, in accordance with the following instructions:

6.10.2.1 Record Number. Assign consecutive numbers from the Electrical Safe Clearance Log maintained by the Approval Authority.

6.10.2.2 Issued By. Fill in the name of the approval authority, the time, and the date of issuance.

6.10.2.3 Name of Person Receiving Clearance Schedule. Fill in the name of the requestor's foreman who will oversee the safe clearance actions. Generally, only one safe clearance schedule will be issued; however, if more than one crew is assigned to the work and due to the distance separating the various crews or the extent of the work, as many safe clearance schedules as required may be issued. In such cases, the requestor will advise the outage approval authority on the original Contractor's Utility Shutdown Request form as to the name of the qualified representative who will act as coordinator among all issued safe clearances.

6.10.2.4 Line Equipment Involved. Provide a brief, but concise, description of the lines or equipment on which work is to be performed.

6.10.2.5 Details of Switching, Blocking, Testing, Grounding, and Tagging. When possible, a visible line break must be provided at all points of possible feed. The procedures required to provide this visible line break must be recorded in the applicable section of the form. All details must be entered in their proper sequence, and must include all switching, blocking, testing, grounding, and tagging operations.

6.10.2.6 Red tags will be filled out by the Owner's representative, one tag per work crew.

6.11 Blocking

6.11.1 Blocking out will be accomplished by the use of padlocks. The requestor will use his lock and retain the key in his possession. Red tags will be tied to the requestors lock by the Owner's representative, and the clearance stubs given to the requestor.

6.12 Re-energizing

6.12.1 The requestor is responsible to ensure switching operations are performed in reverse order. Beginning with the last detail of switching, blocking and tagging, perform the opposite sequence of events. For instance, if a detail of switching, blocking, and tagging reads "open switch No. 27 install lock and attach danger tag." The opposite operation is "remove danger tag, lock, and close switch No. 27."

6.12.2 The reverse operation is to be done only after red tag stubs are matched to the upper body of the red tag by the Owner's representative and both copies are signed by the requestor.

6.12.3 The requestor will return all Danger Tags to the Safe Clearance Approval Authority. The Safe Clearance will be annotated to reflect completion of all actions.

6.12.4 All activities set forth in the procedure section shall be completed in the scheduled work period so that the initiation and maintenance of regular Airport service will not be adversely impacted

7.0 ATTACHMENTS

7.1 Contractor's Utility Shutdown Request
7.2 Safe Clearance Schedule
7.3 Safe Clearance Log
7.4 Danger-Hold Tag

Attachment 15.1-7.1 Contractor's Utility Shutdown Request

Los Angeles World Airports
AIRPORTS DEVELOPMENT GROUP

CONTRACTOR'S UTILITY SHUTDOWN REQUEST

PLEASE NOTE: Fill this form out electronically. In order to "SAVE", *please PRINT to PDF.*

Contract No. _____ Construction Manager Office: _____

1. Email one (1) form for each utility being requested for shutdown. You must fill out separate forms for multiple shutdown request.
2. Email completed form to the Construction Managers Office.
3. Requests must be received **7 DAYS** PRIOR TO THE UTILITY SHUTDOWN TIME – **NO EXCEPTIONS**
   Utilities will be shutdown and restored by LAWA Construction & Maintenance personnel ONLY.
4. The shutdown will not occur unless the Contractor is present at the shutdown location and work area.
5. Please complete the form in its entirety. INCOMPLETE FORMS WILL NOT BE PROCESSED.

SHUTDOWN REQUESTS WILL ONLY BE ACCEPTED BETWEEN THE HOURS OF 7:00 AM TO 1:00 PM
All emails received on SATURDAY, SUNDAY, or after 1:00 PM will be marked as "RECEIVED" on the following day.

SHUTDOWN TIMES MAY CHANGE WITHOUT NOTICE DUE TO AIRPORT OPERATIONAL PRIORITES

Water	Electrical	Gas	Fire Alarm	Security / ACAMS
Sewer	Sprinkler	Communications	HVAC	

Specific Location: _____

Work Area Adjacent To: _____

Possible Affected Buildings: _____

Purpose: _____

Airfield ? YES NO Terminal ? YES NO Floor/Level: _____

CONTACT INFORMATION: Contract Name _____ W.O. Number _____

Company Name: _____ Contact Person: _____

Phone Numbers: Office: _____ Cellular: _____
Fax: _____ Email: _____

SHUTDOWN INFORMATION: 1st Choice Day: _____ 1st Choice Date: _____

SHUTDOWN TIME: _____ AM PM RESTORE TIME: _____ AM PM

Contractor Requestor's Signature: _____ Date: _____

DO NOT WRITE BELOW THIS LINE, FOR CONSTRUCTION MANAGEMENT OFFICE USE ONLY

Date Received: _____ Time: _____ AM PM Approved by: _____
CM Utility Shutdown Coordinator
CC: Construction Inspector

APPROVED NOT APPROVED Rejected Use new form to Re-apply

Comments:_____

Confirmation of Scheduled Shutdown.

_____	_____	_____	_____
LAWA Shop	Name of Supervisor Contacted	Date	Time

CONSTRUCTION & MAINTENANCE 24-HR INCIDENT DESK: LAX 310-646-3276 • VAN NUYS 818-909-3527 • ONTARIO 909-933-5611

SA-003_Rev1 *Contractor's Utility Shutdown Request | 10,09*

Attachment 15.1-7.2 Safe Clearance Schedule

Los Angeles World Airports
AIRPORT DEVELOPMENT GROUP

SAFE CLEARANCE SCHEDULE

PLEASE NOTE: Fill this form out electronically. In order to "SAVE", *please PRINT to PDF*.

AIRPORT	
RECORD NUMBER	DATE
ISSUED BY	TIME AM PM
PERSON RECEIVING CLEARANCE	

LINE EQUIPMENT INVOLVED:
DETAILS

TIME COMPLETED	AM	PM
PERSON GRANTING CLEARANCE NAME		
PERSON GRANTING CLEANANCE SIGNATURE		

SA-004_Rev0 *Safe Clearance Schedule | 08,09*

Attachment 15.1-7.3 Safe Clearance Log

Los Angeles World Airports
AIRPORT DEVELOPMENT GROUP

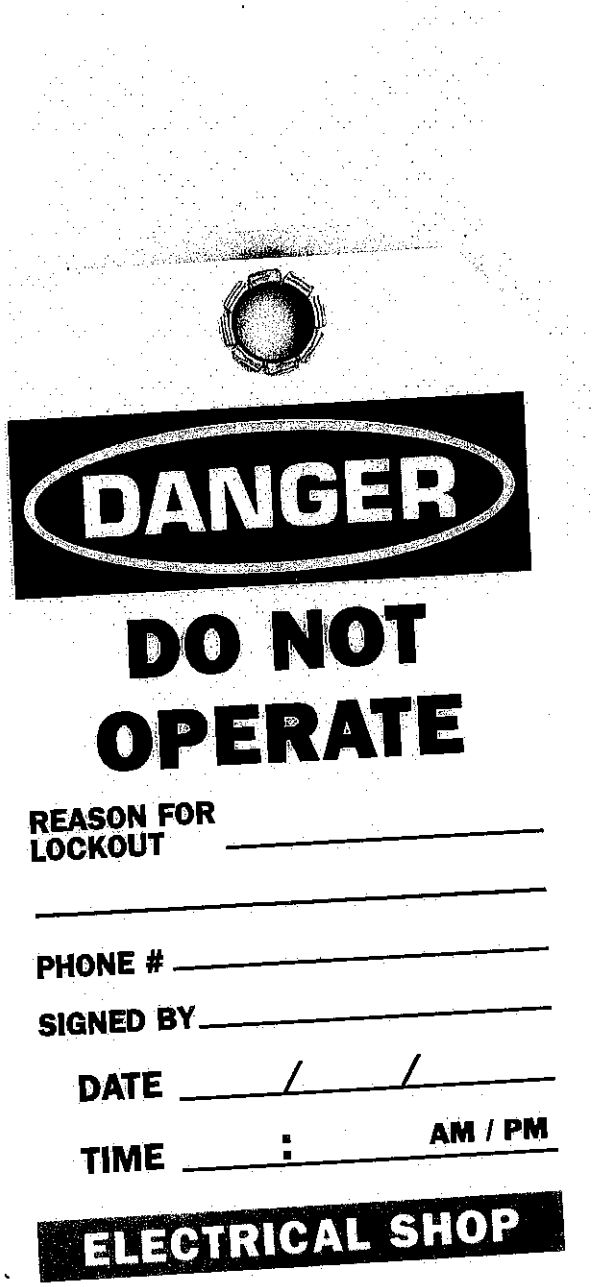
SAFE CLEARANCE LOG

PLEASE NOTE: Fill this form out electronically. In order to "SAVE", *please PRINT to PDF*.

SAFE CLEARANCE NUMBER	DATE OF REQUEST	DATE(S) OF OUTAGES	REQUESTOR	STATUS

SA-005_Rev0 *Safety Clearance Log | 08,09*

Attachment 15.1-7.4 Danger-Hold Tag



SOURCE: CROSSFIELD TAXIWAY PROJECT SPECIFICATIONS

CROSSFIELD TAXIWAY PROJECT
LOS ANGELES INTERNATIONAL AIRPORT
Los Angeles World Airports

SECTION 5 - UTILITIES

5-1 LOCATION. *To this SSPWC subsection add the following:*

This subsection as written in the Standard Specifications shall apply under the contract, except as modified by the following:

The Contractor shall give utility owners ten (10) working days notice to mark or identify existing utilities.

The Contractor shall expose and verify (by survey) the depth and alignment of all underground utilities in the construction site. The Contractor shall pothole and survey all utilities within a five-foot distance of any footing, work, utilities, etc., prior to excavation. The Contractor shall immediately notify the Engineer (in writing) of any conflicts between the design and existing utilities. All costs associated with potholing utilities that are shown on the Plans shall be considered incidental to associated bid items, and no separate payment shall be made. For utilities not shown on the Plans, the Contractor will be paid for potholing under the terms of Section 022119, *Location of Underground Utilities*.

The Contractor shall contact utility owners after the I.D. number is obtained from the Underground Service Alert [USA] (phone: 1-800-227-2600) but not less than fourteen (14) days before excavation work is started, to mark or identify existing utilities. If the utility owner is the City of Los Angeles (DWP, Bureau of Street Lighting, etc.), a confirmation number indicating that the City has been notified shall be obtained by USA or the Contractor from the appropriate City Department. The I.D. number together with the date acquired shall be reported to the Engineer when calling for inspection. Los Angeles World Airports (LAWA) will not mark utility lines owned and maintained by LAWA.

The Contractor's attention is directed to the existence of certain underground facilities that may require special precautions by the Contractor to protect the health, safety, and welfare of workers and of the public. Facilities requiring special precautions include: compressed air lines; conductors of petroleum products, oxygen, chlorine, and toxic or flammable gases; natural gas in pipelines greater than six inches in diameter, or pipelines operating at pressures greater than 60 psi (gauge); underground electric supply system conductors or cables, with the potential to ground more than 300 V, either directly buried or in duct or conduit that do not have concentric grounded or other effectively grounded metal shields or sheaths.

The Contractor will be required to mark all FAA utility lines prior to any work in a given area. Marking shall consist of a 36-inch high lathe, placed 10 feet on center. Lathe shall be marked with the words “DANGER – FAA” or equivalent, and shall be affixed with red or orange surveyor tape to enhance visibility. No separate payment will be made for this marking, but it shall be considered incidental to other bid items.

5-1.1 Notification by the Contractor. Prior to excavation in the vicinity of existing underground facilities, the Contractor shall notify the Engineer, and the respective authorities representing the owners and agencies responsible for such facilities, not less than 3 working days and not more than 5 working days, prior to excavation so that a representative of the owners or agencies can be present if they so desire.

CROSSFIELD TAXIWAY PROJECT
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Los Angeles World Airports

The following includes a list of utility companies and representatives whose facilities may be impacted by this Project. Inclusion on this list does not imply that the agency listed has a facility affected by the project, nor does the absence of an agency contact on the list imply that they do not have a facility affected by the project:

Agency:	Name:	Phone Number:
AT&T	Dan Cobum	(310) 515-4212
Chevron Pipeline Co.	Gerald McClelland	(714) 228-1503
	Mike Roberts	(714) 228-1530
City of LA Dept of Public Works, Bureau of Sanitation	Michael Patoni	(562) 988-3305
City of L.A., Dept. of Water and Power (DWP)	Ralph Jaramillo	(310) 646-0065
Water	Michael Downs	(213) 367-1218
Power	Rodney Beckles	(213) 367-6209
Power	Duke Thompson	(213) 367-1743
ConocoPhilips:	Joseph Mendoza	(310) 466-8188
Submittals	Matt Krubski	(562) 290-1507
Field Coordination	Ron Stone	(562) 843-7011
Field Coordination	Dan Leyva	(310) 466-9850
ExxonMobil:	David Kingston	(310)212-1768
Federal Aviation Administration (FAA)	Mike Ensign	(310) 925-9172
FAA Communications	Jimmy Huang	(310) 215-2052
LAX Fuel	Jim Moses	(310) 646-5915
	Doug Quast	(310) 646-4961
LAWA Communications	Mark Pohl	(310) 646-5915
NOAA	Gary Strickland	(805) 988-6626
PLH	Mike Knezevich	(310) 417-0124
Shell Pipeline Company	Alan Davis	(559) 217-2543
	Russell Guidy	(310) 629-8843
Southern California Edison		
General	Digging Hotline	1-800-422-4133
Communication	Tommy Savage	(626) 308-6186

CROSSFIELD TAXIWAY PROJECT
LOS ANGELES INTERNATIONAL AIRPORT
Los Angeles World Airports

5-2 PROTECTION. *Delete this SSPWC subsection and replace with subsections 5-2.1 through 5-2.2 as follows:*

5-2.1 Maintaining Services. All utilities encountered along the line of the Work shall be maintained in service during all operations under the Contract, unless other arrangements satisfactory to the utility owner, the affected agency, and the Engineer are made in advance. Utilities shall include, all above or below ground conduit, pipes, wet wells, ducts, cables, and appurtenances associated with oil, gas, water, steam, irrigation, sewer, storm drain, wastewater, air, electrical, power, instrumentation, communication, telephone, TV, and lighting systems, whether or not owned by the City. All valves, switches, vaults, and meters shall be maintained readily accessible for emergency shutoff.

Where protection is required to ensure support of utilities located as shown on the Plans or in accordance with Subsection 5-1, *Location*, the Contractor shall, unless otherwise provided, furnish and place the necessary protection at their expense.

Upon learning of the existence and location of any utility omitted from or shown materially incorrectly on the Plans, the Contractor shall immediately notify the Engineer in writing. When authorized by the Engineer, support or protection of the utility will be paid for as provided in Subsection 3-2.2.3, *Agreed Prices,* or Subsection 3-3, *Extra Work*. Damaged facilities will be replaced by the Agency at the Contractor's expense.

When placing concrete around or contiguous to any non-metallic utility installation, the Contractor shall at its expense:

1) Furnish and install a 2-inch cushion of expansion joint material or other similar resilient material; or
2) Provide a sleeve or other opening that will result in a 2-inch minimum-clear annular space between the concrete and the utility; or
3) Provide other acceptable means to prevent embedment in or bonding to the concrete.

Where concrete is used for backfill, or for structures that could result in embedment, or partial embedment, of a metallic utility installation; or where the coating, bedding or other cathodic protection system is exposed or damaged by the Contractor's operations, the Contractor shall notify the Engineer and arrange to secure the advice of the affected utility owner regarding the procedures required to maintain or restore the integrity of the system.

Unless otherwise specified, all underground utility conduits shall have a minimum cover of eighteen (18) inches and shall have identifying detectable tape placed in the trench above the conduit. The detection tape shall be made of metalized foil, laminated between two layers of inert plastic film, six (6) inches wide, and a minimum of 4.5 mils thick, as described here:

1) Safety Red = Electric and lighting conduit and cables.
2) Safety Yellow = Gas, oil, steam, petroleum or gaseous materials.
3) Safety Orange = Telephone, alarm, or signal cables and conduit.
4) Safety Blue = Potable water or irrigation.
5) Safety Green = Sewer or drain lines.

The detection tape shall be placed directly above and reasonably horizontal for the full length of the conduit. For conduits with less than four (4) feet of cover, install tape four (4) to eighteen (18) inches below the subgrade surface and at least twelve (12) inches above the conduit. For conduits with more than four (4) feet of cover, install tape at least three (3) feet above the conduit.

Upon completion of the Work, the Contractor shall remove all enclosures or protective coverings and leave the work area in a finished condition.

5.2.2 Protection of Existing Utilities. The Contractor shall protect all existing utilities and improvements not designated for removal. Physical protection of utilities in proximity of pavement sections shall be provided by the Contractor in all cases. Except where noted on the plans, encasement protection of utilities in proximity of pavement sections shall require prior approval of the Engineer. Protection of utilities shall be as indicated on the plans. No separate payment for protection of utilities shall be made.

All materials, labor, supervision and incidentals necessary to construct the protection as detailed on the plans and as accepted by the Engineer shall be considered incidental to the various other bid items in the project.

The Contractor shall determine the exact locations and depth of all utilities indicated on the drawings. In addition to those indicated, the Contractor shall make exploratory excavations of all utilities. All such exploratory excavations shall be performed as soon as practicable after award of the Contract, and a sufficient time in advance of construction to avoid possible delays to the Contractor's work. When such exploratory excavations show the utility locations as indicated on the drawings to be in error, the Contractor shall notify the Engineer. The number of exploratory excavations required should be that number which is sufficient to determine the alignment of the utility. All costs for such work shall be absorbed by the Contractor.

5-2.3 Damage to Existing Utilities and Improvements. Any utility or improvement that is damaged by the Contractor shall be immediately reported in writing to the Engineer and immediately repaired to a condition equal to, or better than, the condition they were in prior to such damage. Repair work shall be continuous until the utility or improvement is placed back in service.

The provisions of this Subsection shall not be abated even in the event such damage occurs after backfilling, or is not discovered until after completion of the backfilling.

All repairs to a damaged utility or improvement shall be inspected and approved by an authorized representative of the utility or improvement owner before being concealed by backfill or other work.

In case of damage which, in the opinion of the Engineer or Inspector threatens the safety of persons or property, the Contractor shall immediately make all repairs necessary for removal of the hazard. Should the Contractor fail to take prompt action to this end, the Agency has the option to remove any hazard resulting from damages caused by the Contractor without waiving any other rights the Agency may have. Costs shall be charged to the Contractor.

If, an existing utility or substructure was not shown in the original Contract Documents, but has been made known to the Contractor prior to excavation, the utility or substructure shall be considered as an existing known condition. Under these circumstances, the Contractor shall be responsible for protecting the utility. Damage to a utility, which has been made known to the Contractor, shall be repaired at the Contractor's sole cost. The Contractor shall, at its own expense, satisfactorily repair damage to any known pipeline, sewer, conduit, utility, or other underground structure which may result from its operations or negligence. If it is necessary for the Agency to repair such damage, the Contractor shall be billed for and shall pay the actual cost to the Agency for labor and materials plus fifteen percent (15%) administrative costs.

5-3 REMOVAL. *To this SSPWC subsection add the following:*

The Contractor shall notify the Engineer, in writing, seven (7) Days in advance of taking any existing utility line out of service. Arrangements satisfactory to the Engineer must be made prior to taking any existing utility line out of service for any purpose. The Contractor shall confirm with the Inspector and the Engineer twenty-four (24) hours prior to disconnect.

The Contractor shall pull out all wire from electrical conduit or ducts that are being abandoned and shall disconnect same from servicing panels.

5-4 RELOCATION. *Delete this SSPWC subsection and replace with the following:*

Where the proper completion of the Work requires the temporary or permanent relocation and/or removal of an existing utility or other improvement which is shown on the Plans and in coordination with the construction phasing, the Contractor shall at its own expense, without unnecessary delay, temporarily or permanently relocate or replace such utility or improvement in a manner satisfactory to the Engineer and the Owner of the utility. All cases of such temporary relocation, removal, or restoration shall be accomplished by the Contractor in a manner that will restore or replace the utility or improvement as nearly as possible to its former locations and to as good or better condition as found prior to removal.

All existing utilities being relocated by the Contractor shall not be out of service for more than an 8-hour period, unless otherwise specified. This eight (8) hour shut down period for switch-over shall be performed at night.

The Contractor must notify the Engineer thirty (30) Days in advance of any proposed connection and shall notify the Engineer twenty-four (24) hours prior to the actual connection to any existing utility.

5-4.1 Specific Work Elements. The following do not constitute a complete listing of utility work elements for the Project, but are selected for discussion because of their major impact to the overall project.

5-4.1.1 Fiber Optic. The Contractor shall coordinate with the Engineer for the modification, relocation and/or installation of the fiber optics.

Interruptions of electrical and communications services shall be limited to the absolute minimum amount of time necessary to perform cable splices or cut over services. Arrangements satisfactory to the Engineer must be made prior to taking any existing utility line out of service for

any purpose. The Contractor shall notify, in writing, the Engineer seven (7) days in advance of taking any existing utility line out of service.

Contractor shall notify Engineer 6 weeks prior to the expected start date of system installation or modification.

5-4.1.2 DWP Electrical Substation Removal. The Contractor shall coordinate with the City of Los Angeles Department of Water and Power for removals of existing DWP substations and equipment.

Arrangements satisfactory to the Engineer must be made prior to taking any existing utility line out of service for any purpose. The Contractor shall notify, in writing, Mark Holland at DWP, (213) 367-1732, two months in advance of removing any DWP foundations or conduits.

5-4.1.3 Investigation/Relocation of Unidentified Utility Services. Every attempt has been made to identify existing utilities in the various work areas of the Project and to show existing utilities on the plan sheets. Due to the age of the facility, and the variety of utility agencies operating on the airfield, however, there may be utility services, of various types, which are not shown on the plans but which will be discovered during construction. Dealing with these contingencies will be the responsibility of the Contractor, for which he will be reimbursed under an allowance bid item, number 5.3 - Utility Investigation / Relocation. See Section 9-4, *Allowances* for discussion of allowance pay items.

Tasks for which the Contractor will be required to provide service, and for which he will be reimbursed under this Pay Item 5.3 - Utility Investigation / Relocation, will include, but will not be limited to:

1) Review of As-builts, discussion with potential operators, testing and other investigative tasks as needed to identify type, route, ownership, users, and operational status of the service.
2) Coordination with service owner to determine specific relocation requirements, if any, including routing, materials, construction detailing and methods.
3) Coordination with owning and/or operating agencies and users regarding outages.
4) Providing and installing necessary replacement ducts, cables, pipes, or other utility infrastructure if the service is to remain functional.
5) Safely abandoning in place, or removing, as required by the Engineer, any abandoned services.
6) All necessary permitting or other administrative tasks as needed to remove and relocate the service, if operational, or to safely remove and abandon the services, if currently non-operational.
7) All work shall be done in conformance with the owning agencies requirements, with these specifications, and with local, state, and federal standards.

5-4.1.4 AT&T Telephone Line Installation. The Contractor shall coordinate with the AT&T for the installation of new telephone lines.

Arrangements satisfactory to the Engineer must be made prior to installing any new lines. The Contractor shall notify, in writing, Mike Duhe at AT&T, (310) 515-2401, two months in advance of installation of new lines.

5-5 DELAYS. *This subsection applies as written in the SSPWC.*

5-6 COOPERATION. *This subsection applies as written in the SSPWC.*

This subsection as written in the Standard Specification shall apply under the contract, except for the following shall be added.

The Contractor shall coordinate with all affected agencies, utility companies, and the Engineer for said work related to the Project. The cost of permits and licenses is incidental to the other work and no additional payment shall be made for costs incurred in obtaining the permits and licenses or in conforming to the requirements thereof, unless indicated otherwise in these Specifications.

5-7 SCHEDULE COORDINATION. Coordination of work between various utility agencies and work by the Contractor shall be the sole responsibility of the Contractor. Delays to the schedule due to utility agency coordination issues that, in the opinion of the Engineer, could have been prevented by timely intervention and coordination on the part of the Contractor will not be credited to the Contractor's contract schedule requirements.

All costs incurred by the Contractor for coordination with the necessary agencies relative to the work affecting utilities shall be considered incidental to the bid items and no separate payment will be made.

5-8 BASIS OF PAYMENT.

Payment will be made under:

Item 5.1 Utility Investigation/Relocation……per allowance

Item 5.2 AT&T Telephone Line Installation……per allowance

END OF SECTION 5

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