

TRANSMITTAL 4: MITIGATION LIST

San Pedro Waterfront Project Mitigation Measures

AIR QUALITY

MM AQ-1. Harbor Craft Engine Standards.

All harbor craft used during the construction phase of the proposed Project shall, at a minimum, be repowered to meet the cleanest existing marine engine emission standards or EPA Tier 2. Additionally, where available, harbor craft shall meet the proposed EPA Tier 3 (which are proposed to be phased-in beginning 2009) or cleaner marine engine emission standards.

The harbor craft measure shall be met unless one of the following circumstances exists and the contractor is able to provide proof that any of these circumstances exists:

1. A piece of specialized equipment is unavailable in a controlled form within the state of California, including through a leasing agreement.
2. A contractor has applied for necessary incentive funds to put controls on a piece of uncontrolled equipment planned for use on the project, but the application process is not yet approved, or the application has been approved, but funds are not yet available.
3. A contractor has ordered a control device for a piece of equipment planned for use on the project, or the contractor has ordered a new piece of controlled equipment to replace the uncontrolled equipment, but that order has not been completed by the manufacturer or dealer. In addition, for this exemption to apply, the contractor must attempt to lease controlled equipment to avoid using uncontrolled equipment, but no dealer within 200 miles of the project has the controlled equipment available for lease.

MM AQ-2. Dredging Equipment Electrification.

The proposed Project shall use electric dredging equipment.

MM AQ-3. Fleet Modernization for Onroad Trucks.

1. Trucks hauling materials such as debris or fill shall be fully covered while operating off Port property.
2. Idling shall be restricted to a maximum of 5 minutes when not in use.
3. Tier Specifications:
 - January 1, 2009 to December 31, 2011: All onroad heavy-duty diesel trucks with a gross vehicle weight rating (GVWR) of 19,500 pounds or greater used on site or to transport materials to and from the site must contain an EPA 2004 engine model year or newer in order to comply with EPA 2004 onroad emission standards.
 - Post-January 2011: All onroad heavy-duty diesel trucks with a GVWR of 19,500 pounds or greater used on site or to transport materials to and from the site shall comply with 2010 emission standards, where available.

A copy of each unit's certified EPA rating, BACT documentation, and CARB or SCAQMD operating permit shall be provided at the time of mobilization of each applicable unit of equipment.

The construction equipment measures shall be met, unless one of the following circumstances exist and the contractor is able to provide proof that any of these circumstances exists:

1. A piece of specialized equipment is unavailable in a controlled form within the state of California, including through a leasing agreement.
2. A contractor has applied for necessary incentive funds to put controls on a piece of uncontrolled equipment planned for use on the project, but the application process is not yet approved, or the application has been approved, but funds are not yet available.
3. A contractor has ordered a control device for a piece of equipment planned for use on the project, or the contractor has ordered a new piece of controlled equipment to replace the uncontrolled equipment, but that order has not been completed by the manufacturer or dealer. In addition, for this exemption to apply, the contractor must attempt to lease controlled equipment to avoid using uncontrolled equipment, but no dealer within 200 miles of the project has the controlled equipment available for lease.

MM AQ-4. Fleet Modernization for Construction Equipment.

1. Construction equipment shall incorporate, where feasible, emissions savings technology such as hybrid drives and specific fuel economy standards.
2. Idling shall be restricted to a maximum of 5 minutes when not in use.
3. Tier Specifications:
 - January 1, 2009, to December 31, 2011: All offroad diesel-powered construction equipment greater than 50 hp, except derrick barges and marine vessels, shall meet Tier 2 offroad emissions standards. In addition, all construction equipment shall be outfitted with the BACT devices certified by CARB. Any emissions control device used by the contractor shall achieve emissions reductions that are no less than what could be achieved by a Level 2 or Level 3 diesel emissions control strategy for a similarly sized engine as defined by CARB regulations.
 - January 1, 2012, to December 31, 2014: All offroad diesel-powered construction equipment greater than 50 hp, except derrick barges and marine vessels, shall meet Tier 3 offroad emissions standards. In addition, all construction equipment shall be outfitted with BACT devices certified by CARB. Any emissions control device used by the contractor shall achieve emissions reductions that are no less than what could be achieved by a Level 3 diesel emissions control strategy for a similarly sized engine as defined by CARB regulations.
 - Post-January 1, 2015: All offroad diesel-powered construction equipment greater than 50 hp shall meet the Tier 4 emission standards, where available. In addition, all construction equipment shall be outfitted with BACT devices certified by CARB. Any emissions control device used by the contractor shall achieve emissions reductions that are no less than what could be achieved by a Level 3 diesel emissions control strategy for a similarly sized engine as defined by CARB regulations.

A copy of each unit's certified tier specification, BACT documentation, and CARB or SCAQMD operating permit shall be provided at the time of mobilization of each applicable unit of equipment.

The construction equipment measures shall be met, unless one of the following circumstances exists and the contractor is able to provide proof that any of these circumstances exists:

1. A piece of specialized equipment is unavailable in a controlled form within the state of California, including through a leasing agreement.
2. A contractor has applied for necessary incentive funds to put controls on a piece of uncontrolled equipment planned for use on the project, but the application process is not yet approved, or the application has been approved, but funds are not yet available.
3. A contractor has ordered a control device for a piece of equipment planned for use on the project, or the contractor has ordered a new piece of controlled equipment to replace the uncontrolled equipment, but that order has not been completed by the manufacturer or dealer. In addition, for this exemption to apply, the contractor must attempt to lease controlled equipment to avoid using uncontrolled equipment, but no dealer within 200 miles of the project has the controlled equipment available for lease.

MM AQ-5. Additional Fugitive Dust Controls.

The construction contractor shall apply for a SCAQMD Rule 403 Dust Control Permit.

The construction contractor shall further reduce fugitive dust emissions to 90% from uncontrolled levels. The construction contractor shall designate personnel to monitor the dust control program and to order increased watering or other dust control measures, as necessary, to ensure a 90% control level. Their duties shall include holiday and weekend periods when work may not be in progress.

The following measures, at minimum, must be part of the contractor Rule 403 dust control plan:

- Active grading sites shall be watered one additional time per day beyond that required by Rule 403;
- Contractors shall apply approved nontoxic chemical soil stabilizers to all inactive construction areas or replace groundcover in disturbed areas;
- Construction contractors shall provide temporary wind fencing around sites being graded or cleared;
- Trucks hauling dirt, sand, or gravel shall be covered or shall maintain at least 2 feet of freeboard in accordance with Section 23114 of the California Vehicle Code;
- Construction contractors shall install wheel washers where vehicles enter and exit unpaved roads onto paved roads or wash off tires of vehicles and any equipment leaving the construction site;
- The grading contractor shall suspend all soil disturbance activities when winds exceed 25 mph or when visible dust plumes emanate from a site; disturbed areas shall be stabilized if construction is delayed;
- Trucks hauling materials such as debris or fill shall be fully covered while operating off LAHD property;
- A construction relations officer shall be appointed to act as a community liaison concerning onsite construction activity including resolution of issues related to PM10 generation;

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- All streets shall be swept at least once a day using South Coast Air Quality Management District (SCAQMD) Rule 1186, 1186.1 certified street sweepers or roadway washing trucks if visible soil materials are carried to adjacent streets;
- Water or non-toxic soil stabilizer shall be applied three times daily to all unpaved parking or staging areas or unpaved road surfaces;
- Roads and shoulders shall be paved; and
- Water shall be applied three times daily or as needed to areas where soil is disturbed.

MM AQ-6. Best Management Practices.

The following types of measures are required on construction equipment (including on-road trucks):

1. Use diesel oxidation catalysts and catalyzed diesel particulate traps.
2. Maintain equipment according to manufacturers' specifications
3. Restrict idling of construction equipment to a maximum of 5 minutes when not in use
4. Install high-pressure fuel injectors on construction equipment vehicles

MM AQ-7. General Mitigation Measure.

For any of the above mitigation measures (MM AQ-1 through AQ-6), if a CARB-certified technology becomes available and is shown to be as good as or better in terms of emissions performance than the existing measure, the technology could replace the existing measure pending approval by the LAHD.

MM AQ-8. Special Precautions near Sensitive Sites.

When construction activities are planned within 1,000 feet of sensitive receptors (defined as schools, playgrounds, day care centers, and hospitals), the construction contractor shall notify each of these sites in writing at least 30 days before construction activities begin.

MM AQ-26. Leadership in Energy and Environmental Design.

The cruise terminal building shall obtain the Leadership in Energy and Environmental Design (LEED) gold certification level.

MM AQ-27. Compact Fluorescent Light Bulbs.

All interior terminal buildings shall use compact fluorescent light bulbs.

MM AQ-29. Solar Panels.

Solar panels shall be installed on the cruise terminal building.

MM AQ-30. Tree Planting.

Shade trees shall be planted around the cruise terminal building.

MM AQ-9. Alternative Maritime Power (AMP) for Cruise Vessels.

Cruise vessels calling at the Inner Harbor Cruise Terminal shall use AMP at the following percentages while hoteling in the Port:

- 30% of all calls in 2009, and
- 80% of all calls in 2013 and thereafter to accommodate existing lease agreements and home ported vessels. This portion of the mitigation measure is not quantified.

Ships calling at the Outer Harbor Cruise Terminal shall use AMP while hoteling at the Port as follows (minimum percentage):

- 97% of all calls in 2013 and thereafter.

Additionally, by 2013, all ships retrofitted for AMP shall be required to use AMP while hoteling, with a compliance rate of 100%, with the exception of circumstances when an AMP-capable berth is unavailable due to utilization by another AMP-capable ship.

MM AQ-10. Low-Sulfur Fuel.

All ships (100%) calling at the Inner and Outer Harbor Cruise Terminals shall use low-sulfur fuel (maximum sulfur content of 0.2 percent) in auxiliary engines, main engines, and boilers within 40 nm of Point Fermin (including hoteling for non-AMP ships) beginning on Day 1 of operation. Ships with mono-tank systems or having technical issues prohibiting use of low sulfur fuel would be exempt from this requirement. The tenant shall notify the Port of such vessels prior to arrival and shall make every effort to retrofit such ships within one year.

The following minimum annual participation rates were assumed in the air quality analysis:

Inner Harbor

- 30% of all calls in 2009, and
- 90% of all calls in 2013 and thereafter.

Outer Harbor:

- 90% of all calls in 2013.

Low-sulfur fuel requirements shall apply independently of AMP participation.

MM AQ-11. Vessel Speed-Reduction Program.

Ships calling at the Inner Harbor Cruise Terminal shall comply with the expanded VSRP of 12 knots between 40 nm from Point Fermin and the Precautionary Area in the following implementation schedule:

- 75% of all calls in 2009, and
- 100% of all calls in 2013 and thereafter.

Ships calling at the Outer Harbor Cruise Terminal shall comply with the expanded VSRP of 12 knots between 40 nm from Point Fermin and the Precautionary Area in the following implementation schedule:

- 100% of all calls in 2013 and thereafter.

Currently, the VSR program is a voluntary program. This mitigation measure requires cruise vessels to participate in the VSR program at higher rates than those currently being achieved. The cruise speed for a cruise vessel ranges from about 18 to 24 knots, depending on the size of the ship (larger ships generally cruise at higher speeds). For a ship with a 23-knot cruising speed, for example, a reduction in speed to 12 knots reduces the main engine load factor from 83% to 14% due to the cubic relationship of load factor to speed. In addition, this mitigation measure expands the VSRP zone from 20 nm to 40 nm from Point Fermin.

MM AQ-12. New Vessel Builds.

The purchaser shall confer with the ship designer and engine manufacture to determine the feasibility of incorporating all emission reduction technology and/or design options and when ordering new ships bound for the Port of Los Angeles. Such technology shall be designed to reduce criteria pollutant emissions (NO_x, SO_x, and PM) and GHG emission (CO, CH₄, N₂O, and HFCs). Design considerations and technology shall include, but is not limited to:

1. Selective Catalytic Reduction Technology
2. Exhaust Gas Recirculation
3. In-line fuel emulsification technology
4. Diesel Particulate Filters (DPFs) or exhaust scrubbers
5. Medium Speed Marine Engine (Common Rail) Direct Fuel Injection
6. Low NO_x Burners for Boilers
7. Implement fuel economy standards by vessel class and engine
8. Diesel-electric pod propulsion systems
9. Main engine controls will meet at a minimum SIP requirements

MM AQ-13. Clean Terminal Equipment.

All terminal equipment shall be electric, where available.

All terminal equipment other than electric forklifts at the cruise terminal building shall implement the following measures:

- Beginning in 2009, all non-yard tractor purchases shall be either (1) the cleanest available NOX alternative-fueled engine meeting 0.015 g/bhp-hr for PM or (2) the cleanest available NOX diesel-fueled engine meeting 0.015 g/bhp-hr for PM. If there are no engines available that meet 0.015 g/bhp-hr for PM, the new engines shall be the cleanest available (either fuel type) and shall have the cleanest VDEC;
- By the end of 2012, all non-yard tractor terminal equipment less than 750 hp shall meet the EPA Tier 4 nonroad engine standards; and
- By the end of 2014, all terminal equipment shall meet EPA Tier 4 nonroad engine standards.

MM AQ-14. LNG-Powered or LEV equivalent Shuttle Busses.

All shuttle buses from parking lots to cruise ship terminals shall either be LNG powered or a low-emission vehicle (LEV) equivalent that will reduce emissions at or below LNG abilities.

MM AQ-15. Truck Emission Standards.

Onroad heavy-duty diesel trucks (above 14,000 pounds) entering the cruise terminal building shall achieve EPA's 2007 Heavy-Duty Highway Diesel Rule emission standards for onroad heavy-duty diesel engines (EPA 2001a) in the following percentages: 20% in 2009, 40% in 2012, and 80% in 2015 and thereafter.

MM AQ-16. Truck Idling-Reduction Measure.

The cruise terminal building operator shall ensure that heavy-duty truck idling is reduced at both the Inner and Outer Harbor Cruise Terminal. Potential methods to reduce idling include, but are not limited to, the following: (1) operator shall maximize the times when the gates are left open, including during off-peak hours, (2) operator shall implement an appointment-based truck delivery and pick-up system to minimize truck queuing, and (3) operator shall design gate to exceed truck-flow capacity to ensure queuing is minimized.

MM AQ-17. AMP for Tugboats.

Crowley and Millennium tugboats calling at the North Harbor cut shall use AMP while hoteling at the Port as follows (minimum percentage):

- 100% compliance in 2014.

MM AQ-18. Engine Standards for Tugboats.

Tugboats calling at the North Harbor cut shall be repowered to meet the cleanest existing marine engine emission standards or EPA Tier 2, whichever is more stringent at the time of engine replacement, as follows (minimum percentages):

- 30% in 2010, and
- 100% in 2014.

Tugs calling at the North Harbor cut shall be repowered to meet the cleanest existing marine engine emission standards or EPA Tier 3, whichever is more stringent at the time of engine replacement, as follows (minimum percentages):

- 20% in 2015,
- 50% in 2018, and
- 100% in 2020.

MM AQ-19. Tugboats Idling Reduction.

The tug companies shall ensure that tug idling is reduced to less than 10 minutes at the cruise terminal building.

MM AQ-20. Catalina Express Ferry Idling Reduction Measure.

Catalina Express shall ensure that ferry idling is reduced to less than 5 minutes at the cruise terminal building.

MM AQ-21. Catalina Express Ferry Engine Standards.

Ferries calling at the Catalina Express Terminal shall be repowered to meet the cleanest marine engine emission standards in existence at the time of repowering as follows (minimum percentages):

- 30% in 2010, and
- 100% in 2014.

MM AQ-22. Periodic Review of New Technology and Regulations.

LAHD shall require the cruise terminal and tug company tenants to review, in terms of feasibility, any LAHD-identified or other new emissions-reduction technology, and report to LAHD. Such technology feasibility reviews shall take place at the time of LAHD's consideration of any lease amendment or facility modification for the cruise terminal and tug company property. If the technology is determined by LAHD to be feasible in terms of cost, technical, and operational feasibility, the tenant shall work with LAHD to implement such technology.

MM AQ-23. Throughput Tracking.

If the proposed Project exceeds project throughput assumptions/projections (in terms of cruise terminal passenger numbers) anticipated through the years 2011, 2015, 2022, or 2037, LAHD staff shall evaluate the effects of this on the emissions sources (ship and truck calls) relative to the EIS/EIR. If it is determined that these emissions sources exceed EIS/EIR assumptions, staff shall evaluate actual air emissions for comparison with the EIS/EIR and if the criteria pollutant emissions exceed those in the EIS/EIR, then new or additional mitigations would be applied

MM AQ-24. General Mitigation Measure.

For any of the mitigation measures MM AQ-9 through MM AQ-21, if any kind of technology becomes available and is shown to be as good or as better in terms of emissions reduction performance than the existing measure, the technology could replace the existing measure pending approval by LAHD. The technology's emissions reductions must be verifiable through EPA, CARB, or other reputable certification and/or demonstration studies to LAHD's satisfaction.

MM AQ-25. Recycling.

The terminal buildings shall achieve a minimum recycling rate of 40% by 2012 and 60% by 2015. Recycled materials shall include:

- white and colored paper;
- Post-it notes;
- magazines;
- newspaper;
- file folders;
- all envelopes, including those with plastic windows;
- all cardboard boxes and cartons;
- all metal and aluminum cans;
- glass bottles and jars; and
- all plastic bottles.

MM AQ-28: Energy Audit.

The tenant shall conduct a third-party energy audit every 5 years and install innovative power-saving technology where feasible, such as power-factor correction systems and lighting power regulators. Such systems help maximize usable electric current and eliminate wasted electricity, thereby lowering overall electricity use.

BIOLOGICAL RESOURCES

MM BIO-1. Monitor and manage turbidity.

Although in-water activities and Promenade construction adjacent to and along Cabrillo Beach will not occur during the least tern nesting season (April through August), construction activities in this vicinity will be monitored for visible turbidity in shallow water adjacent to the San Pedro de Salinas Salt Marsh to prevent adverse impacts to eelgrass growth and survival and least tern foraging habitat. This requirement will be monitored by the qualified biologist and will be based on visually observed differences between ambient surface water conditions and any dredging turbidity plume. The biologist will report to the LAHD construction manager and environmental manager, the USACE Regulatory Division, and CDFG/USFWS any turbidity from project construction activities that enters the shallow-water area outside of the salt marsh. Dredging activities will be modified in consultation with CDFG/USFWS. Corrective measures could include using a different dredge bucket to reduce water entrainment, installation of a floating silt curtain to contain turbid water, or other measures.

MM BIO-2. Conduct nesting bird surveys.

This measure applies if construction is to occur between February 15 and September 1. Prior to ground-disturbing activities, a qualified biologist will conduct surveys for the presence of black crowned night herons, blue herons, and other nesting birds within Berth 78–Ports O’Call or other appropriate and known

locations within the study area that contain potential nesting bird habitat. Surveys will be conducted 24 hours prior to the clearing, removal, or grubbing of any vegetation or ground disturbance. If active nests of species protected under the MBTA and/or similar provisions of the California Fish and Game Code (i.e., native birds including but not limited to the black-crowned night heron) are located, then a barrier installed at a 50–100 foot radius from the nest(s) will be established and the tree/location containing the nest will be marked and will remain in place and undisturbed until a qualified biologist performs a survey to determine that the young have fledged or the nest is no longer active.

MM BIO-3. Avoid marine mammals.

The contractor will be required to use sound abatement techniques to reduce both noise and vibrations from pile driving activities. Sound abatement techniques will include, but are not limited to, vibration or hydraulic insertion techniques, drilled or augered holes for cast-in-place piles, bubble curtain technology, and sound aprons where feasible. At the initiation of each pile driving event, and after breaks of more than 15 minutes, the pile driving will also employ a “soft-start” in which the hammer is operated at less than full capacity (i.e., approximately 40–60% energy levels) with no less than a 1-minute interval between each strike for a 5-minute period.

Although it is expected that marine mammals will voluntarily move away from the area at the commencement of the vibratory or “soft start” of pile driving activities, as a precautionary measure, pile driving activities occurring within the Outer Harbor will include establishment of a safety zone, and the area surrounding the operations will be monitored by a qualified marine biologist for pinnipeds. As the disturbance threshold level sound is expected to extend at least 1,000 feet from the steel pile driving operations, a safety zone will be established around the steel pile driving site and monitored for pinnipeds within a 1,200-foot-radius safety zone around the pile. As the steel pile driving site will move with each new pile, the 1,200 foot safety zone will move accordingly. Observers on shore or by boat will survey the safety zone to ensure that no marine mammals are seen within the zone before pile driving of a steel pile segment begins. If marine mammals are found within the safety zone, pile driving of the segment will be delayed until they move out of the area. If a marine mammal is seen above water and then dives below, the biologist will instruct the contractor to wait at least 15 minutes, and if no marine mammals are seen by the biologist in that time, it may be assumed that the animal has moved beyond the safety zone. This 15-minute criterion is based on a study indicating that pinnipeds dive for a mean time of 0.50 minutes to 3.33 minutes; the 15-minute delay will allow a more than sufficient period of observation to be reasonably sure the animal has left the project vicinity.

If pinnipeds enter the safety zone after pile driving of a segment has begun, pile driving will continue. The biologist will monitor and record the species and number of individuals observed, and make note of their behavior patterns. If the animal appears distressed and, if it is operationally safe to do so, pile driving will cease until the animal leaves the area. Pile driving cannot be terminated safely and without severe operational difficulties until reaching a designated depth. Therefore, if it is deemed operationally unsafe by the project engineer to discontinue pile driving activities, and a pinniped is observed in the safety zone, pile driving activities will continue until the critical depth is reached (at which time pile driving will cease) or until the pinniped leaves the safety zone. Prior to the initiation of each new pile driving episode, the area will again be thoroughly surveyed by the biologist

MM BIO-4. Enhance and expand Salinas de San Pedro Salt Marsh.

To mitigate impacts associated with shading of the 0.175-acre mudflat habitat at Berth 78–Ports O' Call, shading created by the installation of the promenade at the inlet to the Salinas de San Pedro Salt Marsh,

0.07-acre impact to eelgrass, and 0.04-acre impact to mudflat habitat from placement of the rock groin, LAHD will expand the mudflat and salt marsh habitat and reestablish eelgrass within Salinas de San Pedro Salt Marsh in accordance with the Southern California Eelgrass Mitigation Policy. It is anticipated that construction activities in this portion of the project area will begin shortly after the California least tern nesting season concludes at the end of August. A pre-construction eelgrass survey will be conducted (likely in September or October) prior to commencement of construction activities in the vicinity of Inner Cabrillo Beach and the salt marsh habitat. Surveys for eelgrass will be conducted during eelgrass growing season (March–October), and results will be valid for 60 days, unless completed in September or October; if completed in September or October, results will be valid until resumption of next growing season. It is anticipated that the mudflat area within the salt marsh will be increased approximately 0.56 acre converting only upland areas to do so and that eelgrass habitat will be reestablished within the salt marsh with no net loss. These improvements will occur by recontouring the side slopes to increase mudflat area, removing the rock sill within the inlets, removing nonnative vegetation, removing the rock-sloped island within the marsh, lowering the elevation of the salt marsh, and constructing a rock groin at the marsh inlet to block littoral sediment from entering the marsh. Figure 3.3-5 illustrates the proposed improvements to the salt marsh.

MM BIO-5. Prepare a mitigation and monitoring plan.

A habitat mitigation and monitoring plan (HMMP) will be developed in coordination with National Marine Fisheries Service (NMFS) and other regulatory agencies to detail the Salinas de San Pedro Salt Marsh expansion and enhancements and will include the following performance measures: 1) eelgrass, pickleweed, cord grass, and other native species present will be salvaged prior to construction and placed in a nursery for replanting post-restoration; 2) salvaged plants will be replanted at appropriate tidal elevations; 3) sediments removed from the salt marsh will be disposed of at LAHD’s upland disposal site at Anchorage Road (see Section 3.14, “Water Quality, Sediments, and Oceanography”); 4) turbidity will be monitored in accordance with Mitigation Measure MM BIO-1 so that nearby eelgrass and mudflat habitat are protected during restoration activities; 5) an eelgrass survey will be conducted 30 days following construction; and 6) at the completion of expansion and enhancement activities, the salt marsh and associated mudflat will be monitored by a qualified restoration ecologist at Years 1, 2, 3, 5, 7, 8, and 10 to ensure performance standards are met and that restored areas, including eelgrass and a minimum of 0.22-acre of created mudflat, are self-sustaining by Year 5.

MM BIO-6. Dispose sediment.

Prior to dredging, sediments will be tested for contaminants and if found to meet the sediment quality and quantity criteria for disposal, would be beneficially reused if an appropriate site was identified. If no feasible reuse site is available for uncontaminated sediment disposal, marine disposal would occur. Depending on the test results, sediments will be disposed of at a pre-approved ocean disposal site (LA-2, LA-3), a contained disposal facility in the harbor, or an approved upland location such as the Port’s Anchorage Road Upland Soil Storage Site. Disposal in-harbor will only occur if an acceptable disposal site is identified and permitted by the USACE (under Section 404 of the federal CWA). At this time, no in-harbor disposal is foreseeable for the San Pedro Waterfront dredged sediments.

CULTURAL RESOURCES

MM CR-1: Generate treatment plan and conduct archaeological testing for Mexican Hollywood prior to construction.

Because the project area is paved and developed, archaeological testing and evaluation were not conducted prior to publication of the final EIS/EIR. However, for the purposes of this document, potential archaeological resources associated with Mexican Hollywood are assumed eligible for listing in the CRHR and NRHP. A treatment plan will be generated prior to construction that utilizes the compressed approach for evaluation and treatment of urban historical archaeological sites. Should the identification and evaluation efforts reveal that archeological resources are not eligible for listing in the CRHR and/or NRHP, no further mitigation would be required. However, if archaeological resources are determined to be significant, implementation of Mitigation Measures MM CR-2a and/or MM CR-2b will reduce impacts to less-than-significant levels.

MM CR-2a: If CRHR/NRHP-eligible deposits associated with Mexican Hollywood are identified, redesign project to ensure preservation in place.

If testing results in the identification of CRHR/NRHP-eligible archaeological resources, efforts will be made to avoid these deposits during project development and preserve them in place, which is the preferred mitigation measure under CEQA. Options for preservation in place include, but are not limited to, incorporating the site into park or open space land, avoiding the site during construction, burying the site with sterile sediment, or placing the site within a permanent conservation easement. If preservation in place is not feasible, conduct data recovery as defined in Mitigation Measure MM CR-2b below.

MM CR-2b: Conduct Data Recovery.

If avoidance or redesign of the proposed Project is not feasible, then research and fieldwork to recover and analyze the data contained in that site will be conducted. In addition to the treatment plan, this work may involve additional archival and historical research; excavation; analysis of the artifacts, features, and other data discovered; presentation of the results in a technical report; and curation of the recovered artifacts and accompanying data. Consultation with ACHP, SHPO, and other interested or knowledgeable parties may also be required or appropriate.

The objective of this mitigation measure is to assist in the identification and evaluation of historical and/or unique archaeological resources that are unexpectedly encountered during construction activities associated with the proposed Project. As a result of adverse effects to historic and/or archaeological resources, this mitigation measure provides for the identification and recovery of a property's valuable information, if it exists. The purpose of data recovery is to retrieve and analyze information from a site necessary to address important research questions that have been developed as part of the research design for the property. Recovery is accomplished through detailed excavation efforts, recordation, background research, analysis, and reporting, performed in accordance with a well-defined and justified data recovery plan.

A standard data recovery report will be prepared when all the fieldwork is concluded. The consultant will prepare a comprehensive technical report that will describe the archaeological project's goals and methods, as well as present the project's findings and interpretations. The report will synthesize both the archival research and important archaeological data in an attempt to address the research questions presented in the research design/testing plan. The report will be submitted to the client and any reviewing agencies, and it ultimately will be filed with the Eastern Information Center, located at California State

University, Fullerton. The final data recovery report will include, but is not limited to, the following elements:

- executive summary;
- statement of scope, including proposed project location and setting;
- background contexts or summaries;
- summary of previous research, historical and archaeological;
- research goals and themes;
- field and laboratory methodologies;
- description of recovered materials;
- findings and interpretations, referencing research goals;
- conclusions;
- references cited; and
- appendices such as artifact catalogs, special studies, and other information relevant to the proposed project and findings.

MM CR-3: Stop Work If Unanticipated Cultural Resources Are Identified During Ground Disturbing Activities.

In the event that any artifact or an unusual amount of bone, shell, or non-native stone is encountered during construction, work will be immediately stopped and relocated from that area. The contractor will stop construction within 100 feet of the exposure of these finds until a qualified archaeologist, retained by LAHD in advance of construction, can be contacted to evaluate the find (see 36 CFR 800.11.1 and pertinent CEQA regulations). Examples of such cultural materials might include concentrations of ground stone tools such as mortars, bowls, pestles, and manos; chipped stone tools such as projectile points or choppers; flakes of stone not consistent with the immediate geology such as obsidian or fused shale; trash pits containing bottles and/or ceramics; or structural remains. If the resources are found to be significant, they will be avoided or will be mitigated consistent with SHPO guidelines as appropriate. All construction equipment operators will attend a pre-construction meeting presented by a professional archaeologist retained by LAHD to review types of cultural resources and artifacts that would be considered potentially significant to ensure operator recognition of these materials during construction.

If human remains are encountered, there will be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains. The Los Angeles County Coroner will be contacted to determine the age and cause of death. If the remains are not of Native American heritage, construction in the area may recommence. If the remains are of Native American origin, the most likely descendants of the deceased will be identified by the NAHC. LAHD and the USACE will consult with the Native American most likely descendant(s) to identify a mutually acceptable strategy for treating and disposing of, with appropriate dignity, the human remains and any associated grave goods as provided in PRC Section 5097.98. If the NAHC is unable to identify a most likely descendant; if the descendant fails to make a recommendation within 24 hours of being notified by the NAHC, LAHD, or the USACE; and if the descendant is not capable of reaching a mutually acceptable strategy through mediation by the NAHC, the Native American human remains and associated grave goods will be

reburied with appropriate dignity on the proposed project site in a location not subject to further subsurface disturbance.

MM CR-4: Develop a program to mitigate impacts on nonrenewable paleontologic resources prior to excavation or construction of any proposed project components.

This mitigation program would be conducted by a qualified vertebrate paleontologist and would be consistent with the provisions of CEQA, as well as the proposed guidelines of the Society of Vertebrate Paleontology. This program would include, but not be limited to:

1. Assessment of site-specific excavation plans to determine areas that will be designated for paleontological monitoring during initial ground disturbance.
2. Development of monitoring protocols for these designated areas. Areas consisting of artificial fill materials will not require monitoring. Paleontologic monitors should be equipped to salvage fossils as they are unearthed to avoid construction delays and to remove samples of sediments that are likely to contain the remains of small fossil invertebrates and vertebrates. Monitors must be empowered to temporarily halt or divert equipment to allow removal of abundant or large specimens. Monitoring may be reduced if some of the potentially fossiliferous units described herein are determined upon exposure and examination by qualified paleontologic personnel to have low potential to contain fossil resources.
3. Preparation of all recovered specimens to a point of identification and permanent preservation, including washing of sediments to recover small invertebrates and vertebrates. Preparation and stabilization of all recovered fossils are essential in order to fully mitigate adverse impacts on the resources.
4. Identification and curation of all specimens into an established, accredited museum repository with permanent retrievable paleontologic storage. These procedures are also essential steps in effective paleontologic mitigation and CEQA compliance (Scott and Springer 2003). The paleontologist must have a written repository agreement in hand prior to the initiation of mitigation activities. Mitigation of adverse impacts on significant paleontologic resources is not considered complete until such curation into an established museum repository has been fully completed and documented.
5. Preparation of a report of findings with an appended itemized inventory of specimens. The report and inventory, when submitted to the appropriate lead agency along with confirmation of the curation of recovered specimens into an established, accredited museum repository, will signify completion of the program to mitigate impacts on paleontologic resources.

GEOLOGICAL RESOURCES

MM GEO-1. Emergency response planning.

The tenants within the proposed project area will work with Port engineers and LAHD police to develop tsunami response training and procedures to assure that construction and operations personnel will be prepared to act in the event of a large seismic event. Such procedures will include immediate evacuation requirements in the event that a large seismic event is felt at the proposed project site, as part of overall emergency response planning for this proposed Project.

Such procedures will be included in any bid specifications for construction or operations personnel, with a copy of such bid specifications to be provided to LAHD, including a completed copy of its operations emergency response plan prior to commencement of construction activities and/or operations.

GROUNDWATER AND SOILS

MM GW-1. Complete site remediation.

Unless otherwise authorized by the lead regulatory agency for any given site, the LAHD will remediate all contaminated soils within proposed project boundaries prior to or during demolition and grading activities. Remediation will occur in compliance with local, state, and federal regulations and as directed by the LACFD, DTSC, and/or RWQCB.

Soil remediation will be completed such that contamination levels are below health screening levels established by OEHHA and/or applicable action levels established by the lead regulatory agency with jurisdiction over the site. Use of localized soil capping/paving, combined with agency-approved deed restrictions, may be an acceptable remediation measure in upland areas and/or risk-based soil assessments, but would be subject to the discretion of the lead regulatory agency.

Existing groundwater contamination throughout the proposed project boundary will continue to be monitored and remediated, simultaneous and/or subsequent to site redevelopment, in accordance with direction provided by the RWQCB.

Unless otherwise authorized by the lead regulatory agency for any given site, areas of soil contamination that will be remediated prior to or in conjunction with project demolition, grading, and construction would include, but not be limited to, the properties within and adjacent to the proposed Project.

MM GW-1a. Remediate the former GATX site in Area E.

The GATX Annex Terminal Facility is subject to land-use restrictions imposed by the DTSC. Because of this, prior to implementing the previously listed mitigation measures, it will be necessary to negotiate with the DTSC conditions for remediation and construction at this property. The current proposed use of the GATX Annex Terminal Facility is a park. Currently, DTSC land-use restrictions exclude this use. If LAHD intends to redevelop the area as a park, it will be necessary to modify the land use restriction. If the land use restriction is to be modified, it will likely be necessary to follow DTSCs remedial investigation/feasibility study (RI/FS) or remedial action workplan (RAW) process under an environmental consultative oversight agreement. The work will likely involve additional site characterizations including preparation of a health-based risk assessment, removal of contaminated hot spots, and, possibly, an extensive public comment process. If LAHD is planning the construction of buildings and structures on the site, the requirement will be more extensive.

MM GW-1b. Remediate former oil wells in Area A.

Locate the well using geophysical or other methods. Contact the DOGGR to review abandonment records and inquire whether re-abandonment is necessary prior to any future construction related to the proposed project alternatives. Implement corrective measures as directed by DOGGR

MM GW-1c. Abandon and remove Navy fuel surge line.

Abandonment and removal of the pipeline would include the submittal of a work plan to the California State Fire Marshall (CSFM) and other applicable agencies, as appropriate. The portion of the fuel surge line to be excavated will be drained of all fluids, cleaned, flushed, and then capped. Materials from the purged fuel surge line will be characterized for disposal and disposed of at an appropriately certified hazardous waste facility. Testing will occur prior to the abandonment of the line and prior to any excavation of the North Harbor. Should contamination be found, appropriate remedial or removal action will occur prior to or concurrent with construction, under approval of the appropriate oversight agency.

MM GW-2. LAHD will prepare a contamination contingency plan for non-specific facilities.

The project site has a long history of industrial activity, so it is possible that future construction activity could encounter historical soil or groundwater contamination that had not been previously reported to regulatory agencies. The following contingency plan will be implemented to address previously unknown contamination during demolition, grading, and construction:

- a) All trench excavation and fill operations will be observed for the presence of chemicals of potential concern and petroleum products. Soils that are suspected to be impacted with chemicals of potential concern and/or petroleum products will be segregated from clean soil. Indications of contaminated/impacted soil may include but are not limited to: discolored soil, petroleum or organic odors, and/or visible sheen. In the event unexpected suspected chemically impacted material (soil or water) is encountered during construction, the contractor will notify LAHD's Chief Harbor Engineer, Director of Environmental Management, and Risk Management's Industrial Hygienist. LAHD will confirm the presence of the suspect material; direct the contractor to remove, stockpile, or contain the material; and characterize the suspect material identified within the boundaries of the construction area. Continued work at a contaminated site will require the approval of the Chief Harbor Engineer.
- b) As warranted, appropriate air monitoring equipment (e.g., photoionization detector, combustible gas indicator, organic vapor analyzer, etc.) will be present during grading and/or excavation activities in soils that are suspected to be impacted with chemicals of concern and/or petroleum products.
- c) Excavation of VOC-impacted soil will require obtaining and complying with a South Coast Air Quality Management District Rule 1166 permit.
- d) The remedial option(s) selected will be dependent upon a number of criteria (including but not limited to types of chemical constituents, concentration of the chemicals, health and safety issues, time constraints, cost, etc.) and will be determined on a site-specific basis. Both off-site and on-site remedial options will be evaluated.
- e) The extent of removal actions will be determined on a site-specific basis. At a minimum, the chemically impacted area(s) within the boundaries of the construction area will be remediated to the satisfaction of the lead regulatory agency for the site. The LAHD Project Manager overseeing removal actions will inform the contractor when the removal action is complete.
- f) Copies of hazardous waste manifests or other documents indicating the amount, nature, and disposition of such materials will be submitted to the Chief Harbor Engineer within 30 days of project completion.

- g) In the event that suspected contaminated soil is encountered, all onsite personnel handling the suspected contaminated material must be trained in accordance with the federal Hazardous Waste Operations and Emergency Response (HAZWOPER) standard. This training provides precautions and protective measures for workers remediating contaminated sites. Workers not certified with HAZWOPER training will not be allowed to resume work in suspected contaminated areas until appropriate site characterization confirms that contaminated soil, groundwater, or soil vapor are not present.
- h) As warranted, real-time perimeter and ambient air monitoring stations will be established during all grading, excavation, trenching, and/or soil handling activities associated with contaminated soil.
- i) All excavations will be filled with structurally suitable fill material that is free from contamination.

HAZARDS AND RISKS

MM RISK-1. Removal of all hazardous materials with flashpoints below 140 degrees from Mike's fueling Station.

Mike's fueling station will cease to handle hazardous materials with flashpoints below 140 degrees per the letter sent from LAHD to Mike Albano dated June 16, 2008, regarding the successor permit to revocable permit No. 98-14 prior to the operation of the proposed waterfront promenade. Products with a flashpoint below 140 degrees will not be permitted within the project area (i.e., San Pedro Waterfront Project area). The successor permit to RP No. 98-14 to allow the operation for Mike's fueling station and continued lease of Mike's fueling station will only allow handling of products above said threshold. Prior to the operation of the waterfront promenade, Mike's fueling station will submit written confirmation identifying the complete removal of all hazardous materials on site with a flashpoint below 140 degrees as directed by the letter dated June 16, 2008. At the time of the written confirmation, Mike's fueling station will also provide copies all Material Safety Data Sheets (MSDS) for each product stored in bulk on site.

GROUND TRANSPORTATION

MM TC-1: Develop and implement a Traffic Control Plan throughout proposed project construction.

In accordance with the City's policy on street closures and traffic diversion for arterial and collector roadways, the construction contractor will prepare a traffic control plan (to be approved by the city and county engineers) before construction. The traffic control plan will include:

- a street layout showing the location of construction activity and surrounding streets to be used as detour routes, including special signage;
- a tentative start date and construction duration period for each phase of construction;

- the name, address, and emergency contact number for those responsible for maintaining the traffic control devices during the course of construction; and
- written approval to implement traffic control from other agencies, as needed.

Additionally, the traffic control plan will include the following stipulations.

- Provide access for emergency vehicles at all times.
- Avoid creating additional delay at intersections currently operating at congested conditions, either by choosing routes that avoid these locations, or constructing during nonpeak times of day.
- Maintain access for driveways and private roads, except for brief periods of construction, in which case property owners will be notified.
- Provide adequate off-street parking areas at designated staging areas for construction-related vehicles.
- Maintain pedestrian and bicycle access and circulation during proposed project construction where safe to do so. If construction encroaches on a sidewalk, a safe detour will be provided for pedestrians at the nearest crosswalk. If construction encroaches on a bike lane, warning signs will be posted that indicate bicycles and vehicles are sharing the roadway.
- Traffic controls may include flag persons wearing Occupational Safety and Health Administration–approved vests and using a “Stop/Slow” paddle to warn motorists of construction activity.
- Maintain access to Metro, LADOT, MAX, PVPTA, and LAHD transit services and ensure that public transit vehicles are detoured.
- Post standard construction warning signs in advance of the construction area and at any intersection that provides access to the construction area.
- Construction warning signs will be posted, in accordance with local standards or those set forth in the Manual on Uniform Traffic Control Devices (Federal Highway Administration 2001) in advance of the construction area and at any intersection that provides access to the construction area.
- During lane closures, notify LAFD and LAPD, as well as the Los Angeles County Sheriff’s and Fire Departments, of construction locations to ensure that alternative evacuation and emergency routes are designed to maintain response times during construction periods, if necessary.
- Provide written notification to contractors regarding appropriate routes to and from construction sites, and weight and speed limits for local roads used to access construction sites. Submit a copy of all such written notifications to the City of Los Angeles Planning Department.
- Repair or restore the road right-of-way to its original condition or better upon completion of the work.

MM TC-2. Prohibit weekday peak period parking on Gaffey Street (needed by 2015).

Prohibit parking on Gaffey Street both northbound and southbound north of 9th Street during the weekday AM and PM peak periods to allow for an additional through lane in both the northbound and southbound

directions. This prohibition is identified in the current San Pedro Community Plan as a potential measure to improve traffic flow on Gaffey Street.

MM TC-3. Modify southbound approach to Gaffey Street and 9th Street (needed by 2015).

Modify the southbound approach to Gaffey Street and 9th Street to provide one left-turn lane, two through lanes, and one through/right-turn lane.

MM TC-4. Install traffic signal at Gaffey Street and 6th Street (needed by 2015).

MM TC-5. Modify northbound and southbound approaches at Miner Street and 22nd Street (needed by 2037).

Modify the northbound and southbound approaches at Miner Street and 22nd Street to provide one left-turn lane, one through lane, and one through/right-turn lane.

MM TC-6. Prohibit parking on Harbor Boulevard (needed by 2015).

As a complementary mitigation measure for intersection-specific mitigation measures along Harbor Boulevard, the prohibition of parking on Harbor Boulevard would allow for the roadway to be configured to generally provide three lanes in each direction. This prohibition is identified in the current San Pedro Community Plan as a potential measure to improve traffic flow on Harbor Boulevard north of 7th Street.

MM TC-7. Modify Harbor Boulevard at 6th Street (needed by 2037).

Reconfigure Harbor Boulevard at 6th Street to provide three lanes on the southbound intersection approach, resulting in two through lanes and one shared through/right-turn lane.

MM TC-8. Modify Harbor Boulevard at 5th Street (needed by 2015).

Reconfigure Harbor Boulevard at 5th Street to provide three lanes on the southbound intersection approach, resulting in one left-turn lane, two through lanes, and one shared through/right-turn lane.

MM TC-9. Modify Harbor Boulevard at 1st Street (needed by 2015).

Reconfigure Harbor Boulevard at 1st Street to provide three lanes both northbound and southbound.

MM TC-10. Modify eastbound approach to Harbor Boulevard and 7th Street (needed by 2015).

Reconfigure the eastbound approach to Harbor Boulevard and 7th Street to provide two left-turn lanes, one through lane onto Sampson Way, and one through/right-turn lane.

MM TC-11. Reconfigure Harbor Boulevard and Swinford Street/SR-47 eastbound ramps (needed by 2015).

Restripe the westbound (Swinford Street) approach to provide an additional lane at the Harbor Boulevard and Swinford Street/SR-47 eastbound ramps. The westbound approach would be configured with one left-turn lane, one through lane, and one right-turn lane

MM TC-12. Reconfigure Harbor Boulevard at O'Farrell Street (needed by 2015).

Reconfigure Harbor Boulevard at O'Farrell Street to provide three lanes both northbound and southbound.

MM TC-13. Install signal at Harbor Boulevard and 3rd Street (needed by 2015).

Install a traffic signal at Harbor Boulevard and 3rd Street and configure the roadway to provide three lanes both northbound and southbound.

MM TC-14. Modify eastbound and westbound approaches at Gaffey Street and 13th Street (needed by 2037).

Modify the eastbound and westbound approaches at Gaffey Street and 13th Street to provide one left-turn lane and one shared through/right-turn lane each. This reconfiguration will result in the loss of approximately six on-street parking spaces.

MM TC 15-a. Offset loss of parking through reconfiguration or expansion of parking elsewhere in the vicinity.

MM TC 15-b. Design the southern portion of this extension to minimize disruption to the existing parking lots.

MM TC 15-c. Align the southern segment of the Cabrillo Beach extension behind the Cabrillo Marine Aquarium to avoid or minimize conflicts with the existing parking lots in the area.

MM TC-16. Install a signal at the intersection of Harbor Boulevard and 3rd Street.

MM TC-17. Ensure that traffic signals at cross street locations have protected left-turn phases and, potentially, active "No Right Turn" signs to allow these movements from streets parallel to the tracks to be held when a train is approaching or present.

MM TC-18. Provide traffic control on approach streets to rail line to prevent motorists from stopping on tracks.

On the streets that approach the rail line perpendicularly, such as 1st Street, 5th Street, 6th Street, or Miner Street, the stop bars and vehicle detection loops on the intersection legs where the rail line will be placed in advance of the tracks to prevent motorists from stopping on the tracks. During final design, the LAHD

may also consider installing automatic crossing gates to fully protect the crossings that lie adjacent to parallel streets.

MM TC-19-a. Prohibit left turns across tracks on existing and proposed streets and proposed driveways that cross the tracks.

MM TC-19-b. Reduce streetcar operating speeds along streets where existing and proposed driveways serve the adjacent uses and install appropriate active warning signs or other devices to alert motorists to the possible presence of oncoming streetcars

MM TC-20. Combine lower levels of proposed parking structures to reduce potential conflict points along Sampson Way.

Locate a main access to the surface parking lots on the east side of Sampson Way to create a four-legged intersection there, and install a signal at this location to reduce conflicts by providing only one point of ingress/egress to the multiple parking structures.

MM TC-21. Signalize the reconfigured intersection of Signal Street/Sampson Way.

MM TC-22. Install half-signals at two proposed track crossovers located along Sampson Way and retime signals at the proposed track crossovers on 22nd Street at Miner Street and at Via Cabrillo Marina.

At locations where detailed design determines it necessary, retime traffic signals to include a street car phase for turning and crossing streetcars and provide transit signal priority phasing. At the intersection of 22nd Street and Via Cabrillo Marina, provide for train movements to coincide with the westbound left-turn and northbound right-turn movements.

MM TC-23. Install a half-signal at the proposed track crossover on the City Dock No. 1 extension that would occur south of the proposed Mid-Point Station.

MM TC-24. Design pavement markings and signage in station areas to clearly direct pedestrians to the desired routes.

MM TC-25. Construct new sidewalks to allow for the orderly movement of pedestrians.

MM TC-26. Shift the location of the main Ports O' Call surface parking lot driveway to a point north of this station to improve pedestrian safety there.

Place the main Ports O' Call surface parking lot driveway opposite one of the driveways serving the proposed parking structure on the west side of Sampson Way. Within the Ports O' Call surface parking lots, provide clear pedestrian paths from the foot of the proposed pedestrian bridge.

NOISE

MM NOI-1. Construct temporary noise barriers, muffle and maintain construction equipment, prohibit idling, locate equipment, use quiet construction equipment, and notify residents.

The following will reduce the impact of noise from construction activities:

- a) **Temporary Noise Barriers.** When construction is occurring within 500 feet of a residence or park, temporary noise barriers (solid fences or curtains) will be located between noise-generating construction activities and sensitive receivers.
- b) **Construction Equipment.** All construction equipment powered by internal combustion engines will be properly muffled and maintained.
- c) **Idling Prohibitions.** Unnecessary idling of internal combustion engines near noise sensitive areas will be prohibited.
- d) **Equipment Location.** All stationary noise-generating construction equipment, such as air compressors and portable power generators, will be located as far as practical from existing noise sensitive land uses.
- e) **Quiet Equipment Selection.** Select quiet construction equipment whenever possible. Comply where feasible with noise limits established in the City of Los Angeles Noise Ordinance.
- f) **Notification.** Notify residents within 500 feet to the proposed project site of the construction schedule in writing.

MM NOI-2. Construction Hours.

Construction activities for the proposed Project would not exceed the ambient noise level by 5 dBA at a noise sensitive use between the hours of 6:00 p.m. and 7:00 a.m. Monday through Friday, before 8:00 a.m. or after 6:00 p.m. on Saturday, or at any time on Sunday. If extended construction hours are needed during weekdays under special circumstances, LAHD and the contractor will provide at least 72 hours' notice to sensitive receptors within 0.5 miles of the construction area. Under no circumstances will construction hours exceed the range prescribed by the City of Los Angeles Municipal Code.

PUBLIC SERVICES AND UTILITIES

MM PS-1. Coordinate with law enforcement agencies.

LAHD will be required, pursuant to the Watch Manual, to coordinate with law enforcement agencies, during construction of all roadway improvements, to establish emergency vehicular access and ensure continuous law enforcement access to surrounding areas.

MM PS-2: Recycle construction materials.

Demolition and/or excess construction materials will be separated on site for reuse/recycling or proper disposal. During grading and construction, separate bins for recycling of construction materials will be provided on site.

MM PS-3: Use materials with recycled content.

Materials with recycled content, such as recycled steel from framing and recycled concrete and asphalt from roadway construction, will be used in project construction. Wood chippers registered through the California Air Resources Board's Portable Equipment Registration Program will be operated on site during construction. Wood from tree removal, not from demolished structures, will be reused as landscape cover, further reducing the quantity of wood that would otherwise be disposed of at solid waste facilities.

MM PS-4: Comply with AB 939.

LAHD and Port tenants will implement a Solid Waste Management Program including the following measures to achieve a 50% reduction of current waste generation percentages by 2037 and ensure compliance with the California Solid Waste Management Act (AB 939).

- a. Provide space and/or bins for storage of recyclable materials on the project site. All garbage and recycle bin storage space will be enclosed and plans will show equal area availability for both garbage and recycle bins in storage spaces.
- b. Establish a recyclable material pick-up area for commercial buildings.
- c. Participate in a curbside recycling program to serve the new development.
- d. Develop a plan for accessible collection of materials on a regular basis.
- e. Develop source reduction measures that indicate the method and amount of expected reduction.
- f. Implement a program to purchase materials that have recycled content for project construction and operation (e.g., lumber, plastic, office supplies).
- g. Provide a resident-tenant/employee education pamphlet to be used in conjunction with available Los Angeles County and federal source reduction educational materials. The pamphlet will be provided to all commercial tenants by the leasing/property management agency.
- h. Include lease language requiring tenant participation in recycling/waste reduction programs, including specification that janitorial contracts support recycling.

MM PS-5: Water Conservation and Wastewater Reduction.

LAHD and Port tenants will implement the following water conservation and wastewater reduction measures to further reduce impacts on water demand and wastewater flows.

- a. The landscape irrigation system will be designed, installed, and tested to provide uniform irrigation coverage for each zone. Sprinkler head patterns will be adjusted to minimize overspray onto walkways and streets. Each zone (sprinkler valve) will water plants having similar watering needs (i.e., shrubs, flowers, and turf will not be in the same watering zone). Automatic irrigation timers will be set to water landscaping during early morning or late evening hours to reduce water losses from evaporation. Irrigation run times will be adjusted for all zones seasonally, reducing

length and frequency of waterings in the cooler months (i.e., fall, winter, spring). Adjust sprinkler timer run time to avoid water runoff, especially when irrigating sloped property. Sprinkler times will be reduced once drought-tolerant plants have been established.

- b. Drought-tolerant, low water consuming plant varieties will be used to reduce irrigation water consumption.
- c. Recycled water will be used for irrigation and toilet flushing (dual-flushing)
- d. Ultra-low-flush toilets, ultra-low-flush urinals, and water-saving showerheads must be installed in both new construction and when remodeling. Low flow faucet aerators will be installed on all sink faucets.
- e. Significant opportunities for water savings exist in air conditioning systems that utilize evaporative cooling (i.e., employ cooling towers). LADWP will be contacted for specific information of appropriate measures.
- f. Recirculating or point-of-use hot water systems will be installed to reduce water waste in long piping systems where water must be run for considerable period before heated water reaches the outlet.

MM PS-6: Employ energy conservation measures. During the design process, LAHD will consult with LADWP's Efficiency Solutions Business Group regarding possible energy efficiency measures. LAHD and its tenants will incorporate measures to meet or, if possible, exceed minimum efficiency standards for Title XXIV of the California Code of Regulations, such as:

- a. Built-in appliances, refrigerators, and space-conditioning equipment will exceed the minimum efficiency levels mandated in the California Code of Regulations.
- b. High-efficiency air conditioning will be installed that is controlled by a computerized energy-management system in office and retail spaces and provides the following:
 - a variable air-volume system that results in minimum energy consumption and avoids hot water energy consumption for terminal reheat,
 - a 100% outdoor air-economizer cycle to obtain free cooling in appropriate climate zones during dry climatic periods,
 - sequentially staged operation of air-conditioning equipment in accordance with building demands,
 - the isolation of air conditioning to any selected floor or floors, and
 - considers the applicability of the use of thermal energy storage to handle cooling loads.
- c. Ventilation air will be cascaded from high-priority areas before being exhausted, thereby decreasing the volume of ventilation air required. For example, air could be cascaded from occupied space to corridors and then to mechanical spaces before being exhausted.
- d. Lighting system heat will be recycled for space heating during cool weather. While exhaust lighting-system heat will be recycled from the buildings, via ceiling plenums, to reduce cooling loads in warm weather.
- e. Low and medium static-pressure terminal units will be installed, as well as ductwork to reduce energy consumption by air-distribution systems.

- f. Buildings must be well sealed to prevent outside air from infiltrating and increasing interior space-conditioning loads. Where applicable, design building entrances with vestibules to restrict infiltration of unconditioned air and exhausting of conditioned air.
- g. A performance check of the installed space-conditioning system will be completed by the developer/installer prior to issuance of the certificate of occupancy to ensure that energy-efficiency measures incorporated into the proposed Project operate as designed.
- h. Exterior walls will be finished with light-colored materials and high-emissivity characteristics to reduce cooling loads. Interior walls will be finished with light-colored materials to reflect more light and, thus increase light efficiency.
- i. White reflective material will be used for roofing meeting California standards for reflectivity and emissivity to reject heat.
- j. Thermal insulation that exceeds requirements established by the California Code of Regulations will be installed in walls and ceilings.
- k. Window systems will be designed to reduce thermal gain and loss, thus reducing cooling loads during warm weather and heating loads during cool weather.
- l. Heat-rejecting window treatments will be installed, such as films, blinds, draperies, or others on appropriate exposures.
- m. Fluorescent and high-intensity discharge lamps that give the highest light output per watt of electricity consumed will be installed wherever possible, including all street and parking lot lighting, to reduce electricity consumption. Reflectors will be used to direct maximum levels of light to work surfaces.
- n. Photosensitive controls and dimmable electronic ballasts will be installed to maximize the use of natural daylight available and reduce artificial lighting load.
- o. Occupant-controlled light switches and thermostats to permit individual adjustment of lighting, heating, and cooling will be installed to avoid unnecessary energy consumption.
- p. Time-controlled interior and exterior public area light will be installed, limited to that which is necessary for safety and security.
- q. Mechanical systems (HVAC and lighting) in the building will be controlled with timing systems to prevent accidental or inappropriate conditioning or lighting of unoccupied space.
- r. Windowless walls or passive solar inset of windows will be incorporated, where feasible, in building design.
- s. Project will focus pedestrian activity within sheltered outdoor areas.

RECREATION

MM REC-1. Maintain pedestrian access during construction.

The LAHD and construction contractors will follow standard safety procedures to protect pedestrian traffic from construction hazards, including providing brightly colored fencing and signage indicating closures and safely directing pedestrian traffic around construction areas. This will also require

coordinated construction activities such that pedestrian access can be routed around construction with a minimum increase in distance.

MM REC-2. Maintain bicycle access during construction.

The LAHD and construction contractors will provide signage notifying users of bike lanes of closure as well as signage directing users to alternative bike routes. Alternative bike lanes in the proposed project vicinity include a north-south Class II bike path along the entire length of South Gaffey Street, and an east-west Class III bike path on 9th from North Harbor Boulevard west to State Route 213. LAHD will be required to inform the public prior to commencement of construction resulting in closures or possible disruptions to bike paths. Public sources to notify will, at minimum, include the City of Los Angeles Department of Transportation Bicycle Program, and Los Angeles area bicycling groups.

MM REC-3. Maintain parking during construction.

The LAHD and construction contractors will minimize parking obstructions during construction periods by placing construction areas out of roadways and parking lots, where possible. In areas where construction staging areas and construction activities must impede access to parking areas, detour signs and lane striping will direct traffic to additional off-site parking areas. LAHD will provide shuttle service to remote parking areas in the event that offsite parking areas are farther than 1 mile from existing waterfront areas and the Waterfront Red Car Line does not adequately service the offsite parking areas.

MM REC-4. Maintain vehicle access during construction.

The LAHD and construction contractors will minimize obstructions to vehicle access during construction periods by placing construction areas out of roadways and parking lots, where possible. In areas where construction staging areas and construction activities must impede access to roadways, detour signs and lane striping will safely direct traffic around construction areas.

MM REC-5. Maintain boat ramp access during construction.

The LAHD and construction contractors will minimize obstructions to the boat ramp during construction periods by placing construction areas out of roadways and parking lots leading to boat ramps, where possible. In cases where the boat ramp must be closed, or access will be severely impeded due to construction activities, LAHD will inform the public prior to commencement of construction that will result in closures or possible disruptions to boat ramp access. Public notifications will, at minimum, include notifying local boating groups and posting flyers at boat ramps in the proposed project vicinity.

MM REC-6. Maintain access to open waters of the harbor during construction.

The LAHD and construction contractors will minimize obstructions to open waters of the harbor during construction periods by placing construction staging areas out of high-traffic waterways, parking lots leading to boat ramps, and boat docks, where possible. LAHD will embark on a public awareness campaign, providing information about construction periods, construction areas, closures, and suggestions of alternative boating areas. LAHD will inform the public prior to commencement of construction that

will result in closures or possible disruptions to open waters of the harbor. Public notifications will, at minimum, include notifying local boating groups and posting flyers at boat ramps in the proposed project vicinity. LAHD will offer boater safety training for the public, specifically with respect to safe navigation around construction activities.

MM REC-7. Maintain docking space and dock access during construction.

The LAHD and construction contractors will minimize obstructions to docking space and dock access during construction periods by placing construction staging areas away from boat docks where possible. LAHD will embark on a public awareness campaign, providing information about construction periods, construction areas, closures, and suggestions of alternative boating areas and docking locations. In cases where docking space will be closed or removed and existing tenants need alternative docking space, LAHD will provide temporary docking space in the near vicinity of the proposed Project. LAHD will provide notification and signage to direct users to these temporary alternative docking areas. LAHD will inform the public prior to commencement of construction that will result in closures or possible disruptions to dock access. Public notifications will, at minimum, include notifying local boating groups and posting flyers at boat ramps in the proposed project vicinity. LAHD will offer boater safety training for the public, specifically with respect to safe navigation around construction activities.

Modifications to or Additional Mitigation Measures in the Final EIR

The following mitigation measures were either added to or modified in the Final SEIR. New text is denoted by underlining while deleted text is denoted by ~~striketrough~~.

MM AQ-3. Fleet Modernization for Onroad Trucks.

1. Trucks hauling materials such as debris or fill shall be fully covered while operating off Port property.
2. Idling shall be restricted to a maximum of 5 minutes when not in use.
3. Tier Specifications:
 - January 1, 2009 to December 31, 2011: All onroad heavy-duty diesel trucks with a gross vehicle weight rating (GVWR) of 19,500 pounds or greater used on site or to transport materials to and from the site must contain an EPA 2004 engine model year or newer in order to comply with EPA 2004 onroad emission standards. ~~shall comply with EPA 2004 onroad PM emission standards and be the cleanest available with respect to NO_x (0.10g/bhp-hr PM10 and 2.0 g/bhp-hr NO_x).~~ In addition, all onroad trucks shall be outfitted with the BACT devices certified by CARB. ~~Any emissions control device used by the contractor shall achieve emissions reductions that are no less than what could be achieved by a Level 3 diesel emissions control strategy for a similarly sized engine as defined by CARB regulations.~~
 - Post-January 2011: All onroad heavy-duty diesel trucks with a GVWR of 19,500 pounds or greater used on site or to transport materials to and from the site shall comply with 2010 emission standards, where available.

A copy of each unit's certified EPA rating, BACT documentation, and CARB or SCAQMD operating permit shall be provided at the time of mobilization of each applicable unit of equipment.

MM AQ-5. Additional Fugitive Dust Controls.

The calculation of fugitive dust (PM10) from unmitigated proposed project earth-moving activities assumes a 75% reduction from uncontrolled levels to simulate rigorous watering of the site and use of other measures (listed below) to ensure proposed project compliance with SCAQMD Rule 403.

The construction contractor shall apply for a SCAQMD Rule 403 Dust Control Permit.

The construction contractor shall further reduce fugitive dust emissions to 90% from uncontrolled levels. The construction contractor shall designate personnel to monitor the dust control program and to order increased watering or other dust control measures, as necessary, to ensure a 90% control level. Their duties shall include holiday and weekend periods when work may not be in progress.

The following measures, at minimum, must be part of the contractor Rule 403 dust control plan:

- Active grading sites shall be watered one additional time per day beyond that required by Rule 403;
- Contractors shall apply approved nontoxic chemical soil stabilizers to all inactive construction areas or replace groundcover in disturbed areas;

- Construction contractors shall provide temporary wind fencing around sites being graded or cleared;
- Trucks hauling dirt, sand, or gravel shall be covered or shall maintain at least 2 feet of freeboard in accordance with Section 23114 of the California Vehicle Code;
- Construction contractors shall install wheel washers where vehicles enter and exit unpaved roads onto paved roads or wash off tires of vehicles and any equipment leaving the construction site;
- The grading contractor shall suspend all soil disturbance activities when winds exceed 25 mph or when visible dust plumes emanate from a site; disturbed areas shall be stabilized if construction is delayed;
- Trucks hauling materials such as debris or fill shall be fully covered while operating off LAHD property;
- A construction relations officer shall be appointed to act as a community liaison concerning onsite construction activity including resolution of issues related to PM10 generation;
- All streets shall be swept at least once a day using South Coast Air Quality Management District (SCAQMD) Rule 1186, 1186.1 certified street sweepers or roadway washing trucks if visible soil materials are carried to adjacent streets;
- Water or non-toxic soil stabilizer shall be applied three times daily to all unpaved parking or staging areas or unpaved road surfaces;
- Roads and shoulders shall be paved; and
- Water shall be applied three times daily or as needed to areas where soil is disturbed.

MM AQ-11. Vessel Speed-Reduction Program.

Ships calling at the Inner Harbor Cruise Terminal shall comply with the expanded VSRP of 12 knots between 40 nm from Point Fermin and the Precautionary Area in the following implementation schedule:

- ~~30%~~ 75% of all calls in 2009, and
- 100% of all calls in 2013 and thereafter.

Ships calling at the Outer Harbor Cruise Terminal shall comply with the expanded VSRP of 12 knots between 40 nm from Point Fermin and the Precautionary Area in the following implementation schedule:

- 100% of all calls in 2013 and thereafter.

MM AQ-12. New Vessel Builds.

The purchaser shall confer with the ship designer and engine manufacture to determine the feasibility of incorporating all emission reduction technology and/or design options and when ordering new ships bound for the Port of Los Angeles. Such technology shall be designed to reduce criteria pollutant emissions (NO_x, SO_x, and PM) and GHG emission (CO, CH₄, N₂O, and HFCs). Design considerations and technology shall include, but is not limited to:

1. Selective Catalytic Reduction Technology

2. Exhaust Gas Recirculation
3. In-line fuel emulsification technology
4. Diesel Particulate Filters (DPFs) or exhaust scrubbers
5. Medium Speed Marine Engine (Common Rail) Direct Fuel Injection
6. Low NO_x Burners for Boilers
7. Implement fuel economy standards by vessel class and engine
8. Diesel-electric pod propulsion systems
9. Main engine controls will meet at a minimum the SIP requirements.

MM AQ-14. LNG-Powered or LEV Equivalent Shuttle Buses.

All shuttle buses from parking lots to cruise ship terminals shall either be LNG powered or a low-emission vehicle (LEV) equivalent that will reduce emissions at or below LNG abilities.

MM AQ-18. Engine Standards for Tugboats.

Tugboats calling at the North Harbor cut shall be repowered to meet the cleanest existing marine engine emission standards or EPA Tier 2, whichever is more stringent at the time of engine replacement, as follows (minimum percentages):

- 30% in 2010, and
- 100% in 2014.

Tugs calling at the North Harbor cut shall be repowered to meet the cleanest existing marine engine emission standards or EPA Tier 3, whichever is more stringent at the time of engine replacement, as follows (minimum percentages):

- 20% in 2015,
- 50% in 2018, and
- 100% in 2020.

MM AQ-19. Tugboats Idling Reduction.

The tug companies shall ensure that tug idling is reduced to less than 10 minutes at the cruise terminal building.

MM AQ-20. Catalina Express Ferry Idling Reduction Measure.

Catalina Express shall ensure that ferry idling is reduced to less than 5 minutes at the cruise terminal building.

MM AQ-21. Catalina Express Ferry Engine Standards.

Ferries calling at the Catalina Express Terminal shall be repowered to meet the cleanest ~~existing~~ marine engine emission standards in existence at the time of repowering ~~or EPA Tier 2~~ as follows (minimum percentages):

- 30% in 2010, and
- 100% in 2014.

MM BIO-3. Avoid marine mammals.

The contractor will be required to use sound abatement techniques to reduce both noise and vibrations from pile driving activities. Sound abatement techniques will include, but are not limited to, vibration or hydraulic insertion techniques, drilled or augured holes for cast-in-place piles, bubble curtain technology, and sound aprons where feasible. At the initiation of each pile driving event, and after breaks of more than 15 minutes, the pile driving will also employ a “soft-start” in which the hammer is operated at less than full capacity (i.e., approximately 40–60% energy levels) with no less than a 1-minute interval between each strike for a 5-minute period.

Although it is expected that marine mammals will voluntarily move away from the area at the commencement of the vibratory or “soft start” of pile driving activities, as a precautionary measure, pile driving activities occurring within the Outer Harbor will include establishment of a safety zone, and the area surrounding the operations will be monitored by a qualified marine biologist for pinnipeds. As the disturbance threshold level sound is expected to extend at least 1,000 feet from the steel pile driving operations, a safety zone will be established around the steel pile driving site and monitored for pinnipeds within a 1,200-foot-radius safety zone around the pile. As the steel pile driving site will move with each new pile, the 1,200 foot safety zone will move accordingly. Observers on shore or by boat will survey the safety zone to ensure that no marine mammals are seen within the zone before pile driving of a steel pile segment begins. If marine mammals are found within the safety zone, pile driving of the segment will be delayed until they move out of the area. If a marine mammal is seen above water and then dives below, the biologist will instruct the contractor to wait at least 15 minutes, and if no marine mammals are seen by the biologist in that time, it may be assumed that the animal has moved beyond the safety zone. This 15-minute criterion is based on a study indicating that pinnipeds dive for a mean time of 0.50 minutes to 3.33 minutes; the 15-minute delay will allow a more than sufficient period of observation to be reasonably sure the animal has left the project vicinity.

If pinnipeds enter the safety zone after pile driving of a segment has begun, pile driving will continue. The biologist will monitor and record the species and number of individuals observed, and make note of their behavior patterns. If the animal appears distressed and, if it is operationally safe to do so, pile driving will cease until the animal leaves the area. Pile driving cannot be terminated safely and without severe operational difficulties until reaching a designated depth. Therefore, if it is deemed operationally unsafe by the project engineer to discontinue pile driving activities, and a pinniped is observed in the safety zone, pile driving activities will continue until the critical depth is reached (at which time pile driving will cease) or until the pinniped leaves the safety zone. Prior to the initiation of each new pile driving episode, the area will again be thoroughly surveyed by the biologist.

MM BIO-4. Enhance and expand Salinas de San Pedro Salt Marsh.

To mitigate impacts associated with shading of the 0.175-acre mudflat habitat at Berth 78–Ports O’Call and shading created by the installation of the promenade at the inlet to the Salinas de San Pedro Salt Marsh, 0.07-acre impact to eelgrass, and 0.04-acre impact to mudflat habitat from placement of the rock groin, LAHD will expand the mudflat and salt marsh habitat and reestablish eelgrass within Salinas de

San Pedro Salt Marsh in accordance with the *Southern California Eelgrass Mitigation Policy*. It is anticipated that construction activities in this portion of the proposed project area will begin shortly after the California least tern nesting season concludes at the end of August. A pre-construction eelgrass survey will be conducted (likely in September or October) prior to commencement of construction activities in the vicinity of Inner Cabrillo Beach and the salt marsh habitat. Surveys for eelgrass will be conducted during eelgrass growing season (March–October), and results will be valid for 60 days, unless completed in September or October; if completed in September or October, results will be valid until resumption of next growing season. It is anticipated that the mudflat area within the salt marsh will be increased approximately 0.56 acre converting only upland areas to do so. These improvements will occur by recontouring the side slopes to increase mudflat area, removing the rock sill within the inlets, removing nonnative vegetation, removing the rock-sloped island within the marsh, and potentially constructing a rock groin at the marsh inlet to block littoral sediment from entering the marsh. Figure 3.3-5 illustrates the proposed improvements to the salt marsh.

MM BIO-5. Prepare a mitigation and monitoring plan.

A habitat mitigation and monitoring plan (HMMP) will be developed in coordination with National Marine Fisheries Service (NMFS) and other regulatory agencies to detail the Salinas de San Pedro Salt Marsh enhancements and will include the following performance measures: 1) pickleweed and cord grass present will be salvaged prior to construction and placed in a nursery for replanting post-restoration; 2) salvaged plants will be replanted at appropriate tidal elevations; 3) sediments removed from the salt marsh will be disposed of at LAHD’s upland disposal site at Anchorage Road (see Section 3.14, “Water Quality, Sediments, and Oceanography”); 4) turbidity will be monitored in accordance with Mitigation Measure MM BIO-1 so that eelgrass and mudflat habitat is protected during restoration activities; 5) an eelgrass survey shall be conducted 30 days following construction; and ~~56)~~ at the completion of restoration activities, the salt marsh and associated mudflat will be monitored by a qualified restoration ecologist at Years 1, 2, 3, 5, 7, 8, and 10 to ensure performance standards are met and that restored areas and a minimum of 0.22 acre of created mudflat are self-sustaining by Year 5.

MM BIO-6. Dispose sediment.

Prior to dredging, sediments will be tested for contaminants and if found to will only be disposed of at marine disposal sites if they meet the sediment quality criteria for disposal, will be beneficially reused if an appropriate site is identified. If no feasible reuse site is available for uncontaminated sediment disposal, marine disposal will occur. Depending on the test results, sediments will be disposed of at a pre-approved ocean disposal site (LA-2, LA-3), a contained disposal facility in the harbor, or an approved upland location such as the Port’s Anchorage Road Upland Soil Storage Site. Disposal in-harbor will only occur if an acceptable disposal site is identified and permitted by the USACE (under Section 404 of the federal CWA). At this time, no in-harbor disposal is foreseeable for the San Pedro Waterfront dredged sediments.

MM CR-1: Generate treatment plan and conduct archaeological testing for Mexican Hollywood prior to construction.

~~Potential additional intact, subsurface historic archaeological deposits associated with Mexican Hollywood should be characterized and evaluated for eligibility for inclusion in the California Register by a qualified archaeologist. A testing plan will be developed that will describe evaluation methods for~~

~~determining the eligibility of new finds in Mexican Hollywood for listing in the California Register. Should the identification and evaluation efforts reveal that newly identified deposits do not meet the criteria for inclusion in the California Register, no further mitigation would be required. However, if newly discovered portions of Mexican Hollywood are determined eligible for listing in the California Register, implementation of Mitigation Measures MM CR-2a and/or MM CR-2b will reduce impacts to less than significant levels.~~

Because the proposed project area is paved and developed, archaeological testing and evaluation were not conducted prior to publication of the final EIS/EIR. However, for the purposes of this document, potential archaeological resources associated with Mexican Hollywood are assumed eligible for listing in the CRHR and NRHP. A treatment plan will be generated prior to construction that utilizes the compressed approach for evaluation and treatment of urban historical archaeological sites. Should the identification and evaluation efforts reveal that archeological resources are not eligible for listing in the CRHR and/or NRHP, no further mitigation would be required. However, if archaeological resources are determined to be significant, implementation of Mitigation Measures MM CR-2a and/or MM CR-2b will reduce impacts to less-than-significant levels.

MM CR-2a: ~~If additional California Register~~CRHR/NRHP-eligible deposits associated with Mexican Hollywood are identified, redesign project to ensure preservation in place.

~~If identification and evaluation efforts result in the determination that Mexican Hollywood meets the criteria for inclusion in the California Register~~If testing results in the identification of CRHR/NRHP-eligible archaeological resources, efforts will be made to avoid these deposits during project development and preserve them in place, which is the preferred mitigation measure under CEQA. Options for preservation in place include, but are not limited to, incorporating the site into park or open space land, avoiding the site during construction, burying the site with sterile sediment, or placing the site within a permanent conservation easement. If preservation in place is not feasible, conduct data recovery as defined in MM CR-2b below.

MM CR-2b: Conduct Data Recovery. If avoidance or redesign of the proposed Project is not feasible, then research and fieldwork to recover and analyze the data contained in that site will be conducted. In addition to the treatment plan, this work may involve additional archival and historical research; excavation; analysis of the artifacts, features, and other data discovered; presentation of the results in a technical report; and curation of the recovered artifacts and accompanying data. Consultation with ACHP, SHPO, and other interested or knowledgeable parties may also be required or appropriate.

A standard data recovery report will be prepared when all the fieldwork is concluded. The consultant will prepare a comprehensive technical report that will describe the archaeological project's goals and methods, as well as present the project's findings and interpretations. The report will synthesize both the archival research and important archaeological data in an attempt to address the research questions presented in the research design/testing plan. The report will be submitted to the client and any reviewing agencies, and it ultimately will be filed with the Eastern Information Center, located at California State University, Fullerton. The final data recovery report will include, but is not limited to, the following elements:

- executive summary;
- statement of scope, including proposed project location and setting;
- background contexts or summaries;
- summary of previous research, historical and archaeological;
- research goals and themes;
- field and laboratory methodologies;
- description of recovered materials;
- findings and interpretations, referencing research goals;
- conclusions;
- references cited; and
- appendices such as artifact catalogs, special studies, and other information relevant to the proposed project and findings.

~~MM CR-3: Monitor ground disturbance in the vicinity of known archaeological sites CA-LAN-145 and CA-LAN-146.~~ Archaeological and Native American monitoring will be conducted during ground-disturbing activities within the vicinity of CA-LAN-145 and CA-LAN-146. In addition:

~~An archaeological monitoring plan will be generated in accordance with professional standards. The plan will be generated by an archaeologist who meets the Secretary of Interior's Standards for education, training, and experience.~~

~~The archaeological monitor will ensure that any portions of previously identified significant resources exposed during construction are avoided and protected. In addition, the monitor will determine whether any previously unknown historical resources are uncovered as a result of construction activities. If potentially important historical resources are discovered, the archaeological monitor will immediately ask the Construction Manager to divert construction activity within 100 feet of the find and report the discovery so that appropriate notifications can be issued and treatment measures planned and implemented.~~

~~Upon completion of the monitoring, a final archaeological monitoring report will be prepared for LAHD in accordance with professional standards.~~

Stop Work If Unanticipated Cultural Resources Are Identified during Ground-Disturbing Activities.

In the event that any artifact or unusual amount of bone, shell, or non-native stone is encountered during construction, work will be immediately stopped and relocated from that area. The contractor will stop construction within 100 feet of the exposure of these finds until a qualified archaeologist, retained by LAHD in advance of construction, can be contacted to evaluate the find (see 36 CFR 800.11.1 and pertinent CEQA regulations). Examples of such cultural materials might include concentrations of ground stone tools such as mortars, bowls, pestles, and manos; chipped stone tools such as projectile points or choppers; flakes of stone not consistent with the immediate geology such as obsidian or fused shale; trash pits containing bottles and/or ceramics; or structural remains. If the resources are found to be significant, they will be avoided or will be mitigated consistent with SHPO guidelines as appropriate. All

construction equipment operators will attend a pre-construction meeting presented by a professional archaeologist retained by LAHD to review types of cultural resources and artifacts that would be considered potentially significant to ensure operator recognition of these materials during construction.

If human remains are encountered, there will be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains. The Los Angeles County Coroner will be contacted to determine the age and cause of death. If the remains are not of Native American heritage, construction in the area may recommence. If the remains are of Native American origin, the most likely descendants of the deceased will be identified by the NAHC. LAHD and the USACE will consult with the Native American most likely descendant(s) to identify a mutually acceptable strategy for treating and disposing of, with appropriate dignity, the human remains and any associated grave goods as provided in PRC Section 5097.98. If the NAHC is unable to identify a most likely descendant; if the descendant fails to make a recommendation within 24 hours of being notified by the NAHC, LAHD, or the USACE; and if the descendant is not capable of reaching a mutually acceptable strategy through mediation by the NAHC, the Native American human remains and associated grave goods will be reburied with appropriate dignity on the proposed project site in a location not subject to further subsurface disturbance.

~~MM CR-4: Stop work if cultural resources are discovered during ground-disturbing activities.~~

~~In the event that any artifact or an unusual amount of bone, shell, or non native stone is encountered during construction, work will be immediately stopped and relocated from that area. The contractor will stop construction within 100 feet of the exposure of these finds until a qualified archaeologist, retained by LAHD in advance of construction, can be contacted to evaluate the find (see 36 CFR 800.11.1 and pertinent CEQA regulations). Examples of such cultural materials might include concentrations of ground stone tools such as mortars, bowls, pestles, and manos; chipped stone tools such as projectile points or choppers; flakes of stone not consistent with the immediate geology such as obsidian or fused shale; trash pits containing bottles and/or ceramics; or structural remains. If the resources are found to be significant, they will be avoided or will be mitigated consistent with SHPO guidelines. All construction equipment operators will attend a pre-construction meeting presented by a professional archaeologist retained by LAHD to review types of cultural resources and artifacts that would be considered potentially significant, to ensure operator recognition of these materials during construction.~~

~~If human remains are encountered, there will be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains. The Los Angeles County Coroner will be contacted to determine the age and cause of death. If the remains are not of Native American heritage, construction in the area may recommence. If the remains are of Native American origin, the most likely descendants of the deceased will be identified by the NAHC. LAHD and the USACE will consult with the Native American most likely descendant(s) to identify a mutually acceptable strategy for treating and disposing of, with appropriate dignity, the human remains and any associated grave goods as provided in PRC Section 5097.98. If the NAHC is unable to identify a most likely descendant; if the descendant fails to make a recommendation within 24 hours of being notified by the NAHC, LAHD, or the USACE; and if the descendant is not capable of reaching a mutually acceptable strategy through mediation by the NAHC, the Native American human remains and associated grave goods will be reburied with appropriate dignity on the proposed project site in a location not subject to further subsurface disturbance~~

MM CR-54: Develop a program to mitigate impacts on nonrenewable paleontological resources prior to excavation or construction of any proposed project components.

This mitigation program should be conducted by a qualified vertebrate paleontologist and should be consistent with the provisions of CEQA, as well as the proposed guidelines of the Society of Vertebrate Paleontology. This program should include, but not be limited to:

1. Assessment of site-specific excavation plans to determine areas that will be designated for paleontological monitoring during initial ground disturbance.
2. Development of monitoring protocols for these designated areas. Areas consisting of artificial fill materials will not require monitoring. Paleontological monitors should be equipped to salvage fossils as they are unearthed to avoid construction delays and to remove samples of sediments that are likely to contain the remains of small fossil invertebrates and vertebrates. Monitors must be empowered to temporarily halt or divert equipment to allow removal of abundant or large specimens. Monitoring may be reduced if some of the potentially fossiliferous units described herein are determined upon exposure and examination by qualified paleontological personnel to have low potential to contain fossil resources.
3. Preparation of all recovered specimens to a point of identification and permanent preservation, including washing of sediments to recover small invertebrates and vertebrates. Preparation and stabilization of all recovered fossils are essential in order to fully mitigate adverse impacts on the resources.
4. Identification and curation of all specimens into an established, accredited museum repository with permanent retrievable paleontological storage. These procedures are also essential steps in effective paleontological mitigation and CEQA compliance (Scott and Springer 2003). The paleontologist must have a written repository agreement in hand prior to the initiation of mitigation activities. Mitigation of adverse impacts on significant paleontological resources is not considered complete until such curation into an established museum repository has been fully completed and documented.
5. Preparation of a report of findings with an appended itemized inventory of specimens. The report and inventory, when submitted to the appropriate lead agency along with confirmation of the curation of recovered specimens into an established, accredited museum repository, will signify completion of the program to mitigate impacts on paleontological resources.

MM NOI-1. Construct temporary noise barriers, muffle and maintain construction equipment, prohibit idling, locate equipment, use quiet construction equipment, and notify residents. The following will reduce impact of noise from construction activities:

- a. **Temporary Noise Barriers.** When construction is occurring within 500 feet of a residence or park, temporary noise barriers (solid fences or curtains) will be located between noise-generating construction activities and sensitive receivers.
- b. **Construction Equipment.** All construction equipment powered by internal combustion engines will be properly muffled and maintained.
- c. **Idling Prohibitions.** Unnecessary idling of internal combustion engines near noise sensitive areas will be prohibited.
- d. **Equipment Location.** All stationary noise-generating construction equipment, such as air compressors and portable power generators, will be located as far as practical from existing noise sensitive land uses.
- e. **Quiet Equipment Selection.** Select quiet construction equipment whenever possible. Comply where feasible with noise limits established in the City of Los Angeles Noise Ordinance.
- f. **Notification.** Notify residents within 500 feet to the proposed project site of the construction schedule in writing.

MM NOI-2.

Construction activities for the proposed Project would not exceed the ambient noise level by 5 dBA at a noise sensitive use between the hours of 6:00 p.m. and 7:00 a.m. Monday through Friday, before 8:00 a.m. or after 6:00 p.m. on Saturday, or at any time on Sunday. If extended construction hours are needed during weekdays under special circumstances, LAHD and the contractor will provide at least 72 hours' notice to sensitive receptors within 0.5 miles of the construction area. Under no circumstances will construction hours exceed the range prescribed by the City of Los Angeles Municipal Code.

MM PS-3: Use materials with recycled content.

Materials with recycled content, such as recycled steel from framing and recycled concrete and asphalt from roadway construction, will be used in project construction. Wood chippers registered through the California Air Resources Board's Portable Equipment Registration Program will be used on site during construction using wood from tree removal not wood from demolished structures to further reduce excess wood for landscaping cover. Wood from tree removal, not from demolished structures, will be reused as landscape cover, further reducing the quantity of wood that would otherwise be disposed of at solid waste facilities.

MM PS-5: Water Conservation and Wastewater Reduction.

LAHD and Port tenants will implement the following water conservation and wastewater reduction measures to further reduce impacts on water demand and wastewater flows.

- a. The landscape irrigation system will be designed, installed, and tested to provide uniform irrigation coverage for each zone. Sprinkler head patterns will be adjusted to minimize overspray onto walkways and streets. Each zone (sprinkler valve) will water plants having similar watering needs (i.e., shrubs, flowers, and turf will not be in the same watering zone). Automatic irrigation timers will be set to water landscaping during early morning or late evening hours to reduce water losses from evaporation. Irrigation run times will be adjusted for all zones seasonally, reducing length and frequency of waterings in the cooler months (i.e., fall, winter, spring). Adjust sprinkler timer run time to avoid water runoff, especially when irrigating sloped property. Sprinkler times will be reduced once drought-tolerant plants have been established.
- b. Drought-tolerant, low-water consuming plant varieties will be used to reduce irrigation water consumption.
- c. Recycled water will be used for irrigation and toilet flushing (dual-flushing) ~~The availability of recycled water will be investigated as a source to irrigate large landscaped areas.~~
- d. Ultra-low-flush toilets, ultra-low-flush urinals, and water-saving showerheads must be installed in both new construction and when remodeling. Low-flow faucet aerators will be installed on all sink faucets.
- e. Significant opportunities for water savings exist in air conditioning systems that utilize evaporative cooling (i.e., employ cooling towers). LADWP will be contacted for specific information of appropriate measures.
- f. Recirculating or point-of-use hot water systems will be installed to reduce water waste in long piping systems where water must be run for considerable period before heated water reaches the outlet.