# SECTION 10 – MISCELLANEOUS OTHER REQUIREMENTS

## 10-1 CONTRACTOR'S CONSTRUCTION SCHEDULE AND REPORTS

See Section 19 of these Specifications for requirements relative to the Contractor's Construction Schedule and Reports.

## 10-2 CONTRACTOR'S CONSTRUCTION SCHEDULER

See Section 19 of these Specifications for requirements relative to the Contractor's Construction Scheduler.

## 10-3 OPERATIONAL SAFETY ON THE AIRPORT

The Contractor shall conduct all operations in a manner that will cause no interference with aircraft traffic or normal operation of the airport. The Contractor shall furnish flaggers, escorts and Foreign Object Debris (FOD) control (sweepers) to regulate the movements of vehicles and equipment when it is necessary for a vehicle or piece of equipment to cross an active taxiway, or when working within **[125]** feet of an active taxiway or **[250]** feet of an active runway. When crossing a NAVAID critical area, workers and equipment shall heed the hold instructions of the on-site flagger, who is in communication with the LAWA Inspection or Operations staff, until cleared to proceed. No crossings of active runways will be allowed. Aircraft shall always have the right-of-way.

In all operations, the Contractor shall be governed by the regulations and rules of LAWA and shall cooperate fully with the Engineer and Airport Management. The Contractor shall refer to Section 7-10.5 of these specifications regarding Operation of Vehicles on the AOA. The Contractor shall also be bound by the operational safety requirements outlined in the Federal Aviation Administration (FAA) Advisory Circular No. 150/5370-2, latest edition, entitled "Operational Safety on Airports During Construction", including Appendix 1, "Special Safety Requirements During Construction" and the provisions thereof. This document is attached to these Specifications as Appendix A. Additional information and requirements relating to operations at the Airport are contained in Appendix B, "Instructions to Contractors". Should there be a conflict in the requirements between this Advisory Circular and the requirements in the Plans and Specifications, the most restrictive shall govern.

Construction phasing shall be accomplished in accordance with Section 11 of these Specifications.

## 10-3.1 Introduction

**[Los Angeles International Airport]** is a complex operating facility which is governed by a very strict set of operating rules to insure the safety of the traveling public, the operators of the various airlines, and those individuals who function as support personnel to the facility. It shall be recognized and understood that the Contractor is required to comply with the most current edition requirements contained in FAA Advisory Circulars as they pertain to this project. It shall be understood and accepted that the Contractor has familiarized himself with general Airport operations and has taken these into consideration in arriving at his bid prices and in scheduling his various activities.

Following are the general safety operations and objectives that shall be achieved to maximize safety and to minimize time and economic loss to the aviation community, construction contractors, and others directly or indirectly affected by the Project. The Contractor shall consider these objectives in consideration when formulating schedules and operational activities (see Section 11 of these Specifications for specifics on phasing and work hour restrictions). The Contractor shall be responsible for controlling his operations and the operations of subcontractors (at all levels) and suppliers so as to comply with the requirements of this section as listed below:

**A.** Keep the airport operational for all users.

**B.** Minimize delays to aircraft operations.

**C.** Maximize safety of aircraft movement and airport operations as a whole.

**D.** Minimize delays to construction operations.

**E.** Minimize airport operation and construction activity conflicts.

These requirements are considered a minimum. Detailed construction Safety and Phasing Plans are included in the contract drawings. Where conflicts occur between the requirements in this section and those indicated on the construction Phasing Plans, the more stringent shall govern.

## 10-3.2 Requirements and Regulations Relating to the Operation of Motor Vehicles

### A. General

(1) During the term of this Contract, the Contractor shall recognize and abide by the following rules and controls as they may be modified by Federal regulations.

(2) In addition to these regulations, the Engineer is empowered to issue such other instructions as may be deemed necessary for the safety and well being of Airport users or otherwise in the best interests of the public.

## B. Operation of Motor Vehicles

(1) General:

a. Motor vehicle operations within and on the Airport premises shall be governed generally by the provisions of the California State Motor Vehicle Codes and Traffic Direction procedures and signals for turns. Lights and safe-driving precaution shall be in conformity therewith. In addition, motor vehicles shall conform to all special regulations prescribed by the Los Angeles International Airport or procedures imposed pursuant to Los Angeles International Airport regulations by the Engineer. Refer to Section 7-10.5 of these specifications.

b. Traffic on perimeter roads, enplaning and deplaning drives, public thoroughfares and parking areas of the Airport is limited to those vehicles properly licensed to operate on public streets and highways.

c. All vehicular equipment in the AOA, access road, aircraft parking or storage areas shall at all times comply with any lawful signal or direction of LAWA employees. All traffic signs, lights, and signals shall be obeyed, unless otherwise directed by LAWA employees.

d. Every person operating motorized equipment of any character on any area shall operate the same in a careful and prudent manner and at a rate of speed posted or fixed by this section and at no time greater than is reasonable and proper under the conditions existing at the point of operating, taking into account traffic and road conditions, view, obstructions, and shall be consistent with all conditions so as not to endanger the life, limb, or property or the rights of others entitled to the use thereof.

(2) Operation of Vehicles within the AOA:

a. All motor vehicles that enter the AOA shall possess exhaust systems which are protected with screens, mufflers, or other devices adequate to prevent the escape of sparks or the propagation of flame.

b. All vehicles (powered and non-powered) within the AOA shall be equipped with reflectors or lights on both front and rear ends and on the sides.

c. All Contractor vehicles shall be equipped with operable yellow flashing beacons, beacons must be lighted during all periods of vehicle operation and while the vehicle is on the AOA.

d. No person shall operate any motor vehicle or motorized equipment in the AOA of the Airport unless such motor vehicle or motorized equipment is in a safe and mechanically reliable condition for such operation.

e. Any person operating equipment in the Air Operations Area shall, in addition to this section, abide by all existing Federal Aviation Administration and other governmental rules and regulations.

f. No person shall operate any motor vehicle or motorized equipment on the aircraft movement or non-movement areas of the Airport at a speed in excess of 20 miles per hour, or the posted speed limit, whichever is lower, less where conditions warrant, unless specified otherwise elsewhere. Designated motor vehicle drive lanes shall be utilized where provided unless specific authorization to the contrary is given by the Engineer.

g. No person operating a motor vehicle or motorized equipment in the AOA shall in any way hinder, stop, slow, or otherwise interfere with the operation of any aircraft on the Airport.

h. All aircraft and emergency vehicles have priority over Contractor vehicles. Contractor vehicles shall yield right-of-way to aircraft and emergency vehicles. Contractor shall ensure that under no circumstances will any contractor or subcontractor or other vehicle associated with the job pass beneath any part of an aircraft or loading bridge, or block the access to any parking gate or delay any aircraft movement.

i. Vehicles shall remain within established drive lanes. It is prohibited to use runways or taxiways or adjacent field areas unless specifically indicated on the Drawings. It is emphasized that the contractor's authority to operate does not extend to active aircraft movement area. The Contractor shall operate along established haul routes with prior approval of the Engineer.

j. Contractor vehicles shall not deviate from approved haul routes specified on the Drawings. No crossover between construction sites is allowed. To move from one construction site to another, vehicles must exit the AOA via the approved haul route and access point and re-enter through the approved access gate and haul route for the next construction site.

k. Escorts: At all time during work within **[250]** feet of the centerline of an operating runway or **[125]** feet of the centerline of an operating taxiway, or when entering or crossing an active movement area, vehicles shall be accompanied by an approved radio-equipped escort car.

l. When construction vehicles, other than those routinely used in the aircraft movement area and runway approach area, are required to travel over any portion of that area, they shall be escorted by an approved escort vehicle.

## C. Parking

(1) No parking is permitted on any Airport roadway as the primary purpose of the Airport roadways is for motor vehicle traffic.

(2) No person shall park any motor vehicle, other equipment, or leave materials in the AOA of the Airport, except in a neat and orderly manner and at such points as prescribed by the Contract Documents.

(3) No person shall park any motor vehicle or other equipment or leave materials in the AOA of the Airport within 15 feet of any fire hydrant or standpipe.

(4) Parking of construction workers' private vehicles shall also be in a public or private parking facility outside the AOA. Under no circumstances will vehicles or equipment be parked within 10 feet of the Airport Perimeter Security fence line.

## D. Vehicle Identification

(1) All vehicular equipment operating within the AOA must display signs of commercial design on both sides of the vehicle which identify the vehicle as belonging to the Contractor firm.

(2) Vehicles that appear at access gates without signs on both sides of the vehicle will be denied access. Vehicles found to be missing signs within the AOA will be escorted off the jobsite and not be permitted to re-enter until signs have been installed.

(3) All Contractor vehicles must be equipped with 3-foot by 3-foot flags having a checkered pattern of International orange and white squares at least 1 foot on each side. For fabric color specifications, see FAA AC 150/520-5B, Appendix A. Attach flag on top of vehicles with rigid pole so that the flag will be visible at all times. Vehicles without flags will not be permitted to enter the AOA.

## E. Load Limits

When using airport roadways, the Contractor shall restrict the gross combination weight to 80,000 pounds, single-axle maximum weight of 20,000 pounds, and a tandem axle weight maximum of 32,000 pounds. The vehicle weights are subject to verification by the Engineer.

**F. Other Vehicle Requirements.** See **[Appendix] [Section] [ ]** of these Specifications for other vehicle requirements that will apply to this project.

When using airport roadways, the Contractor shall restrict the **[gross combination][axle]** weight to **[ ]** pounds.

### 10-3.3 Requirements and Regulations Relating to Operators of Vehicles

**A.** All drivers operating vehicles on airport property must carry a valid United States driver's license on his person, appropriately endorsed for the type of equipment being operated.

**B.** The Contractor shall promptly turn in all badges to LAWA Los Angeles Badging Office for employees who will no longer be working at the construction site. All Contractor badges must be turned in at the end of construction. Charges apply to badging, fingerprinting, and the failure to return badges. All such charges shall be the Contractor's sole responsibility.

**C**. Drivers designated to operate vehicles in the AOA shall receive special drivers training and be approved by the Airport before being allowed to operate within the AOA or be escorted by an approved escort. Drivers operating outside the AOA may operate vehicles without attending the special drivers training course.

### 10-3.4 Requirements for Orientation of Contractor Personnel and Project Meetings

**A. Air Operations Orientation**

(1) After Award of the contract has been issued, but prior to the start of the construction, arrange with the Engineer to have all supervisory and job office personnel assigned to this project attend an "Air Operations Orientation." This orientation will be conducted by the Airport for discussion of the rules and regulations pertinent to this Contract. Attendees will include the Engineer, the Contractor's General Manager, and the designated Safety Officer.

(2) At least one first line supervisor who has attended the orientation shall be present in the vicinity of the active runways and taxiways at all times when construction activities require men or equipment in these areas. The Contractor and Engineer shall keep a record of the individuals who have attended the orientation. Contractor employees who have not attended the Airport Operations Orientation will not be permitted to work within **[250]** feet of the centerline of the runways, taxiways or other areas of Aircraft Operations.

**B.** The Air Operations Orientation may be conducted as part of the pre-construction meeting and shall not be considered an educational course in Air Operations Safety , but a discussion of existing rules or regulations related to airport activities. The Contractor shall be fully responsible and liable for the actions of his employees, subcontractors, agents, or representatives.

**C. Safety and Security Meetings**

An airport safety and security meeting will be conducted with the Contractor's staff after the award of the contract and prior to commencing construction and weekly thereafter. The Contractor shall identify one individual as Safety Officer who will be responsible for conducting the meetings.

**D. Safety Plan Submittal**

At the pre-construction meeting, the Contractor will submit a Safety Plan containing, at a minimum, the following:

(1) Identification and 24-hour phone/pager contact for Safety Officer.

(2) List of individuals who will be authorized escort drivers.

(3) List of access gates, gate hours and names of gate guards. List of access gates, gate hours and name of gate proctors.

(4) Identification of individual(s) to be responsible for communication base for escort vehicles. This base radio will be the only one authorized to transmit to the LAWA Ops/Inspection. All escort vehicles must have receiving radios to monitor transmissions from the LAWA Ops/Inspection.

(5) Description of methods to be employed to ensure that all active taxiway crossings will remain free of foreign object debris (FOD).

(6) Description of methods to be employed to ensure that FAA Safety Area requirements are met relative to grade, surface smoothness, wheel load support, etc. in Runway and Taxiway Safety Areas.

(7) Proposed notification and action procedures to be employed for each needed night runway closure.

**10-3.5 Security Requirements**

**A. General Intent.** It is intended that the Contractor shall comply with all requirements of the Airport Security Plan (ASP) and with the security requirements specified herein.

**B.** The Contractor shall designate, and submit to the Engineer in writing, the name of his Contractor Safety Officer (CSO). The CSO shall conduct the Weekly Safety Meetings and shall be accountable for the security requirements for the Contractor.

**C.** The Contractor's Safety Officer (CSO) will be responsible for all security precautions. Prior to the commencement of the work, the CSO shall provide the Engineer an outline of a proposed security protection plan as described in 10-3.4D above (i.e., challenging, ID

checks, gate control and general site security) for all work contemplated under the contract.

**D. Identification/Access Badging**

All Contractor personnel working on the project shall have Los Angeles International Airport (LAX) issued identification/access badges. Refer to Appendix **[ ].**

**E. Perimeter Fence Security**

(1) Contractor shall not open gates or remove fencing without approval of the Engineer. Adequate precautions shall be taken to prevent entrance of unauthorized persons to Airport-restricted areas or inadvertent entry of dogs or large animals into the AOA.

(2) Prior to securing work each evening, Contractor shall ensure that all access gates which have been opened are closed and locked, and that perimeter fencing is restored to a condition that will maintain present security standards.

(3) Ten Foot Rule: No Contractor will be permitted to store materials, park equipment or erect permanent or semi-permanent structures within ten (10) feet of either side of the AOA perimeter security fence.

(4) Use of Gates: The gates shown on the drawings shall be used for access to the worksites. Use of a gate for continuous access will require the gate be manned by a badged guard. The Contractor shall schedule with the Engineer a minimum of 24 hours prior to requiring access through any AOA gates. Use of Gates: The gates shown on the drawings shall be used for access to the worksites. Use of a gate for AOA access will require the gate be manned by LAWA police and a Contractor provided gate guard.

(5) Use of Gate Guards: Gate guards shall be provided by the Contractor. See Section 17 of these Specifications.

(6) Prior to removing or making holes in the Airport perimeter fencing, the Contractor shall obtain permission and written approval from the Engineer, and take adequate precautions to prevent entry of unauthorized personnel or animals.

**F. Other Safety/Security Requirements.** See **[Appendix][Section][ ]** of these Specifications for other requirements that may apply.

**10-3.6 Interruptions and Stoppages of the Work Due to Aircraft Operations and Hazardous Conditions**

**A. Work Stoppages**

(1) Construction may be stopped by the Engineer, any time he considers that the intent of the regulations regarding safety or Security Requirements are being violated or that a hazardous condition exists. This decision to suspend the operation will be final and will only be rescinded by the Engineer when satisfied that the Contractor has taken action to correct the condition and prevent recurrence.

(2) Frequent inspections will be made by the Engineer or his authorized representative during the critical phases of the work to insure that the Contractor is following the recommended safety procedures. The Inspector shall report any violations or potential safety hazards to the Engineer who will in turn advise the Contractor of the concern for immediate correction by the Contractor.

(3) Construction may also be stopped or suspended by Airport Operations, through the Engineer, during periods of inclement weather, such as low visibility, or when it is necessary to provide an extra margin of safety to aircraft operations, or reduce other activities to keep the airport operational. See Section 6 of these Specifications.

**B. Intermittent Construction Operations**

(1) Work under this contract will occur in the AOA. Heavy construction may require closing of certain areas by the Airport. However, some work may be done on an intermittent basis. The Contractor shall maintain constant communication with the Engineer when working on an AOA location, and will immediately obey all instructions from the Engineer. Failure to obey instructions or maintain proper communication will be cause to suspend the Contractor's operations in such areas until satisfactory conditions are assured. Intermittent delays which can be expected to be a normal condition while working on an active airport include holding for aircraft on active taxiways, and holding short of NAVAID critical areas on the haul road in periods of low visibility when aircraft are on landing approach. Such delays shall be considered incidental to the cost of the construction and no compensation or time extensions will be granted for such delays.

(2) When directed to cease construction and move from the area, the Contractor shall immediately respond and move all material, equipment and personnel outside areas. Operations shall not be resumed until directed by the Engineer. Every reasonable effort will be made to cause minimum disturbance to the Contractor's operations; however, no guarantee can be made as to the extent to which disturbance can be avoided.

(3) Limitation of Operations: The Contractor shall be responsible for controlling his operations and those of his subcontractors so as to provide for the free movement of aircraft in the operating areas of the AOA.

## 10-3.7 Requirements and Regulations Affecting the Conduct of the Work

### A. General

(1) Requirements to Begin Work: Before starting work, the Contractor shall provide, and have available, all flags, signs, barricades, lights, electrical generators, and other equipment and materials as may be required for the protection of air traffic, vehicular traffic and the construction work. All personnel shall have the proper identification badges and have received the required training and instruction.

(2) No burning is permitted on Airport property.

(3) Smoking by personnel is prohibited on the AOA.

(4) Construction Activity and Aircraft Movements:

a. Prior to the start of the construction activities affecting aircraft movement areas, the safety requirements relating thereto will be coordinated by the Engineer between the Airport Operations, air carriers, fixed base operators, other users and appropriate representatives of the FAA. This coordination will be based on the Contractor's approved construction schedule with the primary purpose of compliance with the contract document requirements.

b. For construction activity to be performed in other than the AOA, the storage of materials and parking of equipment, when not in use or about to be installed, should not encroach upon the AOA. In protecting operational areas, the minimum clearances maintained for runways shall be in agreement with Federal Aviation Regulations (FAR) Part 77.

c. When necessary to accomplish construction within areas defined by FAR Part 77, while aircraft operations are in progress, the following minimum distances from runway, taxiway edge and runway approach area shall be maintained, unless otherwise specified:

**[Air Carrier] [ ]** Airport

Distance from runway centerline - **[250]** feet
Distance from taxiway centerline - **[125]** feet
Distance from runway threshold
(Longitudinally) – **[1000]** feet

(5) Limitation of Construction Activities:

a. No lips or drop-offs will be allowed between temporary panels or surfaces and adjacent pavement, or between new slabs and adjacent pavement. Other construction shall not result in lips greater than 1 inch, for pavement traveled by aircraft; and 3 inches, for edges between old and new surfaces at edges and ends not traveled by aircraft.

b. Open-flame welding or torch-cutting operations are prohibited unless adequate fire and safety precautions are provided and have been approved by the Fire Chief through the Engineer.

c. During working hours, open trenches, excavations and stockpiled material at the construction site shall be prominently marked with barricades and lights as shown on the drawings.

d. Stockpiled material for use during the current work shift shall be located within the barricaded work area and limited in height and constrained in a manner to prevent movement resulting from aircraft blast or wind conditions. No material may be stored in the work areas during non-working hours.

e. The Contractor will ensure that all lighting fixtures are shielded to protect against interference with the vision of pilots and air traffic controllers.

f. During non-working hours, all trenches and excavations outside of the barricaded work areas shall be backfilled or covered.

g. Non-working hours shall be defined as those hours when construction is not taking place within a work area.

**B. Construction Adjacent to Runways**

(1) All equipment and material above the runway centerline grade and within a distance of **[250]** feet, or as otherwise shown on the phasing plans, from the runway centerline must be removed when the runway is being used by aircraft.

(2) Within **[250]** feet of the runway centerline, all open trenches, lips greater than one inch and drop-offs greater than three inches must be filled, covered, or sloped when the runway is being used by aircraft. Disturbed turf areas, open graded soils, crushed aggregate, or other unbound granular materials must be covered and secured or treated in a manner approved by the Engineer so that these materials do not result in FOD or dust due to exposure to jet blast and/or weather.

(3) Notification to Airport Operations, by way of the Engineer, is required prior to beginning any construction within **[250]** feet of a runway centerline or **[125]** feet of a taxiway centerline which is being used for aircraft operations. Notification of the proposed construction should be made a minimum of fourteen (14) days prior to beginning work.

## C. Construction Adjacent to Taxiways

(1) Except as otherwise described in the construction phasing plans, no equipment or material within 125 feet of a taxiway centerline, or as otherwise specified, shall be above the taxiway centerline grade while the taxiway is being used by aircraft.

(2) Open trenches or abrupt drop-offs may be made adjacent to taxiway pavement edges, providing this work is temporarily covered, approved by the Engineer and coordinated with Airport Operations, who will in turn coordinate the Notice to Airmen (NOTAM). Open graded soils, crushed aggregate, or other unbound granular materials must be covered and secured or treated in a manner approved by the Engineer so that these materials do not result in FOD or dust due to exposure to jet blast and/or weather.

(3) Marking and lighting of work areas adjacent to taxiways shall be required and approved by the Engineer.

## D. Barricades and Marking of Barricades

(1) Continuous burning “Standing Red” barricade lights and/or other lighted hazard devices stipulated on the phasing plans shall be operative at all times while in place. It shall be the Contractor's responsibility to immediately repair or replace any light or flasher that is not operating.

(2) Barricades shall be in place prior to commencing construction operations, and shall be maintained in near new appearance for the life of the contract.

(3) Lighted “X” runway closure markers shall be in place over the runway numerals during any runway closure.

(4) See Section 62 of these Specifications for additional requirements on barricades.

## E. Closures

No ramp, apron, taxiway, or runway area shall be closed to aircraft without approval of the Engineer. This will enable Notices to Airmen (NOTAMS), or other advisory communications to be issued. A minimum of 72 hours notice of requested closing shall be directed to the Engineer. The Engineer will arrange inspections prior to opening any area to air traffic. Any waste

material, and/or debris must be removed from aprons promptly to avoid possible damage to aircraft.

**F. Debris**

(1) Debris Control: When Airport roadways and public highways are used in connection with construction under this contract, the Contractor shall remove all debris from the surfaces of such roadways. Trucks and equipment shall have all accumulated dirt, mud, rocks and debris removed before accessing the AOA, and when leaving the work area. Loads shall be struck flush and secured to prohibit loss of material. If spillage occurs, such roadways shall be swept clean immediately after such spillage to allow for safe operation of vehicles as determined by the Engineer. If the Contractor is negligent in cleanup and LAX forces are required to perform the work, the expense of said cleanup shall be paid by the Contractor.

(2) No loose material or waste (FOD), capable of causing damage to aircraft or capable of being ingested into jet engines may be left in the working area on or next to runways, taxiways, ramps, or aprons. The Contractor shall direct special attention to all areas which are operational to aircraft during construction. These shall be kept clean and clear of all materials or debris at all time. Any food waste shall be promptly cleared to prevent attracting birds and animals.

**G. Existing Pavements and Facilities**

The Contractor shall preserve and/or protect existing and new pavements and other facilities from damage due to construction operations. Existing pavements, facilities, utilities, or equipment which are damaged shall be replaced or reconstructed to original strength and appearance at the Contractor's expense. The Contractor shall take immediate action to replace any damaged facilities and equipment and reconstruct any damaged area which is to remain in service.

Any distress appearing within and/or jeopardizing Caltrans Right-of-Way due to the proposed construction should immediately be notified to the Engineer and be repaired by the contractor at the Contractor’s expense to the satisfaction of the Engineer.

**H. Storage Areas**

(1) The Contractor Staging Area, as depicted on the plans, shall be used to store all idle equipment, supplies and construction materials. Storage shall not interfere with operational areas.

(2) When not in use during working hours, and at all other times, all material and equipment shall be stored at the storage site indicated on the drawings unless prior approval is provided by the Engineer.

(3) The Contractor shall not store materials or equipment in areas in which the equipment or materials will affect the operation of FAA electronic equipment.

(4) All equipment storage and movement shall have prior written approval of the Engineer.

(5) No materials may be stored on the Aircraft Operating Area (AOA).

(6) Contractor's vehicles, equipment and materials shall be stored in areas designated on the drawings. Upon completion of the work, the storage areas shall be cleaned up and returned to their original condition to the satisfaction of the Engineer.

(7) During all non-working hours, equipment shall be parked in the Contractor's Staging area designated on the drawings with the restrictions listed thereon. Parking of construction workers' private vehicles shall not be allowed within storage areas located on the AOA.

(8) The Staging area shall be used to store all bulk materials needed for the project must be fenced at the Contractor's expense. However, barricades with yellow flashing lights shall be installed where potential conflicts with aircraft or ground vehicular traffic exists. Stockpiles shall not penetrate the FAR Part 77 imaginary surfaces or present FOD problems.

(9) Equipment and materials shall not be stored between runways, except as approved, in writing, by the Engineer.

### 10-3.8 Obstructions to Navigation

**A.** Penetrations of the imaginary surfaces defined in FAR Part 77 shall not be permitted without advance notification of, and approval by, the Engineer. It may be necessary to file FAA Form 7460-1 with the FAA to obtain approval prior for operation of exceptionally tall equipment, including but not limited to vehicles, cranes, or other construction equipment, structures, stockpiled materials, excavated earth, etc. It shall be the Contractor's sole responsibility to file this document. Allow at least 45 days for FAA and review and approval prior to expected use of such equipment.

**B.** When penetrations more than 15 feet above ground level (AGL) are unavoidable, they shall be brought to the attention of the Engineer, as far in advance as possible to allow NOTAMS to be prepared and distributed to appropriate FAA divisions for publication and dissemination. Contractor shall comply with the provisions of AC 70/7460-1, latest edition, in the marking and lighting of obstacles. The Contractor shall allow at least 45 days for FAA review and approval. No delays will be granted the Contractor for his failure to submit the necessary documents in a timely manner.

**C.** Appropriate sketches shall be prepared by the Contractor with precise locations shown on the Airport Layout Plan, Height Restriction Plan, or other similar drawing, along with elevations depicting the obstructing object's relationship to the imaginary surfaces.

### 10-3.9 Daily Inspections

The Engineer will conduct a daily inspection of each construction site before workers leave for the day to ensure that areas surrounding the sites are safe for aircraft operations. Inspector(s) will be watchful for food scraps and debris that can be ingested into aircraft engines (FOD), loose polyethylene and other light materials capable of being blown onto aircraft movement areas by wind, unlighted construction and obstruction lights, vehicles and equipment left outside construction areas, construction areas left unlocked, access gates left open, weak partitions or fences, etc. All discrepancies shall be corrected before workers depart from the work site.

Inspectors will review potentially hazardous conditions which may occur during airport construction and maintenance include, but are not limited to the following:

**A.** Trenches, holes, or excavation on or adjacent to any open runway or related safety area.

**B.** Unmarked/unlighted holes or excavations in any apron, open taxiway, open taxilane, or related safety area.

**C.** Mounds or piles of earth, construction materials, temporary structures, or other objects on or in the vicinity of any open runway, taxiway, taxilane or in a related safety, approach or departure area.

**D.** Pavement drop-offs or pavement turf lips (either permanent or temporary) which would cause, if crossed at normal operating speeds, damage to aircraft that normally use the airport.

**E.** Vehicles or equipment (whether operating or idle) on any open runway, taxiway, taxilane, or in any related safety, approach or departure area.

**F.** Vehicles, equipment, excavations, stockpiles, or other materials which could impinge upon NAVAID critical areas and degrade or otherwise interfere with electronic signals from radios or electronic NAVAIDs or interfere with visual NAVAID facilities. NAVAID critical areas are shown on the plans.

**G.** Unmarked utility, NAVAID, weather service, runway lighting, or other power or signal cables that could be damaged during construction.

**H.** Objects (whether marked/flagged or not) or activities anywhere on or in the vicinity of airport which could be distracting, confusing, or alarming to pilots during aircraft operations.

**I.** Unflagged/unlighted low visibility items (such as tall cranes, drills, etc.) in the vicinity of an active runway, or in any approach or departure area.

**J.** Misleading or malfunctioning obstruction lights.

**K**. Unlighted/unmarked obstruction in an approach to any open runway.

**L.** Inadequate approach/departure surfaces (needed to assure adequate landing/takeoff clearance over obstructions or work or storage areas).

**M.** Inadequate, confusing, or misleading (to pilots) marking/lighting of runways (including, displaced or relocated thresholds), taxiways, or taxilanes.

**N.** Water, dirt, debris, or other transient accumulation which temporarily obscures pavement marking, pavement edges, or derogates the visibility of runway/taxiway marking, lighting or of construction and maintenance areas.

**O.** Inadequate or improper methods of marking, barricading, or lighting temporarily closed portions of airport operation areas.

**P**. Trash or other materials with foreign object damage (FOD) potential, whether on runways, taxiways, aprons or related safety areas.

**Q.** Inadequate fencing or other marking to separate construction or maintenance areas from open aircraft operating areas.

**R**. Inadequate control of vehicle and human access, and non-essential, non-aeronautical activities, on open aircraft operating areas.

**S.** Improper radio communication maintained between construction/ maintenance vehicles and LAWA Ops/Inspection or other on-field communications facility (e.g., FAA Flight Service Station (FSS) or Unicom radio).

**T.** Construction/maintenance activities or materials which could hamper airport rescue and fire fighting (ARFF) vehicle access from ARFF stations to all parts of the runway/taxiway system, runway approach and departure areas, or aircraft parking locations.

**U.** Bird attractants such as edibles (food scraps, etc.), trees, brush, other trash, grass/crop seeding, or pond water on or near the airport.

**V.** Personnel at the construction site without proper LAX identification.

**W.** No escorts for persons at the job site without proper identification.

**X.** Vehicles involved in the project that do not meet the safety requirements of LAX Rules and Regulations.

**Y.** Improperly marked, lighted and flagged vehicles involved in the project.

The time restrictions for all work shifts, including the nightly work shifts, are totally inclusive of the Contractor moving onto the site, performing work activities, performing all clean-up, having the work area, pavements, and haul routes inspected and approved by the inspector(s) and moving off the site. The Contractor shall provide adequate lighting for the needs of the inspection personnel.

Any Aircraft Movement Surface or adjoining runway, taxiway or taxilane safety area that does not pass inspection must remain closed until such time cleanup is performed and approved.

### 10-3.10 Emergency Procedures

**A.** The Contractor shall familiarize himself with airport emergency procedures and shall conduct his operation so as not to conflict with such events. Clear routes for Airport Rescue and Fire Fighting (ARFF) equipment shall be maintained in operational condition at all times.

**B.** In case of an emergency caused by an accident, fire, or personal injury or illness, Airport Police are to be immediately notified. Police will coordinate with other emergency agencies as necessary. The Contractor shall also notify the Engineer and Operations so that any coordination or closures that may be required can be addressed immediately.

### 10-3.11 Administrative Requirements

#### A. Applicability

The provisions of this section shall apply to the Prime Contractor, subcontractors at all tiers, suppliers and all others which may have access to the Air Operations Area by way of the Contractor's activities.

#### B. Exclusion from Claims

Impacts caused by failure of the Prime Contractor, subcontractors at all tiers, and all others to comply, implement and maintain the provisions of this section shall not be cause for a claim of delay or increased cost to LAWA.

## 10-4 MARKING OF EQUIPMENT/RESTRICTIONS ON CRANES

Each vehicle or piece of equipment anywhere on the Airport that extends higher than 15 feet above ground shall be equipped with a flag mounted firmly on the highest part of the equipment,

and shall be obstruction lighted per the current edition of FAA Advisory Circular 70/7460-1 when the visibility is less than three (3) miles. Federal Aviation Regulation Part 77, states that no permanent or temporary structure can exceed an imaginary surface which begins 500 feet south and north of the runway centerline, and extends outward and upward at a 7:1 ratio. As long as visibility is at or above 1 mile, there are not restrictions on the height of the crane. In addition, the crane must be obstruction lighted per Advisory Circular 70/7460-1 whenever visibility is less than three (3) miles and it must be lowered at the end of the day. Flags should be rectangular in shape with stiffeners to keep them from dropping in calm wind. This flag shall be not less than 3 feet square consisting of five 1-foot squares of international orange color and four 1-foot squares of white color.

Depending on the location of the construction site, there may be severe restrictions on the use of equipment that extends skyward, such as cranes and concrete pumping booms. Some of these restrictions include limitations on the height cranes can be extended during times of reduced visibility, e.g., cranes may not be raised unless visibility is 2 to 3 miles or greater. Contact the LAWA Engineering Bureau for further information, prior to submitting a bid, if cranes or other vertically extendable equipment will be used on the project.

If cranes or other equipment exceeding 15 feet in height are to be used, the Contractor will be required to submit for approval the FAA's application Form 7460-1 to:

**[CONFIRM ADDRESS]**

Federal Aviation Administration
Attention: Airports Division, AWP-600
P.O. Box 9207
Los Angeles, CA 90009

## 10-5 DOCUMENT CONTROL SERVICES ALLOWANCE

Document Control Services allowance is provided for the use of a LAWA-selected consultant(s) to provide construction document control and construction administration assistance for the Engineer during the construction phase of the project. The Contractor shall be paid for the Document Control Services Allowance based upon the actual invoice payment, plus a three (3%) mark-up for the Contractor's coordination and processing cost. No other compensation beyond the 3% mark-up shall be granted to the Contractor. All invoices from the LAWA-selected consultant shall be approved by the Engineer prior to the Contractor payment of said invoice. After payment to the consultant by the Contractor, the Contractor will be compensated under this allowance item as stipulated above. Any and all unused portions of the allowance will not be paid to the Contractor.

## [10-6 ESCROW BID DOCUMENTS]

### [A. Scope

(1) This Section requires that the three (3) low bidders submit, within the specified time after receipt of bids, one (1) copy of all documentary information including, but not limited to, electronic files generated in preparation of bid prices for this project. This material is hereinafter referred to as "Escrow Bid Documents". The Escrow Bid Documents of the Contractor will be held in escrow for the duration of the Contract.

(2) The successful Bidder agrees, as a condition of the award of the Contract, that the Escrow Bid Documents constitute all of the information used in preparation of the Bid, and that no other bid preparation information shall be considered in resolving disputes or claims. The successful bidder also agrees that nothing in the Escrow Bid Documents shall change or modify the terms or conditions of the Contract Documents.

## B. Ownership

(1) The Escrow Bid Documents are, and shall always remain, the property of the Contractor, subject to joint review by the City and the Contractor as provided herein. The Escrow Bid Documents are proprietary and secret information belonging to the Contractor and exempt from the Federal Freedom of Information Act, California Public Records Act, and the Los Angeles City Freedom of Information Act.

(2) The City stipulates and expressly acknowledges that the Escrow Bid Documents, as defined herein, constitute trade secrets. This acknowledgment is based on the City's express understanding that the information contained in the Escrow Bid Documents is not known outside the Bidder's business, is known only to a limited extent and only to a limited number of employees of the Bidder, is safeguarded while in the Bidder's possession, is extremely valuable to the Bidder and could be extremely valuable to the Bidder's competitors by virtue of it reflecting the Bidder's contemplated techniques of construction. The City acknowledges that the Bidder expended substantial sums of money in developing the information included in the Escrow Bid Documents and further acknowledges that it would be difficult for a competitor to replicate the information contained therein. The City further acknowledges that the Escrow Bid Documents and the information contained therein are made available to the City only because such action is an express prerequisite to award of the Contract. The City acknowledges that the Escrow Bid Documents include a compilation of information used in the Bidder's business, intended to give the Bidder an opportunity to obtain an advantage over competitors who do not know of or use the contents of the documentation. The City further agrees to safeguard the Escrow Bid Documents, and all information contained therein, against disclosure to the fullest extent permitted by law.

## C. Purpose

(1) The purpose of the Escrow Bid Documents procedure is intended to create a spirit of cooperation in an atmosphere of honesty and candor between the City and the Contractor.

(2) Escrow Bid Documents will be used to assist in the negotiation of price adjustments and Change Orders and in the settlement of disputes and claims. They will not be used for pre-award evaluation of the Contractor's anticipated methods of construction or to assess the Contractor's qualifications for performing the work.

## D. Format and Contents

(1) Bidders may submit Escrow Bid documents in their usual cost estimation format; a standard format is not required. It is not the intention of this Section to cause the Bidder extra work during the preparation of the Bid, but to ensure that the Escrow Bid Documents will be adequate to enable complete understanding and proper interpretation for their intended use. The Escrow Bid Documents shall be in English.

(2) It is required that the Escrow Bid Documents clearly itemize the estimated costs of performing the work of each Bid item contained in the Bid schedule. Bid items should be separated into sub-items as required to present a complete and detailed cost estimate and allow a detailed cost review. The Escrow Bid Documents shall include all quantity takeoffs, crew, equipment, calculations of rates of production and progress, copies of quotations from Subcontractors and Suppliers, and memoranda, narratives, add/deduct sheets, and all other information used by the Bidder to arrive at the prices contained in the Bid. Estimated costs should be broken down into the Bidder's usual estimate categories such as direct labor, repair labor, equipment ownership and operation, expendable materials, permanent materials, and subcontract cost, as appropriate. Plant and equipment and indirect costs should be detailed in the Bidder's usual format. The Contractor's reallocation of indirect costs, contingencies, markup and other items to each bid item shall be identified.

(3) All estimates for items of work that are based in whole or in part upon any baseline statements or information in the Geotechnical Baseline Report (GBR), shall clearly reference the baseline statements used. Contractor shall have no right to an adjustment in the Contract Price or the Contract Completion Date due to Differing Site Conditions of the General Conditions unless such baseline statements have been clearly identified in the Escrow Bid Documents.

(4) All cost shall be identified. For bid items amounting to less than $10,000, estimated units costs are acceptable without a detailed cost estimate, provided that labor, equipment, materials, and subcontracts, as applicable, are included and

provided that indirect costs, contingencies, and markups, as applicable, are allocated. Bid documents provided by the City need not be included in the Escrow Bid Documents unless needed to comply with the following requirements.

## E. Submittal

(1) The Escrow Bid Documents shall be submitted by the three (3) low Bidders in sealed containers within twenty four (24) hours after the time for receipt of Bids. The containers shall be clearly marked on the outside with the Bidder's name, date of submittal, project name and the words "Escrow Bid Documents."

(2) The Escrow Bid Documents shall be accompanied with the certification (a sample is included), signed by an individual authorized by the Bidder to execute Bids, stating that the material in the Escrow Bid Documents constitutes all the documentary information used in preparation of the Bid and that the Bidder has personally examined the contents of the Escrow Bid Documents container and has found that the documents in the container are complete.

BID DOCUMENTATION CERTIFICATION

THE UNDERSIGNED HEREBY CERTIFIES THAT THE BID DOCUMENTATION CONTAINED HEREIN CONSTITUTES ALL OF THE INFORMATION USED IN PREPARATION OF THE BID AND THAT I HAVE PERSONALLY EXAMINED THESE CONTENTS AND HAVE FOUND THAT THIS BID DOCUMENTATION IS COMPLETE.

SIGNATURE: _____

NAME: _____

TITLE: _____

FIRM: _____

DATE: _____

(3) Escrow Bid Documents of the apparent successful Bidder will be examined, organized and inventoried by representatives of the City, together with members of the Contractor’s staff who are knowledgeable of how the Bid was prepared. This examination is to ensure that the Escrow Bid Documents are legible and complete. It will not constitute approval of proposed construction methods, estimating assumptions, or interpretations of Contract Documents. Examination will not alter any condition or term of the Contract.

(4) If all the documentation required in Section D, "Format and Contents", has not been included in the original submittal, additional documentation shall be submitted, at the City's sole discretion, within twenty four (24) hours after the original inventory and examination of the Escrow Bid Documents and prior to award of the Contract. The detailed breakdown of estimated costs shall be reconciled and revised, if appropriate, by agreement between the Contractor and the City before making the award. If the Contract is not awarded to the apparent successful Bidder, the Escrow Bid Documents of the Bidder next to be considered for award shall be processed as described above.

(5) Timely submission of complete Escrow Bid Documents is an essential element of the Bidder's responsiveness and a prerequisite to a Contract award. Failure to provide the necessary Escrow Bid Documents shall render the Bid non-responsive. Escrow Bid Documents of the unsuccessful Bidders will be returned, unopened, following award of the Contract.

(6) If any Bidder's Bid is based on subcontracting any part of the work, each Subcontractor, whose total subcontract price exceeds five percent (5%) of the total Contract price bid by the Bidder, shall provide separate Escrow Bid Documents to be included with those of the Bidder. Such documents shall be opened and examined in the same manner and at the same time as the examination described above for the apparent successful Bidder.

(7) If the Contractor wishes to subcontract any portion of the work after award, the City retains the right to require the Contractor to submit Escrow Bid Documents from the Subcontractor before the subcontract is approved.

## F. Storage

The Escrow Bid Documents will be placed in escrow, for the life of the Contract, in a mutually agreeable institution. The cost of storage will be paid by the City.

## G. Examination

(1) The Escrow Bid Documents shall be examined by both the City and the Contractor, at any time deemed necessary by either the City or the Contractor, to assist in the negotiation of price adjustments and Change Orders or the settlement of disputes and claims.

(2) Examination of the Escrow Bid Documents is subject to the following conditions:

a. As trade secrets, the Escrow Bid Documents are proprietary and confidential.

b. The City and the Contractor shall each designate, in writing to the other party and within ten (10) days after execution of the Contract, representatives who are authorized to examine the Escrow Bid Documents. No other person shall have access to the Escrow Bid Documents.

c. Access to the Escrow Bid Documents may take place only in the presence of duly designated representatives of both the City and the Contractor.

(3) The Escrow Bid Documents at all times remain the property of the Contractor and the City will take all reasonable steps necessary to protect confidentiality.

**H. Final Disposition**

(1) The Escrow Bid Documents will be returned to the Contractor at such time as the following conditions have been satisfied.

a. The Contract has been completed.

b. Final payment has been issued by the City.

c. All litigation has been completed, and a written agreement has been executed between the City and the Contractor that no further litigation will be made.

(2) The Escrow Bid Documents will be sealed and promptly returned to the Contractor by the party in charge of the Escrow Bid Documents. Reproduction of any portion of the Escrow Bid Documents will not be permitted at any time without the written permission of the Contractor.]

## [10-7 PARTNERING]

[LAWA intends to encourage the foundation of a cooperative partnership with the Contractor and his subcontractors. To this goal, the successful bidder will have the opportunity to enter into a cooperative partnership agreement with LAWA for the contract. The objective of this Partnering agreement would be effective completion of the Work on time and to achieve a standard of quality that would be a source of pride to both LAWA and the Contractor. Partnering is intended only to establish an environment of cooperation between the parties and will not affect the terms of the contract.

The partnership will be structured to draw on the strengths of each organization to identify and achieve reciprocal goals. It will focus on good communication and creative cooperation to resolve problems in a timely, professional, and non-adversarial manner. The objective is to provide a quality project, safely, on time and within budget so that all are proud to contribute.

This partnership would be bilateral in makeup, and participation will be totally voluntary. Any cost associated with effectuating this partnership will be agreed to by both parties and will be shared equally.

To implement this partnership initiative, at a mutually agreed date between both parties, a one day partnership development and team building workshop, to be attended by the Contractor's on-site staff, LAWA personnel, LAWA Design and Construction Management teams and other key agencies associated with the project will be held. The cost of this training, excluding staff labor charges, will be equally shared between Contractor and LAWA. Subsequent partnering sessions may be held, if agreed to by all partners

The City's share will be paid through a fixed cash allowance that has been allocated for the Opportunity to Partner and is included as an item of the Bid breakdown. Overhead and profit shall be as per Section 9.4, Allowances in the Special Provisions. However, if the Opportunity to Partner training funds are not expended, only partially expended, or over expended (only with the Engineer's prior approval), then an appropriate change order shall be executed in accordance with the provisions of Section 3-3 Extra Work.]

## [10-8 CONSTRUCTION ENVIRONMENTAL MITIGATION REQUIREMENTS

### 10-8.1 GENERAL

This section covers construction related mitigation requirements as agreed to by the LAX Coalition and LAWA in connection with, and as a result of, the Community Benefits Agreement, effective date February 2005. This section consists of traffic mitigation measures, air quality construction related measures, restrictions on construction material stockpiles, and other miscellaneous items, as included hereafter.

The Contractor shall implement and comply with these requirements and standards in performing the work of this contract.

Compliance with this Section does not exempt the Contractor from compliance with other applicable permits, approvals, requirements, rules and regulations of other agencies with jurisdiction over the work of this contract.

Specific documents referenced in this section are available for review at the Engineer's Office.

### 10-8.2 TRAFFIC

The Contractor shall comply with the following traffic requirements:

#### A. Designated Haul Routes

The Contractor shall use the designated haul routes, as shown on the Contract Plans, for all construction traffic, deliveries, and employee travel. Haul routes shall be located away from residential areas. Construction trucks will not be allowed on:

a. 104th Street between Hawthorne Boulevard and Inglewood Avenue;

b. Inglewood Avenue between Century Boulevard and Imperial Highway; and

c. Lennox Boulevard between Hawthorne Boulevard and Inglewood Ave.

A fine of $1,000 per violation shall be assessed against the Contractor and his/her subcontractors/suppliers who are found in violation of the designated truck route, as shown on the Contract Plans.

## 10-8.3 ROCK-CRUSHING OPERATIONS AND CONSTRUCTION MATERIAL STOCKPILES

The Contractor shall submit a Contractor Recycling Plan (CRP) within 30 days from Notice to Proceed for approval by the Engineer. The Contractor Recycling Plan shall describe what materials will be recycled and how the recycling will be implemented. The CRP shall be approved by the Engineer prior to start of construction or demolition.

### A. Rock-crushing Operations

To reduce impacts from emissions of fugitive dust, the Contractor shall locate rock-crushing operations, if any, in areas away from LAX-adjacent residential areas, as shown on the plans, and/or as approved by the Engineer.

### B. Construction Material Stockpiles Locations and Maintenance

Stockpile locations shall be confined to the areas shown on the plans. Stockpile locations/staging areas shall be accessed by construction vehicles with minimal disruption to adjacent public streets.

The Contractor shall seal the surface of all stockpiles of rock and earth materials that are not being actively constructed or mined with a dust control product. Treatment may include water spray via irrigation systems, proprietary non-toxic crusting agents, anchored geotextile fabric or tarps, erosion control fabric, seeding, or other methods approved by the Engineer. The method employed shall be appropriate for the expected duration of, and the material in, the stockpile. Throughout the duration of the project, the Contractor will be required to maintain the dust control seal to meet the requirements of this section. The Contractor shall submit the proposed method of sealing the stockpile area to the Engineer for approval prior to its use. All costs of sealing, and maintaining, stockpile seals are considered incidental to the Environmental Mitigation pay item, and no additional payment will be made.

In addition, the Contractor shall use operational controls to reduce the dust potential of stockpiles. These operational controls may include, but are not limited to:

1) Locating stockpiles behind natural or manufactured windbreaks.
2) Locating the working area on the leeward side of the active piles.

3) Use stone ladders, telescopic chutes, stacker conveyors of other mechanical devices to limit the drop of fall and exposure to wind when the stockpile is being constructed.
4) Limiting the height of the stockpile.
5) Minimize vehicle traffic, and vehicle speeds, in and around stockpiles.
6) Add or remove material from the downwind portion of the storage pile.
7) Avoid steep sides or faces on stockpiles.

See other sections of the project specifications for more stockpile dust control requirements.

## 10-8.4 AIR QUALITY

Contractor shall make every effort to reduce air pollutant emissions from construction traffic and equipment both on and off the airport. This includes, but is not limited to, use of construction equipment with "cleaner burning diesel" fuel and exhaust emission controls. The Contractor shall use alternative fuel or low emission vehicles to the maximum extent practicable.

The Contractor shall prepare and submit to the Engineer for approval, within 30 days from Notice to Proceed, a list of all equipment to be used, including Sub-Contractors' equipment, necessary to complete the Work. Said list shall include equipment type, model, fuel source and emission characteristics. The equipment list shall be updated monthly and submitted to the Engineer. The Contractor shall ensure that equipment is in proper working order as to minimize harmful emissions.

The Contractor shall submit to the Engineer a monthly log showing daily fugitive dust mitigation measures. The log shall specify the subject area, mitigation measures utilized, frequency of control and other relevant information.

All diesel equipment used for construction shall be outfitted with the Best Available Control Technology (BACT) devices certified by the California Air Resources Board (CARB - see www.carb.gov). These devices shall primarily reduce diesel emissions of Particulate Matter (PM), including fine PM, and secondarily, reduce emission of NOx. This requirement shall apply to diesel powered off-road equipment (such as construction machinery), on-road equipment (such as trucks), and stationary diesel engines (such as generators). The BACT device shall be approved by CARB as specified on the website. A copy of each unit's certified BACT documentation, and each unit's CARB or SCAQMD operating permit, shall be provided at the time of mobilization of each applicable unit of equipment. This requirement applies diesel equipment owned and/or operated by the Prime Contractor and Sub-Contractors.

Any emission control devise used by the Contractor shall achieve emission reduction no less than what could be achieved by a Level 2 diesel emission control strategy for a similar-sized engine as defined by CARB regulations.

An exemption to the above may be warranted for a piece of construction-related diesel equipment for which the operator provides a written finding, based upon appropriate market research and approved by the Engineer, that the best available emission control device for reducing the emissions of pollutants is unavailable for that equipment. In such case, the Contractor shall use other technology for reducing the emission of pollutants, if any is available and appropriate for that vehicle, and as deemed appropriate by the Engineer.

Heavy duty and medium-heavy duty vehicles equipment for the Work that are subject to the CARB Voluntary Software Upgrade Program shall have the low NOx Rebuild Software installed. Subject vehicles are model year 1993-1999 with electronically controlled diesel engines manufactured by Caterpillar, Cummins, Detroit Diesel, International, Mack/Renault and Volvo. Documentation of this software upgrade shall be submitted at time of mobilization or before vehicles are utilized.

Under no circumstances shall an emission reduction device or strategy used on the construction site increase the emission of any pollutant above that which is the standard for that engine.

**A. Non-Road Mobile Source Controls**

**1.** The Contractor shall prohibit staging or parking of construction vehicles (including workers' vehicles) on streets adjacent to schools, daycare centers, and hospitals.

**2.** The Contractor shall prohibit construction diesel vehicles or equipment from idling in excess of the idling restrictions as defined in CARB Vehicle Idling Rule. The Contractor shall advise drivers and operators of these requirements at the pre-construction orientation meeting, remind them on a daily basis, and post signs in appropriate places indicating the CARB Vehicle Idling Rule. Exemptions may be granted for safety-related and operational reasons, as defined in CARB or as approved by the Engineer. The Contractor and subcontractors shall have policies and procedures in place for compliance with the Vehicle Idling Rule and a copy of such shall be submitted within 30 days of Notice to Proceed to the Engineer for approval.

**3.** Whenever possible, the Contractor shall utilize on-site rock crushing facility during construction to reuse rock/concrete and minimize off-site truck haul trips.

**B. Stationary Point Source Controls**

The Contractor shall specify a combination of electricity from power poles and electricity from portable diesel- or gasoline-fueled generators using "cleaner burning diesel" fuel and exhaust emission controls for his electrical energy requirements.

1. The Contractor shall obtain approval of the Engineer for the use of internal combustion engine water pumps, power generators, air compressors and other related construction equipment when an option exists to utilize grid power or electric powered equipment.

2. In accordance with SCAQMD Rule 431.2, all diesel construction equipment shall use only Ultra Low Sulfur Diesel fuel (15 ppm or lower), so long as there are adequate supplies of ULSD in the Southern California area. If adequate supplies of ULSD are not available in the Southern California area, then other fuels may be used, provided that the other fuels do not result in emission of fine PM or nitrogen oxides greater than that which would be produced by use of ULSD at 15 ppm or lower. Cost of ULSD shall not be a consideration in determining "adequate supplies". Contractor shall maintain records of diesel fuel procurement for inspection by the Engineer. Diesel fuel samples will be taken periodically by the Engineer and analyzed by an independent laboratory.

3. No emission control device shall increase the emission of any pollutant above that which is the standard for that engine.

## 10-8.5 COMPLIANCE AND ENFORCEMENT

It is the Contractor's responsibility to be in compliance with all the requirements in these specifications. The Contractor shall provide to the Engineer a monthly summary status report of compliance of these specifications. The Engineer will randomly monitor the Contractor's compliance with mitigation requirements throughout the term of the Contract.

The Engineer retains the authority to assess penalties for non-compliance. These penalties will be of $1,000 per day and per occurrence for each non-compliance of the specified requirements herein as deemed by the Engineer.

All contractors' records related to the implementation of these construction related measures are subject to a Third Party Monitor review and LAWA audit at any time, and for the duration of the contract.

## 10-8.6 METHOD OF MEASUREMENT AND BASIS OF PAYMENT

[No separate payment will be made for construction environmental mitigation services which shall be considered incidental to other bid items].

[Payment will be made at the contract lump sum price for "Environmental Mitigation Requirements", which price shall be full compensation for furnishing all materials, labor, equipment, tools, and incidentals necessary to comply with the requirements set forth in this Section.]

## [10-9 OTHER REQUIREMENTS]

[Description]

## BASIS OF PAYMENT

Payment will be made under:

| | | |
|---|---|---|
| Item 10.1 | Document Control Services ..... | per Allowance |
| Item 10.2 | **[Opportunity to Partner][Other]**..... | per Allowance |
| [Item 10.3 | Environmental Mitigation Requirements..... | per lump sum] |

**END OF SECTION 10**

**THIS PAGE LEFT BLANK INTENTIONALLY**