

**LAX MASTER PLAN**  
**MITIGATION MONITORING AND**  
**REPORTING PROGRAM (MMRP)**

**2010 ANNUAL**  
**PROGRESS REPORT**



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*Los Angeles World Airports*

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**Prepared by**

**Los Angeles World Airports**

# LAX Master Plan MMRP 2010 Annual Progress Report

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Appendices:

- A. LAX Master Plan MMRP as adopted September 2004 – Reference LAWA Website <http://www.laxmasterplan.org/publications.cfm> for a copy of the document
- B. MMRP (New measures, Revised measures, and SAIP, CFTP, and BWP-specific measures)
- C. Status and Implementation of Program Plans dated December 2010
- D. Summary Status of “Stand-Alone Mitigation Plans



## 1.0 Executive Summary

Los Angeles City Council certified the LAX Master Plan Final Environmental Impact Report (FEIR) and adopted the LAX Master Plan Mitigation Monitoring and Reporting Program (MMRP) on December 7, 2004. Pursuant to Section 15097 of the California State CEQA Guidelines, the lead agency, Los Angeles World Airports (LAWA), is responsible for reporting, monitoring, and ensuring implementation of all applicable mitigation measures in accordance with the adopted MMRP. This document is the sixth annual progress report for the LAX Master Plan MMRP. This report provides a status update on applicable mitigation activities, policies, and programs that have been and are being implemented by LAWA to ensure compliance with mitigation measures identified in the LAX Master Plan FEIR.

Additional project specific mitigation measures were identified for the Crossfield Taxiway Project (CFTP) and the Bradley West Project (BWP) Final Environmental Impact Reports (FEIRs), the second and third project-level tiered environmental review documents for the LAX Master Plan Program, respectively. Los Angeles City Council approved the CFTP and certified the FEIR on February 9, 2009 and the BWP and FEIR on October 14, 2009. The Los Angeles City Council adopted MMRPs for the CFTP and BWP to mitigate or avoid potentially significant effects on the environment during construction of these projects. The status of one ongoing South Airfield Improvement Project (SAIP) project-specific mitigation and the CFTP and BWP project-specific mitigation measures are also reported in this document.

Mitigation measures applicable to the LAX Master Plan and the BWP are in the process of being implemented. Mitigation measures applicable to the SAIP (with the exception of the one ongoing measure – MM-BC (SA)-1) and CFTP were implemented and the projects are now complete. (The SAIP was completed in June 2008 and the CFTP was completed in May 2010.) Mitigation measures are implemented, monitored, and reported on in accordance with four main categories: (1) Program plans; (2) Construction-related mitigation measures; (3) Design mitigation requirements; and (4) “Stand-alone” mitigation plans, as explained below:

- (1) Program plans are documents that address program-wide mitigation measures specified in the LAX Master Plan MMRP and provide a framework to clearly identify the mitigation measure, define the process of implementation, and establish monitoring and reporting requirements. Some of the program plans are required to update existing operating procedures within appropriate LAWA Divisions and some program plans may be required to develop new procedures and guidelines. Examples of updating existing operations include the maintenance of applicable elements of the existing Aircraft Noise Abatement Program (ANAP) or implementing a Revised Aircraft Noise Mitigation Program. New program plans were developed to address specific mitigation measures from the MMRP, such as the Mitigation Plan for Air Quality (MPAQ) to address air quality impacts. (2) To mitigate or avoid potential significant impacts on the environment during construction, construction-related mitigation measures were implemented by requiring the Construction Contractors to comply with specific environmental requirements. Key areas of mitigation include reduction of traffic impacts by requiring construction deliveries not to coincide with peak traffic periods; and construction equipment replacements and/or retrofit for noise control and reduction of air pollution. (3) Some mitigation measures, such as

measures to maximize use of reclaimed water, were incorporated into the design of the CFTP and BWP and will be incorporated into all other LAX Master Plan projects during the design process. (4) “Stand-alone” mitigation plans are specifically developed to address impacts that are not specifically linked to any one project within the LAX Master Plan. These stand-alone plans are summarized in Appendix D of this report.

## **2.0 Reporting Period**

This report covers the period January 1, 2010 through December 31, 2010.

### 3.0 Introduction/Background

In December 2004, the Los Angeles City Council approved the LAX Master Plan and related entitlements for the future development of LAX. The LAX Master Plan allows for the first major new facilities for, and improvements to, the airport since 1984, and plans how projected growth in passengers and cargo at LAX can be accommodated, in part, through the year 2015. The approved LAX Master Plan includes airfield modifications, development of new terminals, and new landside facilities to accommodate passenger and employee traffic, parking, and circulation. The LAX Master Plan serves as a broad policy statement regarding the conceptual strategic planning framework for future improvements at LAX and working guidelines to be consulted by Los Angeles World Airports (LAWA) as it formulates and processes site-specific projects under the LAX Master Plan program.

Together with its approval of the LAX Master Plan, the Los Angeles City Council certified the LAX Master Plan Final Environmental Impact Report (FEIR) and adopted the LAX Master Plan Mitigation Monitoring and Reporting Program (MMRP). The MMRP (reference **Appendix A**) documents all mitigation measures set forth in the FEIR. The basic framework of, and requirements for, the MMRP were established in conjunction with approval of the LAX Master Plan and are anticipated to remain in effect throughout implementation of the Master Plan. If additional new mitigation measures are required in conjunction with subsequent environmental (i.e., CEQA) review of individual projects proposed under the Master Plan, such as the Crossfield Taxiway Project (CFTP) and the Bradley West Project (BWP), the MMRP will be updated in a similar manner to include such additional project-specific measures. **Appendix B** includes the subsequent project-specific MMRP documents: (1) an MMRP index delineating which Master Plan commitments and mitigation measures are included within the overall MMRP; (2) Revised Mitigation Measures, i.e., administrative refinements to the LAX Master Plan commitments and mitigation measures occurring in conjunction with the Los Angeles City Council certification of the FEIR in December 2004; and (3) four new project-specific mitigation measures applicable to the CFTP; and (4) twenty-four new project-specific mitigation measures applicable to the BWP.

The MMRP Index included in Appendix B provides a comprehensive delineation of all Master Plan commitments, Master Plan mitigation measures, and project-specific mitigation measures adopted to date, and indicates where within Appendix A the complete text of each measure can be found, as well as an indication of the origin of each measure (i.e., the LAX Master Plan FEIR, the FAA Final Environmental Impact Statement (FEIS) and Record of Decision (ROD), the Crossfield Taxiway Project FEIR, or the Bradley West Project FEIR). The MMRP Index provides the most current and comprehensive delineation of which Master Plan commitments and mitigation measures are included within the overall MMRP, recognizing that, if other new mitigation measures are added, the MMRP Index will be updated accordingly.

The primary purpose of this report is to document and report on the status of the current and recently completed mitigation measures set forth in the LAX Master Plan MMRP.

## 4.0 Noise

### 4.0.A N-1 Maintenance of Applicable Elements of Existing Aircraft Noise Abatement Program (ANAP)

The LAX Master Plan MMRP states:

***“Maintenance of Applicable Elements of Existing Aircraft Noise Abatement Program.*** All components of the current airport noise abatement program that pertain to aircraft noise will be maintained.”

The existing ANAP at LAX currently is maintained by LAWA’s Noise Management Section (NMS). The existing ANAP at LAX sets forth LAWA’s noise abatement traffic, flight, and runway use procedures. All aircraft operations at LAX must comply with FAA regulations and procedures for noise abatement and noise emission standards and with all rules, policies, procedures, resolutions, and ordinances established by the City of Los Angeles, LAWA, and LAWA’s Board of Airport Commissioners relative to noise abatement. LAWA’s NMS will continue to maintain the Noise Abatement Program throughout implementation of the LAX Master Plan projects. Actions indicating compliance include submission of the Quarterly Report per the 2005 Stipulated Variance to the County of Los Angeles. Included in each quarterly report is a short summary of actions indicating compliance with each condition of the variance, including “continuing, in full force and effect, the implementation and enforcement of the.... noise abatement policies.”

**Status→ Existing Policy:**

LAWA has complied with this commitment by continually maintaining the existing Aircraft Noise Abatement Program (ANAP) at LAX, as well as submitting the summary report with each Quarterly Report to the County of Los Angeles. Please refer to MM-LU-1, Implement Revised Aircraft Noise Mitigation, for further information regarding the status of the ANAP.

### 4.0.B MM-N-4 Update the Aircraft Noise Abatement Program Elements as applicable to adapt to the future Airfield configuration

The LAX Master Plan MMRP states:

***“Update the Aircraft Noise Abatement Program Elements as applicable to adapt to the future Airfield configuration.*** When existing runways are relocated or reconstructed as part of the Master Plan, the aircraft noise abatement actions associated with those runways shall be modified and re-established as appropriate to assure continuation of the intent of the existing program.”

**Status→ No action required at this time:**

No changes to the ANAP were required as a result of the completion in September 2008 of SAIP construction. Therefore, the existing Preferential Runway Use Policy is still in full force and effect.

#### 4.0.C MM-N-5 Conduct Part 161 Study to Make Over-Ocean Procedures Mandatory

The LAX Master Plan MMRP states:

**“Conduct Part 161 Study to Make Over-Ocean Procedures Mandatory.** A 14CFR Part 161 Study shall be initiated to seek federal approval of a locally-imposed Noise and Access Restriction on departures to the east during Over-Ocean Operations, or when Westerly Operations remain in effect during the Over-Ocean Operations time period.”

The Part 161 Study is a technical and legal study regarding implementation of a Noise and Access Restriction. The proposed restriction includes departures between the hours of midnight and 6:30 a.m. over the communities to the east of LAX, when LAX is operating in either over-ocean operations or remains in westerly operations, and excluding times when LAX operates in easterly operations (49 U.S.C. Section 47521 *et seq.*). The Part 161 Study must meet the relevant requirements of the Airport Noise and Capacity Act of 1990 (ANCA) and the Part 161 regulations (14 C.F.R. Part 161).

#### **Status→ In Progress:**

The Part 161 Study process encompasses three general elements including: (1) data collection and analysis to justify the LAX Proposed Restriction; (2) evaluation and explanation of the legal, environmental, and economic impacts of the proposed restriction; and (3) preparation and submittal to the FAA of the required reports and application materials. LAWA began the Part 161 Study in June 2005.

During 2010, LAWA’s contractor worked on the 2009 fleet mix forecast update in anticipation of a 2010 submittal of the application to the FAA. However, this analysis was delayed to ensure consistency with the fleet mix and forecast being developed for the Specific Plan Amendment Study (SPAS), which is currently underway as required by the 2006 LAX Stipulated Settlement Agreement between LAWA and parties adverse to approval of the LAX Master Plan. The Part 161 study will commence again in 2011 and is expected to take an additional 12 to 18 months to complete.

#### 4.0.D. MM-N-7 Construction Noise Control Plan

The LAX Master Plan MMRP states:

**“Construction Noise Control Plan.** A Construction Noise Control Plan will be prepared to provide feasible measures to reduce significant noise impacts throughout the construction period for all projects near noise sensitive uses. For example, noise control devices shall be used and maintained, such as equipment mufflers, enclosures, and barriers. Natural and artificial barriers such as ground elevation changes and existing buildings may be used to shield construction noise.”

**Status→ Ongoing:**

LAWA requires submission of a Construction Noise Control Plan (CNCP) as a condition in all construction contracts at LAX.

4.0.E. MM-N-8 Construction Staging

The LAX Master Plan MMRP states:

**“Construction Staging.** Construction operations shall be staged as far from noise-sensitive uses as feasible.”

**Status→ Ongoing:**

LAWA requires this condition in all construction contracts at LAX.

4.0.F. MM-N-9 Equipment Replacement

The LAX Master Plan MMRP states:

**“Equipment Replacement.** Noisy equipment shall be replaced with quieter equipment (for example, rubber tired equipment rather than track equipment) when technically and economically feasible.”

**Status→ Ongoing:**

LAWA requires this condition in all construction contracts at LAX.

4.0.G. MM-N-10 Construction Scheduling

The LAX Master Plan MMRP states:

**“Construction Scheduling.** The timing and/or sequence of the noisiest on-site construction activities shall avoid sensitive times of the day, as feasible (9 p.m. to 7 a.m. Monday-Friday; 8 p.m. to 6 a.m. Saturday; anytime on Sunday or Holidays).”

**Status→ Ongoing:**

LAWA requires this condition in all construction contracts at LAX.

4.0.H. MM-N-11 Automated People Mover (APM) Noise Assessment and Control

The LAX Master Plan MMRP states in part:

**“Automated People Mover (APM) Noise Assessment and Control Plan.** In conjunction with detailed design and engineering of the proposed APM systems, a noise control plan shall be prepared specifying noise attenuation measures to reduce APM noise levels at the two significantly impacted hotels to acceptable level (i.e. less than 67 dBA CNEL for the Courtyard by Marriott and the Four Points Sheraton).”

**Status→ Not Applicable:**

This measure is not applicable at this reporting period because the engineering and design phase of the APM did not begin in 2010. The measure will be implemented during the engineering and design phase of the APM.

**5.0 Land Use****5.0.A LU-1 Incorporation of City of Los Angeles Ordinance No. 159,526 (Q) Zoning Conditions for LAX Northside into the LAX Northside/Westchester Southside Project**

The LAX Master Plan MMRP states in part:

***“Incorporation of City of Los Angeles Ordinance No. 159,526 (Q) Zoning Conditions for LAX Northside into the LAX Northside/Westchester Southside Project. To the maximum extent feasible, all [Q] Conditions (Qualifications of Approval) from City of Los Angeles Ordinance No. 159,526 that address the Northside project area will be incorporated by LAWA into a new LAX Zone/LAX Specific Plan for the LAX Northside/Westchester Southside project.”***

**Status→ Completed:**

The LAX Specific Plan, adopted by the City Council in December, 2004, established the LAX Northside as a distinct land use designation and added the LAX-N Zone to the Los Angeles Municipal Code. Section 11 of the LAX Specific Plan incorporates all conditions of development, including the [Q] Conditions, described in Ordinance 159,526 into the Specific Plan.

**5.0.B LU-2 Establishment of a Landscape Maintenance Program for Parcels Acquired due to Airport Expansion**

The LAX Master Plan MMRP states:

***“Establishment of a Landscape Maintenance Program for Parcels Acquired due to Airport Expansion. Land acquired and cleared for airport development will be fenced, landscaped, and maintained regularly until the properties are actually developed for airport purposes.”***

**Status→ In Progress:**

LAWA fences, landscapes, and regularly maintains any newly acquired properties. In addition, LAWA is currently developing procedures that will form the basis of the LMP.

**5.0.C LU-4 Neighborhood Compatibility Program**

The LAX Master Plan MMRP states in part:

***“Neighborhood Compatibility Program. Ongoing coordination and planning will be undertaken by LAWA to ensure that the airport is as compatible as possible with surrounding properties and neighborhoods.”***

**Status→ In Progress:**

LAWA, through its Stakeholder Liaison Office, consults with the neighboring communities on all Master Plan projects. Other projects subject to the LAX Plan Compliance Review (LAX Specific Plan section 7) also must have community input before approval. Conditions of development along the northern and southern boundaries of the airport property include, but are not limited to, setbacks, buffer zones and landscaping.

**5.0.D LU-5 Comply with City of Los Angeles Transportation Element Bicycle Plan**

The LAX Master Plan MMRP states in part:

***“Comply with City of Los Angeles Transportation Element Bicycle Plan. LAWA will comply with bicycle policies and plans in the vicinity of LAX, most notably those outlined in the City of Los Angeles Transportation Element Bicycle Plan and the General Plan Framework, including Pershing Drive, Sepulveda Boulevard, and Aviation Boulevard.”***

**Status→ Ongoing:**

The City of Los Angeles Bicycle Master Plan shows streets that are expected to have bike routes and bike lanes in the future. LAWA takes this into account primarily when considering off-airport mitigations, but LAWA is not expected to install any bike facilities. The City of Los Angeles approved the latest Bicycle Master Plan (independent of LAWA) in March 2011. LAWA is in compliance with the Plan, and no relevant action was required from LAWA in 2010.

**5.0.E MM-LU-1 Implement Revised Aircraft Noise Mitigation**

The LAX Master Plan MMRP states:

***“Implement Revised Aircraft Noise Mitigation Program. LAWA shall expand and revise the existing Aircraft Noise Mitigation Program (ANMP) in coordination with affected neighboring jurisdictions, the State, and the FAA. The expanded Program shall mitigate land uses that would be rendered incompatible by noise impacts associated with implementation of the LAX Master Plan, unless such uses are subject to an existing aviation easement and have been provided with noise mitigation funds. LAWA shall accelerate the ANMP's timetable for achieving full compatibility of all land uses within the existing noise impact area pursuant to the requirements of the California Airport Noise Standards (California Code of Regulations, Title 21, Subchapter 6) and current Noise Variance. With the exception of a possible new interior noise level standard for schools to be established through the study required by Mitigation Measure MM-LU-3, Conduct Study of the Relationship Between Aircraft Noise Levels and the Ability of Children to Learn, the relevant performance standard to achieve compatibility for land uses that are incompatible due to aircraft noise (i.e., residences, schools, hospitals and churches) is adequate acoustic performance (sound insulation) to ensure an interior noise level of 45 CNEL or less. As an alternative to sound insulation, incompatible property may also achieve compatibility if the incompatible use is converted to a noise-compatible use.***



*LAWA shall revise the ANMP to incorporate new, or expand existing measures, including, but not necessarily limited to, the following:*

- *Continued implementation of successful programs to convert existing incompatible land uses to compatible land uses through sound insulation of structures and the acquisition and conversion of incompatible land use to compatible land use.*
- *Ongoing monitoring and provision of annual updates in support of the requirements of the current LAX Noise Variance pursuant to the California Airport Noise Standards, with the updates made available (upon request) to affected local jurisdictions, the Airport Land Use Commission of Los Angeles County, and other interested parties.*
- *Continue the current pre- and post-insulation noise monitoring to ensure achievement of interior noise levels at or below 45 CNEL.*
- *Accelerated rate of land use mitigation to eliminate noise impact areas in the most timely and efficient manner possible through:*
  - *Increased annual funding by LAWA for land use mitigation;*
  - *Reevaluating aviation easements requirements with sound insulation mitigation;*
  - *Provision by LAWA of additional technical assistance, where needed, to local jurisdictions to support more rapid and efficient implementation of their land use mitigation programs;*
  - *Reduction or elimination, to the extent feasible, of structural and building code compliance constraints to mitigation of sub-standard housing.*
- *Revised criteria and procedures for selection and prioritization of properties to be sound insulated or acquired in consideration of the following:*
  - *Insulation or acquisition of properties within the highest CNEL measurement zone;*
  - *Acceleration of the fulfillment of existing commitments to owners wishing to participate within the current ANMP boundaries prior to proceeding with newly eligible properties;*
  - *Insulation or acquisition of incompatible properties with high concentrations of residents or other noise-sensitive occupants such as those housed in schools or hospitals.*
- *Amend the ANMP to include libraries as noise-sensitive uses eligible for aircraft noise mitigation.*

- *Upon completion of the acquisition and/or soundproofing commitment under the current Program, expand the boundaries of the ANMP as necessary over time. LAWA will continue preparing quarterly reports that monitor any expansion of the 65 CNEL noise contours beyond the current ANMP boundaries. Based upon these quarterly reports, LAWA will evaluate and adjust the ANMP boundaries, periodically as appropriate, so that as the 65 CNEL noise contours expand, residential and noise sensitive uses newly impacted by 65 CNEL noise levels would be included within the Program.”*

*The Aircraft Noise Mitigation Program (ANMP) describes the ongoing efforts by LAWA to convert existing incompatible land uses surrounding LAX to compatible land uses through the implementation of two noise mitigation strategies: (1) sound insulation of structures; and (2) acquisition of property followed by the conversion of its incompatible land use to compatible land use (land recycling).*

*LAWA implements the ANMP in an effort to reduce adverse impacts of airport noise and achieve airport standards as set forth in Chapter 6 of Title 21 of the California Code of Regulations. ANMP reports are also specifically required by the State of California as a formal condition of approval of the three-year variances granted by the State to LAWA airports that have not achieved land use compatibility. Based on current data and funding commitments, the ANMP documents the progress made toward achieving land use compatibility and projects the ultimate date when full compatibility will be reached.*

**Status→ In Progress:**

As described above in connection with commitment measure N-1, LAWA has an existing program in place with periodic updates to the State of California and the County of Los Angeles. The last full update was the 2005 ANMP which was submitted in October of 2006. The status of LAWA's existing Aircraft Noise Mitigation Program also is reported in **Appendix C**. In addition, specific updates are as follows:

- LAWA continues to implement two very successful programs to convert existing incompatible land uses to compatible land uses through sound insulation of structures and the acquisition and conversion of incompatible land use to compatible land use.
- Annual updates in support of the requirements of the current LAX Noise Variance pursuant to the California Airport Noise Standards are submitted with the Quarterly Report for the second quarter each year, with the updates provided to all affected jurisdictions, and made available upon request to other interested parties.
- Pre- and post-insulation noise monitoring audits are regularly conducted to ensure achievement of interior noise levels at or below 45 CNEL.
- Land use mitigation programs are being implemented as quickly as possible given that participation in the program is voluntary.

- LAWA makes available land use mitigation funds as soon as the jurisdiction has met all program requirements and upon approval of BOAC.
- Avigation easements are no longer required for sound insulation, except for limited circumstances. Avigation easements are still required for land acquisition using LAWA funds.
- Under very limited circumstances, as required by California Airport Noise Standards where acoustical treatments alone are insufficient to convert residential land uses to compatible uses with airport operations, noise easements are required for residential sound insulation mitigation.
- LAWA makes available the resources for timely technical assistance, where needed, to local jurisdictions to support more rapid and efficient implementation of their land use mitigation programs.
- Selection of and prioritization of properties to be sound insulated or acquired are in consideration of the following:
  - a. Insulation or acquisition of properties within the highest CNEL measurement zone.
  - b. Acceleration of the fulfillment of existing commitments to owners wishing to participate within the current ANMP boundaries prior to proceeding with newly eligible properties.

#### 5.0.F MM-LU-2 Incorporate Residential Dwelling Units Exposed to Single Event Awakenings Threshold into Aircraft Noise Mitigation Program

The LAX Master Plan MMRP states:

***“Incorporate Residential Dwelling Units Exposed to Single Event Awakenings Threshold into Aircraft Noise Mitigation Program.*** *In addition to any restrictive measures that may be implemented resulting from completion of Mitigation Measure MM-N-5, Conduct Part 161 Study to Make Over-Ocean Departure Procedures Mandatory, the boundaries of the ANMP will be expanded to include residential uses newly exposed to single event exterior nighttime noise levels of 94 dBA SEL, based on the Master Plan alternative that is ultimately approved and periodic reevaluation and adjustments by LAWA. Uses that are newly exposed would be identified based on annual average conditions as derived from the most current monitored data.”*

#### **Status→ In Progress:**

All of the newly impacted areas, by definition, would be outside of the 65 CNEL area as defined by the ANMP. Therefore, they will be prioritized accordingly. As part of the standard Variance requirements, annual ANMP progress reports and periodic ANMP report updates will continue to be submitted to the County of Los Angeles.

5.0.G MM-LU-3 (Revised Mitigation Measure) Conduct Study of the Relationship Between Aircraft Noise Levels and the Ability of Children to Learn

The LAX Master Plan MMRP states:

***“Conduct Study of the Relationship Between Aircraft Noise Levels and the Ability of Children to Learn. Current studies of aircraft noise and the ability of children to learn have not resulted in the development of a statistically reliable predictive model of the relative effect of changes in aircraft noise levels on learning. Therefore a comprehensive study shall be initiated by LAWA to determine what, if any, measurable relationship may be present between learning and the disruptions caused by aircraft noise at various levels. An element of the evaluation shall be the setting of an acceptable replacement threshold of significance for CEQA purposes for classroom disruption by both specific and sustained aircraft noise events.”***

**Status→ In Progress:**

The Transportation Research Board's (TRB's) Airport Cooperative Research Program (ACRP) has allocated \$450,000 to perform a study entitled Evaluating the Impact of Aviation Noise on Learning. This study is currently underway. A panel created by the TRB, including one LAWA staff member, will define the scope and objectives of the study, select the contractor performing the work, evaluate the work, and review and comment on the draft and final report.

The objectives of the ACRP study, as currently defined, will be to determine when aircraft noise impacts student learning and what noise metric(s) best defines impact on learning. The study is expected to take 20 months once the selection is made and the consultant is under contract with the TRB.

Upon completion of the study, LAWA will assess the conclusions of the study against the goal of setting an acceptable threshold of significance for classroom disruption by both specific and sustained aircraft noise events. If the goals are met, then further study will not be necessary. If the goals are not met, or only partially met, then LAWA will assess the need for additional study, as required.

5.0.H MM-LU-4 (Revised Mitigation Measure) Provide Additional Sound Insulation for Schools Shown by MM-LU-3 to be Significantly Impacted by Aircraft Noise

The LAX Master Plan MMRP states:

***“Provide Additional Sound Insulation for Schools Shown by MM-LU-3 to be Significantly Impacted by Aircraft Noise. Prior to completion of the study required by Mitigation Measure MM-LU-3, Conduct Study of the Relationship Between Aircraft Noise Levels and the Ability of Children to Learn, and within six months of the commissioning of any relocated runways associated with implementation of the LAX Master Plan, LAWA shall conduct interior noise measurements at schools that could be newly exposed to noise levels that exceed the interim LAX interior noise thresholds for classroom disruption of 55 dB Lmax, 65 dB Lmax, or 35 Leq(h), as presented in Section 4.1 Noise, of the Final EIS/EIR. All school classroom buildings***

*(except those within schools subject to an aviation easement) that are found through the noise measurements to exceed the interim interior noise thresholds, as compared to the 1996 baseline conditions presented in the Final EIS/EIR, would become eligible for soundproofing under the ANMP.*

*Upon completion of the study required by Mitigation Measure MM-LU-3 and acceptance of its results by peer review of industry experts, any schools found to exceed a newly established threshold of significance for classroom disruption based on comparison with 1996 baseline conditions due to implementation of the LAX Master Plan, shall be eligible for participation in the ANMP administered by LAWA, unless they are subject to an existing aviation easement. A determination of which schools become eligible will be made following application of the new threshold based on measured data.”*

**Status→ Not required at this time:**

LAWA will implement this measure's requirements contingent on the results from the study required by MM-LU-3. It should be noted that there is ongoing work related to settlement agreements that were reached between LAWA and both the Inglewood Unified and Lennox School Districts. LAWA actively is assisting each school district in its efforts to mitigate the impacts to schools within the ANMP boundary, per those agreements.

On July 9, 2008 LAWA submitted a letter to the FAA asking that a determination be made related to which schools are impacted. On August 24, 2009 the FAA responded to LAWA by letter with information that this determination will be made as part of the Passenger Facility Charge (PFC) application process. LAWA is proceeding with the PFC application pending information from each school district sufficient for the FAA to make such a determination.

On October 2, 2008, Congress enacted Public Law 110-337, which made noise mitigation for certain schools located within the LAX noise impact area in both the Lennox School District (LSD) and the Inglewood Unified School District (IUSD) eligible for PFC funding regardless of an easement.

**LENNOX SCHOOL DISTRICT**

On December 6, 2010 BOAC authorized the release of \$1,214,600 to LSD as reimbursement for a newly constructed school (Huerta Elementary). This amount represented the difference between the cost of a newly constructed sound insulated school and a newly constructed school without sound insulation. The funds came from the LAX PFC fund, which required special authorization by the FAA.

**INGLEWOOD UNIFIED SCHOOL DISTRICT**

LAWA is working with IUSD and FAA to complete the PFC application for submittal to FAA requesting authorization to impose and use PFC funding for sound insulation of impacted schools in IUSD. The date of completion of the PFC application is uncertain at this time but it is anticipated that the application will be submitted to BOAC and FAA during CY 2012 or 2013.

### 5.0.I MM-LU-5 Upgrade and Expand Noise Monitoring Program

The LAX Master Plan MMRP states:

***“Upgrade and Expand Noise Monitoring Program.*** *LAWA shall upgrade and expand its existing noise monitoring program in surrounding communities through new system procurement, noise monitor location, and equipment installation. Permanent or portable monitors shall be located in surrounding communities to record noise data 24 hours per day, seven days per week for correlation with FAA radar data to cross-reference noise episodes with flight patterns. The upgraded system will support LAWA and other jurisdictional ANMP’s when considering adjustments to airport noise mitigation boundaries.”*

**Status→ Completed:**

On April 18, 2005, LAWA awarded a contract to upgrade and expand the Aircraft and Noise Monitoring and Management System (ANMMS) for LAWA at LAX, ONT, and VNY. LAWA entered into a contract with Lochard Corporation in August 2005 to install the latest software called the Aircraft Noise and Operations Monitoring System (ANOMS) version 8x. The Site Acceptance Testing (SAT) was completed in October 2008 and the 30-day Reliability Testing was conducted in mid 2009. Full acceptance of the system, including new design components (all hardware, software, web applications, and reporting capabilities) is complete at this time. The System Acceptance Certificates were issued for all three LAWA airports as of November 2009. In December 2009, LAWA submitted the required ANOMS documentation to the State of California, Department of Transportation (CalTrans) for approval per the requirement of CCR Title 21, Subchapter 6. On February 4, 2010, CalTrans approved LAWA’s Noise Monitoring Plan for LAX, ONT, and VNY airports that included the upgraded and expanded ANMMS. The system is fully functional and only two punchlist items (System Events and Aircraft Registry) remain to be resolved before final payment is made to Lochard.

As part of the new system design, LAWA replaced all of the actual noise monitoring equipment located throughout the communities impacted by LAX operations. LAWA installed many new permanent noise monitors to better represent the actual noise levels in different areas, including areas well outside of the current 65 dB CNEL Noise Impact Area. A total of 39 noise monitors have been installed at LAX and all are operational. These monitors all are permanent sites, and will be collecting data continuously. Data from each site is downloaded nightly into the ANOMS system, and processed with the flight data to determine the noise levels associated with airport operations. The data then is used to calculate the annual noise levels represented in the State-required Quarterly Reports.

## 6.0 Surface Transportation (On-Airport)

### 6.0.A ST-2 Non-Peak CTA Deliveries

The LAX Master Plan MMRP states:

***“Non-Peak CTA Deliveries.*** *Deliveries to the CTA terminal reconstruction projects will be limited to non-peak traffic hours whenever possible.”*

**Status→ No action required at this time:**

There were no LAX Master Plan projects that required deliveries to the CTA in 2010.

### 6.0.B ST-7 Adequate GTC, ITC, and APM Design

The LAX Master Plan MMRP states:

***Adequate GTC, ITC, and APM Design.*** *LAWA will ensure that the surface transportation system and curbside for the GTC and ITC, commercial vehicle staging areas, and APM systems will be designed to adequately accommodate all forecast vehicular activity through 2015.*

**Status→ No action required at this time:**

The GTC, ITC, and the APM were not under design in 2010.

### 6.0.C ST-8 Limited Short-Term Lane Closures

The LAX Master Plan MMRP states:

***“Limited Short-Term Lane Closures.*** *When construction of any new ramps at the Century Boulevard/Sepulveda Boulevard interchange or construction for the GTC, ITC, or APM elevated structures require short-term lane closures, the lane closures will be for as brief a period as practical, with a goal that closures would principally be scheduled for non-peak periods.”*

**Status→ No action required at this time:**

No new ramps at the Century Boulevard/Sepulveda Boulevard interchange were constructed in 2010, and the GTC, ITC, and the APM were not under design in 2010.

### 6.0.D MM-ST-1 Require CTA Construction Vehicles to Use Designated Lanes

The LAX Master Plan MMRP states:

***“Require CTA Construction Vehicles to Use Designated Lanes.*** *Whenever feasible, construction vehicles shall be restricted to designated*

*roadways or lanes of traffic on CTA roadways adjacent to the existing close-in parking, thus limiting the mix of construction vehicles and airport traffic.”*

**Status→ No action required at this time:**

There were no LAX Master Plan projects that required construction vehicles in the CTA in 2010.

6.0.E MM-ST-2 Modify CTA Signage

The LAX Master Plan MMRP states:

***“Modify CTA Signage.*** *During construction, additional signage will be installed, as required, to separate construction traffic from non-construction traffic to the extent feasible.”*

**Status→ No action required:**

There were no LAX Master Plan projects that required construction vehicles in the CTA in 2010.

6.0.F MM-ST-3 Develop Designated Shuttle Stops for Labor Buses and ITC-CTA Buses

The LAX Master Plan MMRP states:

***“Develop Designated Shuttle Stops for Labor Buses and ITC-CTA Buses.*** *Develop shuttle stops for labor buses (i.e. buses carrying construction workers) and the ITC-CTA shuttle buses at the CTA arrivals level. All ITC-CTA shuttle buses will be routed to these lower level (arrivals) curb areas. These buses will not circulate through the upper level (departures) curbside.”*

**Status→ No action required at this time:**

There were no LAX Master Plan projects that required labor or shuttle buses in the CTA in 2010.



## 7.0 Surface Transportation (Off-Airport)

### 7.0.A ST-9 Construction Deliveries

The LAX Master Plan MMRP states:

***“Construction Deliveries.*** *Construction deliveries requiring lane closures shall receive prior approval from the Construction Coordination Office. Notification of deliveries shall be made with sufficient time to allow for any modifications to approved traffic detour plans.”*

**Status→ In Progress:**

There is ongoing coordination regarding deliveries for the Bradley West project, but lane closures are rarely required.

### 7.0.B ST-12 Designated Truck Delivery Hours

The LAX Master Plan MMRP states:

***“Designated Truck Delivery Hours.*** *Truck deliveries shall be encouraged to use night-time hours and shall avoid the peak periods of 7:00 a.m. to 9:00 a.m. and 4:30 p.m. to 6:30 p.m.”*

**Status→ In Progress:**

There is ongoing enforcement for the Bradley West project.

### 7.0.C ST-14 Construction Employee Shift Hours

The LAX Master Plan MMRP states:

***“Construction Employee Shift Hours.*** *Shift hours that do not coincide with the heaviest commuter traffic periods (7:00 a.m. to 9:00 a.m., 4:30 p.m. to 6:30 p.m.) will be established. Work periods will be extended to include weekends and multiple work shifts, to the extent possible and necessary.”*

**Status→ In Progress:**

There is ongoing enforcement for the Bradley West project.

### 7.0.D ST-16 Designated Haul Routes

The LAX Master Plan MMRP states:

***“Designated Haul Routes.*** *Every effort will be made to ensure that haul routes are located away from sensitive noise receptors.”*

**Status→ In Progress:**

There is ongoing enforcement for the Bradley West project.

#### 7.0.E ST-17 Maintenance of Haul Routes

The LAX Master Plan MMRP states:

***“Maintenance of Haul Routes.*** *Haul routes on off-airport roadways will be maintained periodically and will comply with City of Los Angeles or other appropriate jurisdictional requirements for maintenance. Minor striping, lane configurations, and signal phasing modifications will be provided as needed.”*

**Status→ In Progress:**

There is ongoing enforcement for the Bradley West project.

#### 7.0.F ST-18 Construction Traffic Management Plan

The LAX Master Plan MMRP states:

***“Construction Traffic Management Plan.*** *A complete construction traffic plan will be developed to designate detour and/or haul routes, variable message and other sign locations, communication methods with airport passengers, construction deliveries, construction employee shift hours, construction employee parking locations and other relevant factors.”*

**Status→ Completed for the Bradley West project:**

A Construction Traffic Management Plan was prepared by the contractor for the Bradley West project and approved by LAWA.

#### 7.0.G ST-19 Closure Restrictions of Existing Roadways

The LAX Master Plan MMRP states:

***“Closure Restrictions of Existing Roadways.*** *Other than short time periods during nighttime construction, existing roadways will remain open until they are no longer needed for regular traffic or construction traffic, unless a temporary detour route is available to serve the same function. This will recognize that there are three functions taking place concurrently: (1) airport traffic, (2) construction haul routes, and (3) construction of new facilities.”*

**Status: Ongoing:**

Existing roadways remain open unless a temporary detour route is available to serve the same function.

#### 7.0.H ST-20 Stockpile Locations

The LAX Master Plan MMRP states:

***“Stockpile Locations.*** *Stockpile locations will be confined to the eastern area of the airport vicinity, to the extent practical and feasible. After the eastern facilities are under construction in Alternative D, stockpile locations will be selected that are as close to I-405 and I-105 as possible, and can be accessed by construction vehicles with minimal disruption to*

*adjacent streets. Multiple stockpile locations may be provided, as required.”*

**Status→ Ongoing:**

Multiple stockpile locations near work locations are being utilized.

7.0.I ST-21 Construction Employee Parking Locations

The LAX Master Plan MMRP states:

**“Construction Employee Parking Locations.** *During construction of the eastern airport facilities, employee parking locations will be selected that are as close to I-405 and I-105 as possible and can be accessed by employee vehicles with minimal disruption to adjacent streets. Shuttle buses will transport employees to construction sites. In addition, remote parking locations (of not less than 1 mile away from project construction activities) will be established for construction employees with shuttle service to the airport. An emergency return system will be established for employees that must leave unexpectedly.”*

**Status→ Not Applicable:**

This measure is not applicable at this reporting period because eastern airport facilities are not currently under construction.

7.0.J ST-22 Designated Truck Routes

The LAX Master Plan MMRP states in part:

**“Designated Truck Routes.** *For dirt and aggregate and all other materials and equipment, truck deliveries will be on designated routes only (freeways and non-residential streets). Every effort will be made for routes to avoid residential frontages....”*

**Status→ In Progress:**

There is ongoing enforcement for the Bradley West project.

7.0.K ST-23 Expanded LAX Gateway Improvements/Greening of Impacted Communities

The LAX Master Plan MMRP states in part:

**“Expanded LAX Gateway Improvements/Greening of Impacted Communities.** *Gateway LAX improvements will be enabled through transportation improvements along Century Boulevard to the east as they are proposed to extend into low-income and minority communities in the City of Inglewood. LAWA anticipates making financial contribution, on a fair-share basis up to a maximum of ten million dollars, to various off-airport surface transportation related components.”*

**Status→ In Progress:**

In 2007 FAA indicated that some elements of the proposed uses of funds would not be allowed and that those uses that would be allowed could only cover a portion of the cost, requiring additional funding from the adjacent community. LAWA has not received final determination on this measure.

**7.0.L ST-24 Fair Share Contribution to Congestion Management Plan (CMP) Improvements**

The LAX Master Plan MMRP states in part:

***“Fair Share Contribution to Congestion Management Plan (CMP) Improvements.*** *At the time of substantial completion of the LAX Master Plan, LAWA will contribute funding on a fair-share basis to future transportation improvements identified through the Congestion Management Plan (CMP) analysis completed for Alternative D.”*

**Status→ No action required at this time:**

As the LAX Master Plan was not substantially complete in 2010, no action was required.

**7.0.M MM-ST-6 (Revised Mitigation Measure) Add New Traffic Lanes**

The LAX Master Plan MMRP states in part:

***“Add New Traffic Lanes.*** *Traffic lanes shall be added to select intersections to the satisfaction of LADOT or other appropriate jurisdiction, sufficient to increase the capacity of the intersection without unnecessarily reducing sidewalk widths, removing on-street parking, or encroaching onto other land uses.”*

**Status→ In Progress:**

In 2010, construction started at the intersections of Imperial Highway and Main Street to install an additional westbound left-turn lane, and at Imperial Highway and Pershing Drive to install an additional westbound right-turn lane. These improvements are being performed as construction traffic mitigations for the Bradley West project.

**7.0.N MM-ST-7 (Revised Mitigation Measure) Restripe Existing Facilities**

The LAX Master Plan MMRP states in part:

***“Restripe Existing Facilities.*** *Existing traffic lanes shall be restriped to the satisfaction of LADOT or other appropriate jurisdiction, so that additional lane capacity will be provided without adding any new pavement to the intersection or road segment.”*

**Status→ No action required at this time:**

No action was required in 2010.

7.0.O MM-ST-8 (Revised Mitigation Measure) Add ATSAC, ATCS or Equivalent

The LAX Master Plan MMRP states in part:

***“Add ATSAC, ATCS or Equivalent.*** Automated Traffic Surveillance and Control (ATSAC) or Adaptive Traffic Control System (ATCS) capability or equivalent shall be added to select intersections to the satisfaction of LADOT or other appropriate jurisdiction. The improved capability will result in a more effective traffic signal network.”

**Status→ No action required at this time:**

No action was required in 2010.

7.0.P MM-ST-10 (Revised Mitigation Measure) Modify Signal Phasing

The LAX Master Plan MMRP states in part:

***“Modify Signal Phasing.*** The traffic signal phasing of select intersections shall be modified to the satisfaction of LADOT or other appropriate jurisdiction, to allow more efficient use of the intersections, particularly those that will experience a notable change in traffic characteristics as a result of the project.”

**Status→ Completed for the Bradley West project:**

As a traffic mitigation for the Bradley West project, traffic signal timing at the intersection of Imperial Highway and Main Street was modified by LADOT at LAWA’s request when construction at the intersection reduced the number of travel lanes.

7.0.Q MM-ST-12 Provide New Ramps Connecting I-105 to LAX Between Aviation Boulevard and La Cienega Boulevard

The LAX Master Plan MMRP states:

***“Provide New Ramps Connecting I-105 to LAX Between Aviation Boulevard and La Cienega Boulevard.*** These ramps shall be provided to allow for direct access and egress to/from the ITC and GTC via I-105, between Aviation Boulevard and La Cienega Boulevard. A feasibility study is underway to determine the best design for these ramps.”

**Status→ No action required at this time:**

No action was required in 2010 as the Intermodal Transportation Center (ITC) and the Ground Transportation Center (GTC) were not under design.

7.0.R MM-ST-13 Create a New Interchange at I-405 and Lennox Boulevard

The LAX Master Plan MMRP states:

***“Create a New Interchange at I-405 and Lennox Boulevard.*** This interchange shall provide grade-separated ramps from I-405 directly into airport property, and vice-versa. It shall be located approximately mid-way between Century

*Boulevard and Imperial Highway. A feasibility study is underway to determine the best design for the interchange. Should this proposed interchange not be constructed, suitable and alternate traffic mitigation measures shall be designed and implemented to the satisfaction of LADOT and the Bureau of Engineering.”*

**Status→ No action required at this time.**

7.0.S MM-ST-14 Ground Transportation/Construction Coordination Office Outreach Program

The LAX Master Plan MMRP states:

***Ground Transportation/Construction Coordination Office Outreach Program.*** *The construction coordination office proposed in Master Plan Commitment C-1, Establishment of a Ground Transportation/Construction Coordination Office, shall establish appropriate mechanisms to involve and coordinate with other major airport-area development projects to the extent feasible, to ensure that the cumulative impacts of construction in the airport area are coordinated and minimized.*

**Status→ No action required at this time:**

There was no action required in 2010 as there were no other major airport-area development projects under construction in 2010.

7.0.T MM-ST-15 (Revised Mitigation Measure) Provide Fair-Share Contributions to Transit Improvements

The LAX Master Plan MMRP states in part:

***“Provide Fair-Share Contributions to Transit Improvements.*** *Provide fair-share contributions to benefit transit to and from LAX to the satisfaction of LADOT and/or other appropriate jurisdiction or agency.”*

**Status→ No action required at this time.**

7.0.U MM-ST-16 (Revised Mitigation Measure) Provide Fair-Share Contribution to LA County's project to extend the Marina Expressway

The LAX Master Plan MMRP states in part:

***“Provide Fair-Share Contribution to LA County's project to extend the Marina Expressway.*** *Provide fair-share contribution to Los Angeles County's project to extend the Marina Expressway (Route 90) to Admiralty Way or complete alternative off-site improvements at the following intersections: By 2015: Bali Way & Lincoln Boulevard, Lincoln Boulevard & Marina Expressway, Lincoln Boulevard & Mindanao Way...”*

**Status→ No action required at this time:**

Los Angeles County is not actively pursuing the project to extend the Marina Expressway at this time.

## 8.0 Relocation of Residences and Businesses

### 8.0.A RBR-1 Residential and Business Relocation Program

The LAX Master Plan MMRP states in part:

***Residential and Business Relocation Program.*** *To address the acquisition of properties and relocation of businesses and residents associated with the proposed Master Plan, LAWA will prepare a Residential and Business Relocation Plan (Relocation Plan) in compliance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended, state and local regulations, and FAA Advisory Circular 150/5100-17, prior to the commencement of acquisition.”*

**Status→ Not Applicable:**

This measure is not applicable at this reporting period, and will not be triggered until Master Plan improvements requiring acquisition are advanced to more detailed planning.

### 8.0.B MM-RBR-1 Phasing for Business Relocations

The LAX Master Plan MMRP states in part:

***“Phasing for Business Relocations.*** *To maximize opportunities for airport/airport-dependent businesses and other businesses being acquired to relocate in proximity to their current sites, LAWA shall, to the maximum degree feasible, schedule acquisition phasing and/or development phasing to accommodate interested parties on airport property in a manner that would avoid delays to the overall construction and development schedule.*

**Status→ Not Applicable:**

This measure is not applicable at this reporting period, and will not be triggered until Master Plan improvements requiring acquisition are advanced to more detailed planning.

### 8.0.C MM-RBR-2 Relocation Opportunities through Aircraft Noise Mitigation Program

The LAX Master Plan MMRP states in part:

***“Relocation Opportunities through Aircraft Noise Mitigation Program.*** *As a special project under the Aircraft Noise Mitigation Program (ANMP) for LAX, LAWA shall coordinate with the City of Inglewood and the County of Los Angeles to identify residential land uses that are subject to high levels of aircraft noise where land acquisition and conversion to compatible land uses is contemplated under applicable plans or is otherwise deemed appropriate.”*

**Status→ In Progress:**

LAWA fully supports the efforts of Inglewood and Los Angeles County in using land acquisition to achieve land use compatibility. However, it is up to those jurisdictions to identify properties for acquisition, and make the request for funding to LAWA via the Grant Implementation Plan (GIP) process. LAWA will process the GIP request and provide funding upon approval of BOAC. Inglewood has acquired incompatible land uses and converted them to airport compatible lands in the past, but has not submitted an acquisition GIP since January 2008. Los Angeles County is authorized to do land acquisition, but has not identified any properties for acquisition and has not submitted an acquisition GIP to LAWA.

**9.0 Environmental Justice**

LAWA has worked with local and contracting communities to develop programs that address the current and projected demands for qualified employees and contractors. Some of these programs are:

**9.0.A EJ-1 Aviation Curriculum**

The LAX Master Plan MMRP states:

*“**Aviation Curriculum.** LAWA will work with local school districts to offer aviation-related curriculum at elementary schools, middle schools, high schools and colleges in affected communities near the Los Angeles International Airport. Potential pilot schools could include: Beulah Payne Elementary School, Lennox Middle School, Hillcrest Continuation School, Inglewood High School, Morningside High School, and Los Angeles Southwest College.”*

**Status→ Ongoing:**

LAWA continually is coordinating with the local school districts in developing aviation-related curriculum.

**9.0.B EJ-2 Aviation Academy**

The LAX Master Plan MMRP states:

*“**Aviation Academy.** LAWA will work with local school districts to provide comprehensive educational and trade training for aviation-related careers, targeting students in the affected communities to provide them with increased career opportunities.”*

**Status→ Ongoing:**

The Aviation Career Education (ACE) Academy is a free, week-long motivational program to provide students with a basic understanding of career opportunities within the aviation industry, as well as a general knowledge about LAX. This program is open to all Los Angeles area seventh-and eighth-grade students (between the ages of 12 and 14) and high school students (between the ages of



15 and 18) in communities surrounding LAX, including El Segundo, Hawthorne, Inglewood, Lennox, South Los Angeles, and Westchester/Playa del Rey. Annually, 75 local students participate in the program. Program participants attend site visits and presentations by organizations such as the FAA, Boeing Aircraft, Federal Drug Enforcement Agency, Airlines, LSG Sky Chefs, and others.

The Gateways Internship Program was launched by LAWA as a collaborative initiative of the Inglewood Unified School District, South Bay Private Industry Council, and the Los Angeles World Airports. The program was developed as one of several approaches to address the current and projected demand for qualified employees to fill positions at LAWA. This program provides paid internships to local youth currently attending high school or college and has been expanded to include the Los Angeles Unified School District, Centinela Valley High School District, and the El Segundo Unified School District. The program consists of a high school and a college internship component. The goal of the program is to expose local high school and college students to career opportunities in the aviation industry. This is accomplished by providing on-the-job practical experience in the aviation field through education, training and mentoring programs and activities.

AIRCademics, "Passport to Art Program" is comprised of a 30-week curriculum offered at the Westchester YMCA, near LAX. This school-to-career enrichment program focuses on teaching the subjects of science, math, reasoning, and aviation through the completion of art projects. Participants, who are of middle school age, also learn about the history of flight while attending lectures and field trips. The final class project is the creation of a comic book about LAX. This program has been provided to 15 participants this year.

"Wings to Fly" Mentoring Program connects positive adult role models, in this case airport employees, with at-risk youth in local high schools. Over a seven-month period, students come to LAX twice per month for professionally facilitated workshops, guest speakers, and one-on-one time with their mentors, and learn about airport opportunities in a fun atmosphere. This program has been provided to 40 participants.

Job Shadow Day is an opportunity for students to learn about the aviation industry and its career possibilities while experiencing the workplace. Each student shadows an airport employee throughout the day to witness the individual's daily work activities. As a member of the Inglewood/Airport Area Chamber of Commerce, LAX participates in the annual event and hosts a group of students by introducing them to the airport and the career possibilities in aviation.

The "Flight Path Flyer" flight simulation program offers basic flying skills and operating techniques on flight simulators for six-Saturday sessions at the Flight Path Museum at LAX. This community-educational based program is free and offered three times per year aimed at novice students, ranging from middle school to senior citizens.

LAWA is continually coordinating with local school districts to provide education and trade training programs for aviation-related careers. Positive feedback was received from participants surveyed in these LAX education outreach programs.

#### 9.0.C EJ-3 Job Outreach Center

The LAX Master Plan MMRP states in part:

*“Construction and Other LAX-Related Job Outreach - LAWA will create or utilize an existing resource center to assist historically underrepresented and at-risk local residents to find construction and other substantive jobs with LAWA and surrounding airport-related businesses through training and comprehensive outreach.”*

#### **Status→ In Progress:**

Within Fiscal Year 2009-2010 LAWA attended over 80 job fairs and spoke at numerous career days on elementary and high school campuses. LAWA's website [www.lawa.org/bjrc](http://www.lawa.org/bjrc) contains interactive applications for users to create and post resumes as well as apply for open positions and internships at LAWA. There is a link to the Los Angeles Business Assistance Virtual Network (BAVN) which provides information about upcoming procurement opportunities and job fairs. The Business Database will be the next innovation to be added to the site. It will allow prime contractors to locate qualified MBE, WBE and DBE subcontractors who have previously worked on LAWA projects.

#### **Gateways Internship Program**

The Gateways Internship Program was described above under measure EJ-2. Through LAWA's partnerships with various community based organizations, youth and adults were placed in various Divisions at LAWA in support of the Federal Stimulus Program. The Gateways Internship Program placed 37 local high school and college students for the summer in 2010. There are 12 college students currently working with LAWA divisions, the Federal Aviation Administration (FAA), and LAWA employers at LAX, Van Nuys and Ontario Airports. The 12 students are paid with LAWA funds.

LAWA is continuing its education outreach to international students. As a result, it is anticipated international students from Belgium, Germany, and Japan will come on board. Several college students that participated in the Gateways Internship Program received permanent positions as a result.

#### **Job Training Program**

Although the FAA has not approved a job training program (JTP) for LAWA and therefore no LAWA funds may be used for job training, LAWA leverages its relationships with agencies funded to provide job training.

By leveraging relationships with over 16 JTP partners, LAWA, through its Business and Job Resources Division (BJRD), initiated its JTP in January 2007. LAWA was able to successfully partner with agencies funded through other means to provide job training opportunities to residents in the Project Impact Area. Currently, LAWA is working with agencies that provide an array of training,

including computer skills, customer service, time management, leadership skills, and other classes.

Collaboratively, LAWA was able to work with Loyola Marymount University (LMU) to train 150 shuttle bus drivers for Servisair. They were given courses in anger management, customer service, and cultural diversity. These drivers also were given training which allowed them to become ADA certified as well.

Based on surveys to employers, both internally and externally, new training courses will include Conversational Spanish for Concessions Division staff and Management training in the areas of communication, coaching, and interviewing for Duty Free Shops (DFS). The Conversational Spanish course officially started on September 8<sup>th</sup>, with a class of about 20 LAWA students.

As a result of a partnership with the Los Angeles Community College District, LAWA has been able to train over 50 high school and college interns. For the second consecutive year, through Los Angeles City College (LACC), students have taken courses in life and work skills, customer service, time management, and work ethics. The students received college credit for their efforts.

The BJRDC has been able to refer over 65 individuals to pre-apprenticeship construction training. As a result, over two dozen have received their Pre-Apprenticeship Construction Training Certificate. Through the LAWA partnerships, many local residents have completed training in customer service, retail sales, auto mechanics, and other disciplines.

The Mayor's Office has initiated discussions with Worksource Centers, the Los Angeles Community College District, and surrounding LAWA businesses to conduct Hospitality Training for local residents. Plans are underway to create training modules that will result in career paths for residents within the hospitality industry. Upon the completion of training, these candidates will be well-positioned to compete for job opportunities at the hotels or with various Airport employers.

#### As of June 30, 2010

JTP Referrals: 505                      Completed Training 321\*

\*This number includes new employees as well as incumbent workers.

#### **First Source Hiring Program**

The First Source Hiring Program (FSHP) is designed to provide residents from the communities immediately surrounding the airport and those most impacted by airport operations access to airport jobs. Those communities are a part of the Project Impact Area (PIA) and are comprised of South Los Angeles, El Segundo, Hawthorne, Inglewood, and Lennox.

Through a competitive process, LAWA hired Agile 1 to automate the FSHP and to provide staff to operate the program day to day. Now fully automated, with an Applicant Tracking System (ATS) launched in July 2009, the FSHP now quickly assists residents with information about LAWA jobs.

LAWA works closely with the Work Source, One-Stop Centers, community, and faith-based organizations that serve the airport area and beyond to register potential candidates on the ATS for positions with LAWA. LAWA staff is training the job developers at these organizations to prescreen and qualify their clients to be eligible for opportunities at LAWA as they arise. Their clients are able to post their resumés and apply for positions where they may be reviewed online by hiring managers.

On February 23, 2010, the BJRC hosted Walsh-Austin JV at the Flight Path Museum and held a targeted recruitment event for non-construction mid-level and upper management positions. Through LAWA's efforts they were able to hire Project Managers, Engineers, Safety Superintendents, Administrative Assistants, and others for the Bradley West Gates construction project.

As of 6/30/2010 - Actual

FSHP	Referrals:	3360**	Hires:	790***
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\*\*These candidates were referred to approximately 1373 positions with 85 LAWA employers.

\*\*\*Number of confirmed hired, actual number may be higher.

With 65 Program Partner Companies

<u>Hiring Goals:</u>	Through June 2009	through June 2010
FSHP	675	801

9.0.D EJ-4 Community Mitigation Monitoring

The LAX Master Plan MMRP states:

***“Community Mitigation Monitoring.*** LAWA will include community participation in monitoring the implementation of the final Mitigation Measures and Master Plan Commitments in order to ensure agency compliance and accountability. The community participation will include a diverse group of residents, stakeholders, environmental specialists and community leaders that will convene on a regular basis.”

**Status→ In Progress:**

The LAX Master Plan Stakeholders Liaison Office (LAX MP SLO) was created as a component of the LAX Plan and the LAX Specific Plan by the Los Angeles City Council to ensure public participation in the implementation of the LAX Master Plan. The LAX MP SLO provides stakeholders with direct access to applicable information on the LAX Master Plan. In addition, the SLO continues to provide the communities with notifications that require public comment (Notice to Proceed, Executive Director's Report, and LAX Plan Compliance Notifications).

### 9.0.E. MM-EJ-1 Expedite Residential Soundproofing for Qualifying Property Owners

The LAX Master Plan MMRP states in part:

***“Expedite Residential Soundproofing for Qualifying Property Owners. Prior to commencing operations on the new runway (Alternative A) or relocated runway (Alternatives C and D) related to the northern runway complex, LAWA will increase funding and technical assistance in order to complete residential soundproofing related to LAX aircraft noise within the City of Inglewood and Los Angeles County to the extent feasible, and will seek federal funding assistance from the FAA.”***

**Status → Not required at this time:**

To be implemented following completion of the Specific Plan Amendment Study (SPAS) and approval of a north airfield runway project, as applicable.

## **10.0 Air Quality**

### 10.0.A AQ-1 Air Quality Source Apportionment Study

The LAX Master Plan MMRP states in part:

***“Air Quality Source Apportionment Study. LAWA will conduct an air quality source apportionment study to evaluate the contribution of on-airport aircraft emissions to off-airport air pollutant concentrations.”***

**Status → In Progress:**

Following approval of the Master Plan, LAWA commenced an Air Quality and Source Apportionment Study (AQSAS) to assess air quality in areas adjacent LAX. This AQSAS will be the most comprehensive air monitoring, modeling, and data analysis program to be undertaken by LAWA for one of its facilities.

This study will include the installation of monitoring stations in selected areas to collect and measure both criteria and toxic air pollutants on site at LAX and at sites in the communities surrounding LAX. This study was planned to be conducted in three phases. The first phase commenced in March 2008. The second phase included a Technology and Methodology Feasibility Demonstration Project (Demonstration Project) where data was collected continuously at five on-airport sites during June, July, and August 2008 to assess the feasibility of the approach and methodology for Phase III. The results of the Demonstration Project will be used to validate the scientific approach of Phase III, the Long-Term Study.

The Study’s scope or Work Plan was developed by a Technical Working Group (TWG) comprised of representatives from U.S. Environmental Protection Agency (EPA), Federal Aviation Administration (FAA), California Air Resources Board, South Coast Air Quality Management District, State of California Office of Environmental Health Hazard Assessment, Desert Research Institute, University

of Southern California, research experts in the fields of receptor modeling and air pollutant monitoring, and representatives from community organizations.

Several meetings were held in 2008 to communicate the status, progress and results of the Study to a larger Briefing Group consisting of a diverse panel of environmental and public health regulatory agencies, as well as federal, State and local elected officials.

At the commencement of the Demonstration Project, LAWA authorized funding for the consultant to perform Phases I and II only as a detailed scope for Phase III could not be developed until the Demonstration Project was completed and the data fully analyzed. In 2009, the Study's TWG reviewed the draft documentation from the Demonstration Project and recommended that additional analysis of the sizeable Demonstration Project data and air sampling of taxiing aircraft be completed prior to developing the methodology, protocols, and Work Plan for Phase III.

In 2010, an approach was developed to move the Air Quality Study forward in the most expeditious manner possible while taking into account LAWA's contracting process. The Study is anticipated to be completed in 2013.

#### 10.0.B AQ-2 School Air Filters

The LAX Master Plan MMRP states:

***"School Air Filters.*** LAWA will provide funding for air filtration system at qualifying public schools with air conditioning systems in place. The qualifying schools will be determined based upon review of the conclusions and recommendations of the Air Quality Source Apportionment Study to be conducted in Master Plan Commitment AQ-1."

**Status→ Not required at this time:**

LAWA will initiate the process of identifying qualifying schools following completion of AQ-1, Air Quality and Source Apportionment Study, anticipated to be completed in 2013.

#### 10.0.C AQ-3 Mobile Health Research Lab

The LAX Master Plan MMRP states:

***"Mobile Health Research Lab.*** LAWA will explore the ability to fund/co-fund, to the extent feasible and permissible by federal and local regulations, or seek funding sources to support the goal of a Mobile Health Research Lab. The goal of the Mobile Health Research Lab will be to research and study, not diagnose or treat, upper respiratory and hearing impacts that may be directly related to the operation of LAX."

**Status→ Not required at this time:**

It is expected that the Health Study will commence after the completion of AQ-1, Air Quality and Source Apportionment Study.

#### 10.0.D MM-AQ-1 LAX Master Plan – Mitigation Plan for Air Quality (Framework)

The LAX Master Plan MMRP states in part:

***"LAX Master Plan - Mitigation Plan for Air Quality - LAWA shall expand and revise the existing air quality mitigation programs at LAX through the development of an LAX Master Plan –Mitigation Plan for Air Quality (LAX MP-MPAQ)."***

**Status→ Completed:**

In 2005, LAWA completed a Mitigation Plan for Air Quality that established the overall framework for the implementation of specific measures for mitigating air quality impacts associated with the LAX Master Plan. The MM-AQ-1 Plan was adopted by the Board of Airport Commissioners in December 2005, in conjunction with approval of the SAIP (i.e., prior to implementation of the first project under the LAX Master Plan).

#### 10.0.E MM-AQ-2 Construction-Related Mitigation Measures

The LAX Master Plan MMRP states in part:

***"Construction-Related Mitigation Measures - The required components of the construction-related air quality mitigation measures are itemized below [starting on page 4-725 of the FEIR]. These components include numerous specific actions to reduce emissions from on-road and non-road mobile sources and stationary engines. All of these measures must be in place prior to commencement of the first Master Plan construction project and must remain in place through build out of the Master Plan. An implementation plan will be developed which provides available details as to how each of the elements of this construction-related mitigation measures will be implemented and monitored."***

**Status→ Completed:**

LAWA completed a Construction-Related Mitigation Plan that set forth specific implementation requirements for the measures referenced in the FEIR. The MM-AQ-2 Plan was adopted by the Board of Airport Commissioners in December 2005, in conjunction with approval of the SAIP (i.e., prior to implementation of the first project under the LAX Master Plan) and were integrated into the CFTP construction specifications as appropriate. The execution of this implementation plan (i.e., the MM-AQ-2 Plan) will occur in conjunction with construction of each Master Plan project.

#### 10.0.F MM-AQ-3 Transportation-Related Mitigation Measures

The LAX Master Plan MMRP states in part:

***"Transportation-Related Mitigation Measure - The primary feature of the transportation-related air quality mitigation measure is the development and construction of at least eight (8) additional sites with Flyaway service similar to the service provided by the Van Nuys Flyaway currently operated by LAWA. The intent of these FlyAway sites is to reduce the quantity of traffic going to and from LAX by providing regional locations where LAX employees and passengers can***

*pick up an LAX-dedicated, clean-fueled bus that will transport them from a FlyAway closer to their home or office into LAX and back."*

### Status→ In Progress:

LAWA operates four FlyAway routes between LAX and remote boarding locations at Van Nuys, Union Station, Westwood/UCLA and Irvine Station. All but the Irvine route now demonstrate a consistent and mature level of passenger demand, despite declines in 2009 mirroring the percentage drop in air passenger volume at LAX. In 2010, the network realized an average daily ridership of over 3,677 passengers, reduced vehicle emissions by almost 22 tons per day, and removed 3,125 vehicles per day, travelling a combined total of 63,150 miles per day on roads approaching LAX.

Table 1 (below) summarizes the FlyAway network mitigation data for years 2007 through 2010. Note that the ridership on the Westwood FlyAway was down in 2009, from 2008, but more emissions have been mitigated due to increased efficiency (service reductions resulted in fewer bus trips for about the same number of passengers). While Irvine has reduced vehicle trips by 11,500 annually, emissions have not been reduced due to low ridership per bus trip.

<b>TABLE 1: CY 2007/2008/2009/2010 LAX FlyAway Network Emissions Reduction Summary</b>				
Emissions reported include NOX, CO, ROG, PM10 and CO2				
	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>
<b>Van Nuys</b> (rebuilt 12/05)				
Ridership	946,018	987,705	880,024	807,485
Vehicle Trips Saved	804,060 (2,203/day)	839,491 (2,300/day)	747,969 (2,049/day)	686,315
Reduction in Miles Traveled	16.9 million miles	17.6 million miles	15.7 million miles	14.4 million miles
Emissions reduced	7,073.2 tons	7,400.6 tons	6,455.5 tons	5,595.2 tons
Auto operating cost savings	\$9.5 million	\$11.0 million	\$9.8 million	\$6.8 million
<b>Union Station</b> (opened 03/06)				
Ridership	329,323	433,216	409,491	413,975
Vehicle Trips Saved	279,905 (767/day)	368,208 (1,009/day)	348,043 (954/day)	351,854
Reduction in Miles Traveled	5.5 million miles	7.3 million miles	6.9 million miles	6.9 million miles
Emissions reduced	1,674.1 tons	2,549.8 tons	2,322.2 tons	2,328.9 tons
Auto operating cost savings	\$3.1 million	\$4.5 million	\$4.3 million	\$3.3 million
<b>Westwood</b> (opened 06/07)				
Ridership	98,274	125,288	115,048	107,136
Vehicle Trips Saved	83,527 (229/day)	106,487 (292/day)	97,784 (268/day)	91,059
Reduction in Miles Traveled	1.0 million miles	1.3 million miles	1.2 million miles	1.1 million miles
Emissions reduced	-72.2 tons	67.7 tons	211.9 tons	204 tons
Auto operating cost savings	\$563,000	\$796,000	\$731,000	\$618 thousand
<b>Irvine</b> (opened 11/16/09)				
Ridership	--	--	1,500	13,604
Vehicle Trips Saved	--	--	1,275	11,563
Reduction in Miles Traveled	--	--	60 thousand miles	580 thousand miles
Emissions reduced	--	--	N/A (insufficient data)	- 81 tons
Auto operating cost savings	--	--	\$40,000	\$327 thousand
<b>Network Summary</b>				
Ridership	<b>1,373,615</b>	<b>1,546,209</b>	<b>1,406,063</b>	<b>1,342,200</b>
Vehicle Trips Saved	<b>1,167,492 (3,198/day)</b>	<b>1,314,186 (3,600/day)</b>	<b>1,195,295 (3,275/day)</b>	<b>1,140,791</b>
Reduction in Miles Traveled	<b>23.4 million miles</b>	<b>26.2 million miles</b>	<b>23.8 million miles</b>	<b>23.0 million miles</b>
Emissions reduced	<b>8,675 tons</b>	<b>10,018 tons</b>	<b>8,990 tons</b>	<b>7,966 tons</b>
Auto operating cost savings	<b>\$13.2 million</b>	<b>\$16.3 million</b>	<b>\$14.9 million</b>	<b>\$13 million</b>

*Westwood data for 2007 is a projection for a full 12 months operation.*



The LAX Master Plan MMRP states in part:

***"Transportation-Related Mitigation Measure*** – *Other feasible mitigation elements may be developed to ensure that the emission reductions for this transportation-related measure are achieved. These may include, for example"... Clean Vehicle Fleets measures such as:*

- *Promoting commercial vehicles/trucks/vans using terminal areas (LAX and regional intermodal) to install SULEZ/ZEV engines to reduce vehicle air emissions.*

**Status→ In Progress:**

LAWA's fleet is the largest Alternative Fuel Vehicle (AFV) airport fleet in the nation and includes over 590 AFVs. Currently, over 63% of LAWA's fleet vehicles and equipment at LAX are AFV's. Additionally, 100% of the LAX courtesy shuttle fleet is powered by natural gas. LAWA has designed and built a state-of-the-art, high-technology LNG/LCNG fueling station at LAX and acquired over \$5 million in grant funding to offset the differential cost of AFVs. LAWA has partnered with the Department of Water and Power to install 32 public access electric vehicle charging stations at LAX and partnered with Praxair, BP, SCAQMD, California Energy Commission, and the U.S. DOE to build the first retail hydrogen fueling station at an airport.

The AFV program has been recognized as one of the most successful airport AFV programs in the nation and a world-class model for airports and other agencies. Awards and recognition include:

- Clean Air Awards from the Coalition for Clean Air and South Coast Air Quality Management District
- Certificate of Distinguished Achievement from the California Natural Gas Vehicle Coalition
- Clean Cities Certificate for participation in the U.S. Department of Energy's Clean Cities Program
- Recognized by the U.S. Department of Energy Clean Cities Program as a "success story for airports"

**10.0.G MM-AQ-4 Operations-Related Mitigation Measures**

The LAX Master Plan MMRP states in part:

***"Operations-Related Mitigation Measure:*** *The primary component of the operations-related air quality mitigation measure consists of one airside item, the conversion of ground support equipment (GSE) to extremely low emission technology (such as electric power, fuel cells, or other future technological developments)."*

**Status→ In Progress:**

LAWA is continuing to investigate available technology and potential technological developments regarding extremely low emission GSE.

## 11.0 Hydrology and Water Quality

### 11.0.A HWQ-1 (Revised Master Plan Commitment) Conceptual Drainage Plan

The LAX Master Plan MMRP states in part:

**“Conceptual Drainage Plan.** Once a Master Plan alternative is selected, and in conjunction with its design, LAWA will develop a conceptual drainage plan of the area within the boundaries of the Master Plan alternative (in accordance with FAA guidelines and to the satisfaction of the City of Los Angeles Department of Public Works, Bureau of Engineering). The purpose of the drainage plan will be to assess area-wide drainage flows as related to the Master Plan project area, and at a level of detail sufficient to identify the overall improvements necessary to provide adequate drainage capacity to prevent flooding.”

**Status→ Completed:**

LAWA completed a Conceptual Drainage Plan which was adopted in conjunction with the SAIP.

### 11.0.B MM-HWQ-1 Update Regional Drainage Facilities

The LAX Master Plan MMRP states:

**“Update Regional Drainage Facilities.** Regional drainage facilities should be upgraded, as necessary, in order to accommodate current and projected future flows within the watershed of each stormwater outfall resulting from cumulative development. This could include upgrading the existing outfalls, or building new ones. The responsibility for implementing this mitigation measure lies with the Los Angeles County Department of Public Works and/or the City of Los Angeles Department of Public Works, Bureau of Engineering. A portion of the increased costs for the upgraded flood control and drainage facilities would be paid by LAX tenants and users in accordance with the possessory interest tax laws and other legal assessments, consistent with federal airport revenue diversion laws and regulations and in compliance with state, county and city laws. The new or upgraded facilities should be designed in accordance with the drainage design standards of each agency.”

**Status→ In Progress:**

LAWA completed a Conceptual Drainage Plan which was adopted in conjunction with the SAIP. To determine if regional drainage facilities should be upgraded, LAWA is performing an analysis to evaluate the post-construction drainage conditions for ongoing and future projects.

## 12.0 Historical/Architectural and Archaeological/Cultural Resources

### 12.0.A HR-1 Preservation of Historic Resources

The LAX Master Plan MMRP states:

***“Preservation of Historic Resources.*** *In implementing the LAX Plan and conducting ongoing activities associated with operation of the airport, LAWA will support the preservation of identified significant historic/architectural resources through careful review of design and development adjacent to those resources and by undertaking any modifications to those resources in a manner consistent with the Secretary of the Interior's Standards for the Treatment of Historic Properties. Additionally, where sound insulation is proposed for identified significant historic/architectural resources under the Aircraft Noise Mitigation Program, LAWA will ensure that methods are developed with the approval of a qualified architectural historian or historic architect, who meets the Secretary of the Interior's Professional Qualifications Standards, in compliance with the Secretary of the Interior's Standards for Rehabilitation.”*

#### **Status→ Ongoing:**

Any project at LAWA involving any historic resource is required to be reviewed by the Office of Historic Resources of the City of Los Angeles before any changes to the resource are approved. The historic preservation architect within this division of the Department of City Planning is charged with this responsibility.

### 12.0.B MM-HA-1 Historic American Buildings Survey (HABS) Document

The LAX Master Plan MMRP states in part:

***“Historic American Buildings Survey (HABS) Document.*** *For historic properties eligible at the federal, state or local levels that are proposed for demolition or partial demolition (i.e., the International Airport Industrial District), a Historic American Buildings Survey (HABS) document shall be prepared by LAWA in accordance with the Secretary of the Interior's Guidelines for Architectural and Engineering Documentation Standards. The level of documentation (I, II, III) shall be determined by the National Park Service (NPS).”*

#### **Status→ Not required at this time:**

No historic buildings were proposed for demolition or partial demolition during 2010. Therefore, this requirement has not been triggered.

### 12.0.C MM-HA-2 Historic Educational Materials

The LAX Master Plan MMRP states in part:

***Historic Educational Materials.*** *For the significant historic resources proposed for demolition or partial demolition, educational materials suitable for the general public, secondary school use, and/or aviation historians and enthusiasts shall be*

*designed with the assistance of a qualified historic preservation professional and implemented by LAWA.*

**Status→ Not required at this time:**

No significant historic resources were proposed for demolition or partial demolition during 2010. Therefore, this requirement has not been triggered.

12.0.D MM-HA-4 Discovery

The LAX Master Plan MMRP states in part:

*“Discovery. The FAA shall prepare an archaeological treatment plan (ATP), in consultation with SHPO, that ensures the long-term protection and proper treatment of those unexpected archaeological discoveries of federal, state, and/or local significance found within the APE of the selected alternative.”*

**Status→ Completed:**

The Archaeological Treatment Plan was prepared and completed in June 2005. The provisions of this plan refine and, in some cases, replace all of the MM-HA measures.

12.0.E MM-HA-5 Monitoring

The LAX Master Plan MMRP states in part:

*“Monitoring. Any grading and excavation activities within LAX proper or the acquisition areas that have not been identified as containing redeposited fill material or having been previously disturbed shall be monitored by a qualified archaeologist.”*

**Status→ In Progress:**

All LAWA Construction Approval Letters for projects which require grading and excavation include an established LAWA procedure to protect any archaeological finds and to contact a qualified archaeologist when such finds are encountered.

12.0.F MM-HA-6 Excavation and Recovery

The LAX Master Plan MMRP states:

*“Excavation and Recovery. Any excavation and recovery of identified resources (features) shall be performed using standard archaeological techniques and the requirements stipulated in the ATP. Any excavations, testing, and/or recovery of resources shall be conducted by a qualified archaeologist selected by LAWA.”*

**Status→ Ongoing:**

This is an ongoing requirement in LAWA all bids and contracts

#### 12.0.G MM-HA-7 Administration

The LAX Master Plan MMRP states:

***“Administration.*** *Where known resources are present, all grading and construction plans shall be clearly imprinted with all of the archaeological/cultural mitigation measures. All site workers shall be informed in writing by the on-site archaeologist of the restrictions regarding disturbance and removal as well as procedures to follow should a resource deposit be detected.”*

**Status→ Ongoing:**

This is an ongoing requirement in all LAWA bids and contracts.

#### 12.0.H MM-HA-8 Archaeological/Cultural Monitor Report

The LAX Master Plan MMRP states in part:

***“Archaeological/Cultural Monitor Report.*** *Upon completion of grading and excavation activities in the vicinity of known archaeological resources, the Archaeological/Cultural monitor shall prepare a written report. The report shall include the results of the fieldwork and all appropriate laboratory and analytical studies that were performed in conjunction with the excavation.”*

**Status→ Ongoing:**

This is an ongoing requirement in all LAWA bids and contracts.

#### 12.0.I MM-HA-9 Artifact Curation

The LAX Master Plan MMRP states:

***“Artifact Curation.*** *All artifacts, notes, photographs, and other project-related materials recovered during the monitoring program shall be curated at a facility meeting federal and state standards.”*

**Status→ Ongoing:**

This is an ongoing requirement in all LAWA bids and contracts.

#### 12.0.J MM-HA-10 Archaeological Notification

The LAX Master Plan MMRP states:

***“Archaeological Notification.*** *If human remains are found, all grading and excavation activities in the vicinity shall cease immediately and the appropriate LAWA authority shall be notified: compliance with those procedures outlined in Section 7050.5(b) and (c) of the State Health and Safety Code, Section 5097.94(k) and (i) and Section 5097.98(a) and (b) of the Public Resources Code*

*shall be required. In addition, those steps outlined in Section 15064.5(e) of the CEQA Guidelines shall be implemented.”*

**Status→ Ongoing:**

This is an ongoing requirement in all LAWA bids and contracts.

12.0.K MM-HA-11 (Additional Mitigation Measure) Navigational Aids Relocation and Improvements

The LAX Master Plan MMRP Additional Mitigation Measures states in part:

*“**Navigational Aids Relocation and Improvements.** Prior to initiation of any grading and/or excavation activities associated with the proposed improvement and relocation of navigational aids, the FAA shall prepare, or cause to be prepared, an archaeological treatment plan (ATP) that ensures the long-term protection and proper treatment of any previously unknown significant archaeological resources, including any Native American remains, encountered during such grading and/or excavation within the Coastal Zone.”*

**Status→ Ongoing:**

This is an ongoing requirement in all design contracts as needed.

### 13.0 Paleontological Resources

13.0.A MM-PA-1 Paleontological Qualification and Treatment Plan

The LAX Master Plan MMRP states:

*“**Paleontological Qualification and Treatment Plan.** A qualified paleontologist shall be retained by LAWA to develop an acceptable monitoring and fossil remains treatment plan (that is, a Paleontological Management Treatment Plan - PMTP) for construction-related activities that could disturb potential unique paleontological resources within the project area. This plan shall be implemented and enforced by the project proponent during the initial phase and full phase of construction development. The monitoring and treatment plan shall be subject to approval by the Vertebrate Paleontology Section of the Natural History Museum of Los Angeles County to comply with paleontological requirements, as appropriate.”*

**Status→ Completed:**

The Paleontological Management Treatment Plan was prepared and revised in December 2005. The provisions of this plan refine and, in some cases, replace all of the MM-PA measures.

### 13.0.B MM-PA-2 Paleontological Authorization

The LAX Master Plan MMRP states:

***“Paleontological Authorization.*** *The paleontologist shall be authorized by LAWA to halt, temporarily divert, or redirect grading in the area of an exposed fossil to facilitate evaluation and, if necessary, salvage. No known or discovered fossils shall be destroyed without the written consent of the project paleontologist.”*

**Status→ Ongoing:**

This is an ongoing requirement in all LAWA bids and contracts.

### 13.0.C MM-PA-3 Paleontological Monitoring Specifications

The LAX Master Plan MMRP states:

***“Paleontological Monitoring Specifications.*** *Specifications for paleontological monitoring shall be included in construction contracts for all LAX projects involving excavation activities deeper than six feet.”*

**Status→ Ongoing:**

This is an ongoing requirement in all LAWA bids and contracts.

### 13.0.D MM-PA-4 Paleontological Resources Collection

The LAX Master Plan MMRP states:

***“Paleontological Resources Collection.*** *Because some fossils are small, it will be necessary to collect sediment samples of promising horizons discovered during grading or excavation monitoring for processing through fine mesh screens. Once the samples have been screened, they shall be examined microscopically for small fossils.”*

**Status→ Not Applicable:**

This measure is not applicable at this reporting period.

### 13.0.E MM-PA-5 Fossil Preparation

The LAX Master Plan MMRP states:

***“Fossil Preparation.*** *Fossils shall be prepared to the point of identification and catalogued before they are donated to their final repository.”*

**Status→ Not Applicable:**

This measure is not applicable at this reporting period.

### 13.0.F MM-PA-6 Fossil Donation

The LAX Master Plan MMRP states:

***“Fossil Donation.*** All fossils collected shall be donated to a public, nonprofit institution with a research interest in the materials, such as the Los Angeles County Museum of Natural History.”

**Status→ Not Applicable:**

This measure is not applicable at this reporting period.

### 13.0.G MM-PA-7 Paleontological Reporting

The LAX Master Plan MMRP states:

***“Paleontological Reporting.*** A report detailing the results of these efforts, listing the fossils collected, and naming the repository shall be submitted to the lead agency at the completion of the project.”

**Status→ Not Applicable:**

This measure is not applicable at this reporting period.

## **14.0 Biotic Communities**

### 14.0.A MM- BC-1 (Revised Mitigation Measure) Conservation of State-Designated Sensitive Habitat Within and Adjacent to the El Segundo Blue Butterfly Habitat Restoration Area

The LAX Master Plan MMRP states in part:

***“Conservation of State-Designated Sensitive Habitat Within and Adjacent to the El Segundo Blue Butterfly Habitat Restoration Area.*** FAA is responsible for conservation measures related to the relocation of navigational aids, while LAWA is responsible for all other conservation measures. All necessary steps shall be taken to ensure that state-designated sensitive habitats within and adjacent to the Habitat Restoration Area are conserved and protected during construction, operation, and maintenance.”

**Status→ In Progress:**

Prior to initiation of construction for the Bradley West Project, tarps were added to existing fencing on the western side of Pershing Drive to reduce the transport of fugitive dust particles related to construction activities. During construction, soil stabilization, watering and/or other dust control measures are being implemented to reduce fugitive dust emissions.

LAWA is continuing to maintain and manage the El Segundo Blue (ESB) Butterfly Habitat Restoration Area.



LAWA's ESB conservation program has three components:

- Restoration of the native sand dunes habitat
- Monitoring the progress of the program
- Public awareness

Because human activity negatively impacts the ESB and its food plant buckwheat, the area is protected and activities are controlled to meet the restoration goals. A major threat to both the ESB and buckwheat are the invasive plant species that dominate the habitat. LAWA's Maintenance Services Division has a dedicated two-man crew that worked exclusively at the LAX dunes to perform regular trash and debris removal, weeding, and other vegetation management activities. Numerous truckloads of trash (which continually blow onto the dunes from the adjacent Dockweiler State Beach), debris, and weeds are hauled out of the dunes regularly. Detailed estimates of ESB population are performed annually through monitoring. The seasonal estimates indicate that ESB population increased about 41% in 2010 compared to the seasonal population estimates for 2009. As part of the public awareness efforts, LAWA conducted ESB preserve tours for media and LAWA employees.

#### 14.0.B MM- BC-2 (Revised Mitigation Measure) Conservation of Floral Resources: Lewis' Evening Primrose

The LAX Master Plan MMRP states in part:

***“Conservation of Floral Resources: Lewis' Evening Primrose. FAA is responsible for conservation measures related to the relocation of navigational aids, while LAWA is responsible for all other conservation measures. A plan shall be prepared and implemented to compensate for the loss of individuals of the sensitive Lewis' evening primrose, currently located at the westerly end of the north runway and within the Habitat Restoration Area. Seed shall be collected from those plants to be removed, and properly clean and store the collected seed until used. If possible, seeds shall be collected in multiple years to ensure an adequate seed supply for planting. A mitigation site of suitable habitat equal to the area of impact shall be delineated within areas of the Los Angeles/El Segundo Dunes as described in the "Los Angeles/El Segundo Dunes Habitat Restoration Plan."***

**Status→ Not required at this time:**

To be implemented following completion of the Specific Plan Amendment Study (SPAS) and approval of a north airfield runway project, as applicable.

#### 14.0.C MM-BC-3 Conservation of Floral Resources: Mature Tree Replacement

The LAX Master Plan MMRP states in part:

***“Conservation of Floral Resources: Mature Tree Replacement. LAWA or its designee shall prepare and implement a plan to compensate at a ratio of 2:1 for the loss of approximately 300 mature trees, which would occur as a result of implementation of the LAX Northside project.”***

**Status→ In Progress:**

See MM-BC (BWP)-7 in the Project-Specific section of this report.

14.0.D MM-BC-8 Replacement of Habitat Units

The LAX Master Plan MMRP states in part:

***“Replacement of Habitat Units.*** LAWA or its designee shall undertake mitigation for the loss of habitat units resulting from implementation of Alternative D. Implementation of Alternative D would result in the loss of 45.43 habitat units. These habitat units shall be replaced at a 1:1 ratio within the Los Angeles/EI Segundo Dunes.”

**Status→ In Progress:**

This measure is being partially fulfilled by MM-BC (SA)-1. Please see Section 26.0, Project-Specific Mitigations.

14.0.E MM-BC-9 (Revised Mitigation Measure) Conservation of Faunal Resources

The LAX Master Plan MMRP Revised Mitigation Measures states in part:

***“Conservation of Faunal Resources.*** FAA is responsible for conservation measures related to the relocation of navigational aids, while LAWA is responsible for all other conservation measures. LAWA or its designee shall develop and implement a relocation and monitoring plan to compensate for the loss of 1.34 habitat units of occupied western spadefoot toad habitat and for the loss of western spadefoot toad individuals currently in the southwestern portion of the AOA; 2.38 habitat units of occupied San Diego black-tailed jackrabbit habitat and for the loss of individuals of this species within the AOA; and 10.83 habitat units utilized by loggerhead shrike within the western airfield. LAWA shall minimize incidental take of active nests of loggerhead shrike through pre-construction surveys and construction avoidance measures. LAWA shall conduct pre-construction surveys for silvery legless lizard, San Diego horned lizard and burrowing owls and relocate individuals, if required.”

**Status→ Completed for the Bradley West Project:**

As part of the Bradley West Project, LAWA conducted focused surveys for the Western Spadefoot Toad (*Spea [=Scaphiopus] hammondi*, a California Species of Special Concern, in March and April 2009. No Western Spadefoot were observed during the surveys. The removal of soil in the pool areas at LAX, as a condition of the Biological Opinion for the LAX Master Plan, resulted in modified site hydrology that no longer provides suitable breeding habitat for this species. For this reason, LAWA is not required to implement a relocation and monitoring plan for the Western Spadefoot.

See MM-BC (BWP)-4, MM-BC (BWP)-5, and MM-BC (BWP)-6 in Section 26.0, Project-Specific Mitigations, for information concerning other species addressed in this measure as they relate to the Bradley West Project.

#### 14.0.F MM- BC-13 (Revised Mitigation Measure) Replacement of State-Designated Sensitive Habitats

The LAX Master Plan MMRP Revised Mitigation Measures states in part:

***“Replacement of State-Designated Sensitive Habitats.*** FAA is responsible for conservation measures related to the relocation of navigational aids, while LAWA is responsible for all other conservation measures. Mitigation shall be undertaken for the loss of State-designated sensitive habitat within the Los Angeles/EI Segundo Dunes, including the Habitat Restoration Area.”

**Status→ Not required at this time:**

To be implemented following completion of the Specific Plan Amendment Study (SPAS) and approval of a north airfield runway project, as applicable.

### **15.0 Endangered and Threatened Species**

#### 15.0.A MM-ET-1 Riverside Fairy Shrimp Habitat Restoration

The LAX Master Plan MMRP states in part:

***“Riverside Fairy Shrimp Habitat Restoration.*** LAWA or its designee shall undertake mitigation for direct impacts to 0.04 acre (1,853 square feet) of degraded wetland habitat containing embedded cysts of Riverside fairy shrimp and potential indirect impacts to 1.26 acres of degraded wetland habitat containing embedded cysts of the Riverside fairy shrimp.”

**Status→ In-Progress:**

On April 20, 2004, the United States Fish and Wildlife Service (USFWS) issued a Biological Opinion (BO) based on their review of Alternative D of the Draft EIS/EIR for LAWA Master Plan for LAX and its effects on the federally endangered Riverside Fairy Shrimp (*Streptocephalus woottoni*, “RFS”) in accordance with Section 7 of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 et seq.). The April 20, 2004 BO proposed several conservation measures (i.e. mitigation requirements) to offset direct and indirect impacts on the RFS. Subsequently, on April 8 2005, the USFWS issued a BO based on their review of the proposed operations and maintenance activities for LAX and its effects on the RFS. Details of all of the conservation measures are described in both BOs.

LAWA’s Riverside Fairy Shrimp Habitat Restoration, identified as Mitigation Measure MM-ET-1 in the LAX Master Plan MMRP, is consistent with the BOs from the USFWS. This mitigation measure involves the creation of an RFS habitat at a site approved by the USFWS. LAWA currently is investigating a comparable site at Madrona Marsh in the City of Torrance (COT), California. To date, LAWA’s mitigation activities include the following as it pertains to MM-ET-1:

Completion of the salvage and storage of RFS cyst-bearing soils at LAX in support of the April 20, 2004, BO for Alternative D and the April 8, 2005 BO for Operations and Maintenance. Conservation Measures 5 and 9 of the April 20, 2004 BO and Conservation Measure 8 of the April 8, 2005 BO identify the methods of salvage and storage of RFS cyst-bearing soils located at LAX.

On July 13, 2005 through August 8, 2005, LAWA salvaged and stored approximately 1800 cubic feet of RFS cyst-bearing soils formerly located at LAX SAIP site. The RFS cyst-bearing soils collected are being stored in a climate-controlled facility near LAX. The facility is secured and monitored by video cameras 24 hours a day. The Carlsbad Fish and Wildlife Office inspected and approved the RFS-cyst storage facilities on August 2, 2005. On December 2, 2005, the FAA transmitted a letter confirming the completion of the RFS cysts conservation work to the United States Fish & Wildlife Services.

LAWA and the FAA were pursuing alternate plans to create an RFS habitat on federal lands located at the former Marine Corps Air Station El Toro. In August 2006, the proposed RFS habitat creation site was the subject of discussions between the FAA and the Federal Bureau of Investigation (FBI) regarding the future compatibility of the site between FBI training and creation of a RFS habitat. After further investigation, in May 2008, it was determined that the El Toro site does not have suitable soil for developing RFS habitat. With the concurrence of the USFWS, FAA and LAWA, all mitigation for the RFS cysts will occur at the Madrona Marsh location in COT. Currently LAWA and COT are awaiting COT Council approval of a Right of Entry permit, a preliminary step in the process of negotiating the language of a Memorandum of Understanding (MOU) for use of Madrona Marsh for RFS Habitat Restoration activities. The Memorandum of Understanding will be finalized when the 100% design and plans have been completed (expected completion by December 2012.)

LAWA has hired CH2MHILL and subcontractor HELIX to further expand RFS habitat acreage of pre-30% design previously developed by Coffey/CTL and Larry Stromberg and Hydrosociences, Inc., and to finalize the design and plan by the end of 2012. All soil studies and surveys have been completed, and development of the hydrogeological model for the project is currently underway. A final vernal pool plan and design and written RFS Habitat Creation, Enhancement, Maintenance and Reporting Plan is anticipated by December 2011. The construction phase RFP process is anticipated to begin at that time, followed by initiation of construction by summer 2013. Due to limitations at the mitigation site, the final plan may not be able to meet the acreage requirement of the BOs. FAA and FWS are aware of this and will reopen and modify the BOs as needed to reflect any negotiated changes.

#### 15.0.B MM-ET-3 El Segundo Blue Butterfly Conservation: Dust Control

The LAX Master Plan MMRP states:

***“El Segundo Blue Butterfly Conservation: Dust Control. To reduce the transport of fugitive dust particles related to construction activities, soil stabilization, watering or other dust control measures, as feasible and appropriate, shall be implemented with a goal to reduce fugitive dust emissions by 90 to 95 percent during construction activities within 2,000 feet of the El Segundo Blue Butterfly Habitat Restoration Area. In addition, to the extent feasible, no grading or stockpiling for construction activities should take place within 100 feet of occupied habitat of the El Segundo blue butterfly.”***

**Status→ In Progress:**

See MM-BC-1 above.

**15.0.C MM-ET-4 (Revised Mitigation Measure) El Segundo Blue Butterfly Conservation: Habitat Restoration**

The LAX Master Plan MMRP Revised Mitigation Measure states in part:

***“El Segundo Blue Butterfly Conservation: Habitat Restoration. FAA is responsible for conservation measures related to the relocation of navigational aids, while LAWA is responsible for all other conservation measures. All necessary steps shall be taken to avoid the flight season of the El Segundo blue butterfly (June 14 - September 30) when undertaking installation of navigational aids and associated service roads proposed under Master Plan Alternative D within habitat occupied by the El Segundo blue butterfly. Installation of navigational aids within the Habitat Restoration Area should be required to take place between October 1st and May 31st.”***

**Status→ Not required at this time:**

To be implemented following completion of the Specific Plan Amendment Study (SPAS) and approval of a north airfield runway project, as applicable.

**16.0 Energy Supply****16.0.A E-1 Energy Conservation and Efficiency Program**

The LAX Master Plan MMRP states in part:

***“Energy Conservation and Efficiency Program. LAWA will seek to continually improve the energy efficiency of building design and layouts during the implementation of the LAX Master Plan. Title 24, Part 6, Article 2 of the California Administrative Code establishes maximum energy consumption levels for heating and cooling of new buildings to assure that energy conservation is incorporated into the design of new buildings.”***

**Status→ Ongoing:**

This requirement is addressed largely through LAWA’s Sustainable Airport Planning, Design and Construction Guidelines. In addition, LAWA hired a consultant to conduct a High Performance Building Audit.

**16.0.B E-2 Coordination with Utility Providers**

The LAX Master Plan MMRP states:

***“Coordination with Utility Providers. LAWA will implement Master Plan activities in coordination with local utility providers. Utility providers will provide input on the layout of utilities at LAX to assure that LAX and the surrounding region receive both safe and uninterrupted service. When service by existing***

*utility lines could be affected by airport design features, LAWA will work with the utility to identify alternative means of providing equivalent or superior post-construction utility service.”*

**Status→ Ongoing:**

This requirement is implemented with each Master Plan development project.

In addition, LAWA met with the City of Los Angeles Department of Water and Power to discuss long-term improvements to the electrical distribution system to provide an additional feed/power source to LAX.

16.0.C PU-1 Develop a Utility Relocation Program

The LAX Master Plan MMRP states in part:

*“Develop a Utility Relocation Program. LAWA will develop and implement a utilities relocation program to minimize interference with existing utilities associated with LAX Master Plan facility construction.”*

**Status→ Ongoing:**

This is an ongoing requirement in all LAWA bids and contracts.

## 17.0 Light Emissions

17.0.A L1-2 Use of Non-Glare Generating Building Materials

The LAX Master Plan MMRP states:

*“Use of Non-Glare Generating Building Materials. Prior to approval of final plans, LAWA will ensure that proposed LAX facilities will be constructed to maximize use of non-reflective materials and minimize use of undifferentiated expanses of glass.”*

**Status→ Ongoing:**

This is an ongoing requirement in all bids and contracts.

17.0.B L1-3 Lighting Controls

The LAX Master Plan MMRP states in part:

*“Lighting Controls. Prior to final approval of plans for new lighting, LAWA will conduct reviews of lighting type and placement to ensure that lighting will not interfere with aeronautical lights or otherwise impair Airport Traffic Control Tower or pilot operations.”*

**Status→ Ongoing:**

LAWA is committed to integrating sustainable practices in the areas of Sustainable Design, Energy and Atmosphere, Materials and Resources, Water Efficiency, Transportation Resources, and Administrative Processes into operations and administrative processes throughout the organization.

## 18.0 Solid Waste

### 18.0.A SW-1 Implement an Enhanced Recycling Program

The LAX Master Plan MMRP states in part:

**“Implement an Enhanced Recycling Program.** *“LAWA will enhance their existing recycling program, based on successful programs at other airports and similar facilities.”*

**Status→ Completed and Ongoing:**

LAWA completed an enhanced recycling plan in 2010 for LAX. LAWAs Maintenance Services Division’s Recycling and Source Reduction Program achieved a 67.2% recycling rate at LAX for calendar year 2010. This achievement exceeds the previous year’s rate by .8%. With this accomplishment, LAWA continues on the path toward meeting the Mayor’s goal of 70% recycling by 2015.

Other notable achievements for the Recycling and Source Reduction Program include the following:

- Increased metal recycling by 27%
- Increased mixed paper and cardboard recycling by 44%
- Increased wood pallet recycling by 13%

LAWAs goals for 2010 included working with airlines to implement their in-flight recycling program and to continue pursuing new recycling opportunities.

### 18.0.B SW-2 Requirements for the Use of Recycled Materials During Construction

The LAX Master Plan MMRP states:

**“Requirements for the Use of Recycled Materials During Construction.** *LAWA will require, where feasible, that contractors use a specified minimum percentage of recycled materials during construction of LAX Master Plan improvements. The percentage of recycled materials required will be specified in the construction bid documents. Recycled materials may include, but are not limited to, asphalt, drywall, steel, aluminum, ceramic tile, cellulose insulation, and composite engineered wood products. The use of recycled materials in LAX Master Plan construction will help to reduce the project’s reliance upon virgin materials and support the recycled materials market, decreasing the quantity of solid waste requiring disposal.”*

**Status→ Ongoing:**

This is an ongoing requirement in all LAWAs bids and contracts.

### 18.0.C SW-3 Requirements for the Recycling of Construction and Demolition Waste

The LAX Master Plan MMRP states:

***“Requirements for the Recycling of Construction and Demolition Waste.*** LAWA will require that contractors recycle a specified minimum percentage of waste materials generated during demolition and construction. The percentage of waste materials required to be recycled will be specified in the construction bid documents. Waste materials to be recycled may include, but are not limited to, asphalt, concrete, drywall, steel, aluminum, ceramic tile, and architectural details.”

**Status→ Ongoing:**

This is an ongoing requirement in all LAWA bids and contracts.

### 18.0.D MM-SW-1 Provide Landfill Capacity

The LAX Master Plan MMRP states:

***“Provide Landfill Capacity.*** Additional landfill capacity in the Los Angeles region should be provided through the siting of new landfills, the expansion of existing landfills, or the extension of permits for existing facilities. As an alternative, or to augment regional landfill capacity, landfill capacity outside the region could be accessed by developing the necessary rail haul infrastructure. The responsibility for implementing this mitigation measure lies with state, county, and local solid waste planning authorities. The costs for implementing this mitigation measure will be passed on to LAX and other solid waste generators through increased solid waste disposal costs.”

**Status→ No Action Required:**

LAWA has no jurisdiction regarding this mitigation measure which must be implemented by state, county, and local solid waste planning authorities.

## **19.0 Construction Impacts**

### 19.0.A C-1 Establishment of a Ground Transportation/Construction Coordination Office

The LAX Master Plan MMRP states in part:

***“Establishment of a Ground Transportation/Construction Coordination Office.*** Establish this office for the life of the construction projects to coordinate deliveries, monitor traffic conditions, advise motorists and those making deliveries about detours and congested areas, and monitor and enforce delivery times and routes.”



**Status→ Ongoing:**

This measure was included in the CFTP and BWP contract specifications and is an ongoing requirement in all of LAWA's contract specifications.

19.0.B C-2 Construction Personnel Airport Orientation

The LAX Master Plan MMRP states:

***“Construction Personnel Airport Orientation.*** All construction personnel will be required to attend an airport project-specific orientation (pre-construction meeting) that includes where to park, where staging areas are located, construction policies, etc.”

**Status→ Ongoing:**

This measure was included in the CFTP and BWP contract specifications and is an ongoing requirement in all of LAWA's contract specifications.

**20.0 Design, Art, and Architecture Applications/Aesthetics**20.0.A DA-1 Provide and Maintain Airport Buffer Areas

The LAX Master Plan MMRP states:

***“Provide and Maintain Airport Buffer Areas.*** Along the northerly and southerly boundary areas of the airport, LAWA will provide and maintain landscaped buffer areas that will include setbacks, landscaping, screening or other appropriate view-sensitive improvements with the goals of avoiding land use conflicts, shielding lighting, enhancing privacy and better screening views of airport facilities from adjacent residential uses. Use of existing facilities in buffer areas may continue as required until LAWA can develop alternative facilities.”

**Status→ No action required at this time:**

The LAX Specific Plan establishes buffer areas that are protected by the conditions described in Ordinance 159,526 and included in the LAX Specific Plan. The Specific Plan establishes and maintains the buffers through requiring setbacks, landscaping, and other screening mechanisms along the southern and northern boundaries of the airport. This measure is not triggered until development of LAX Northside. The southern boundary of the airport is landscaped and includes buffers and setbacks.

20.0.B DA-2 Update and Integrate Design Plans and Guidelines

The LAX Master Plan MMRP states in part:

***“Update and Integrate Design Plans and Guidelines.*** The following plans and guidelines will be individually updated or integrated into a comprehensive set of design-related guidelines and plans; LAX Street Frontage and Landscape Development Plan (June 1994), LAX Air Cargo Facilities Development Guidelines (April 1998; updated August 2002), and LAX Northside Design Plan

*and Development Guidelines (1989), including conditions addressing heights, setbacks and landscaping. “*

**Status→ In Progress:**

The Street Frontage and Landscape Plan was completed in March 2005. The Plan includes requirements to be incorporated into Master Plan projects. In addition to updating the above referenced plans, LAWA has developed and commenced implementing comprehensive Airport Sustainable Planning, Design and Construction Guidelines (LSAG) that apply to all LAWA projects, not only LAX Master Plan-related. The LSAG provides structure to LAWA's sustainability commitment related to planning, design and construction on airport property through communicating expectations and implementing a transparent process.

The Guidelines were updated in 2009 (dated February 2010), and additional revisions are planned for the LSAG in 2011 to incorporate changes to State and City of Los Angeles green building codes and requirements. Links to the documents are usually available on LAWA's intranet at [http://www.lawa.aero/welcome\\_LAWA.aspx?id=1036](http://www.lawa.aero/welcome_LAWA.aspx?id=1036), but the link is temporarily disabled while revisions are underway.

Implementation of these guidelines will meet green building specifications, and improve the use of recycling, alternative fuel sources, recycled water, water conservation, reduce energy requirements, and reduce the airport's overall Greenhouse Gas emissions.

An update of the LAX Northside Guidelines has been initiated and currently is being processed.

**20.0.C DA-3 Undergrounding of Utility Lines**

The LAX Master Plan MMRP states:

***“Undergrounding of Utility Lines.** In conjunction with the extension of the Century Freeway and other roadway/right-of-way improvement projects, LAWA will pursue opportunities to place existing overhead utility lines underground wherever feasible and appropriate.”*

**Status→ No action required at this time.**

There were no roadway projects in 2010 that triggered this requirement.

**20.0.D MM-DA-1 Construction Fencing**

The LAX Master Plan MMRP states:

***“Construction Fencing.** Construction fencing and pedestrian canopies shall be installed by LAWA to the degree feasible to ensure maximum screening of areas under construction along major public approach and perimeter roadways, including Sepulveda Boulevard, Century Boulevard, Westchester Parkway, Pershing Drive, and Imperial Highway west of Sepulveda Boulevard. Along Century Boulevard, Sepulveda Boulevard, and in other areas where the quality of*

*public views are a high priority, provisions shall be made by LAWA for treatment of the fencing to reduce temporary visual impacts.”*

**Status→ Ongoing:**

This ongoing requirement is implemented with each construction project.

## **21.0 Hazardous Materials**

### 21.0.A HM-1 Ensure Continued Implementation of Existing Remediation Efforts

The LAX Master Plan MMRP states in part:

***“Ensure Continued Implementation of Existing Remediation Efforts.*** *Prior to initiating construction of a Master Plan component, LAWA will conduct a pre-construction evaluation to determine if the proposed construction will interfere with existing soil or groundwater remediation efforts. “*

**Status→ In Progress:**

Comprehensive soil investigation is required prior to commencement of any design and construction activity at the airport. All required remediation efforts are carried out as needed.

### 21.0.B HM-2 Handling of Contaminated Materials Encountered During Construction

The LAX Master Plan MMRP states in part:

***“Handling of Contaminated Materials Encountered During Construction.*** *Prior to the initiation of construction, LAWA will develop a program to coordinate all efforts associated with the handling of contaminated materials encountered during construction. The intent of this program will be to ensure that all contaminated soils and/or groundwater encountered during construction are handled in accordance with all applicable regulations. “*

**Status→ Completed:**

A Hazardous Materials Management Plan was developed and revised in December 2005, and all LAWA contractors are required to comply with its provisions as they apply to the different projects.

## **22.0 Water Use**

### 22.0.A W-1 Maximize Use of Reclaimed Water

The LAX Master Plan MMRP states:

***“Maximize Use of Reclaimed Water.*** *To the extent feasible, LAWA will maximize the use of reclaimed water in Master Plan-related facilities and landscaping. The intent of this commitment is to maximize the use of reclaimed*

*water as an offset for potable water use and to minimize the potential for increased water use resulting from implementation of the LAX Master Plan. This commitment will also facilitate achievement of the City of Los Angeles' goal of increased beneficial use of its reclaimed water resources. This commitment will be implemented by various means, such as installation and use of reclaimed water distribution piping for landscape irrigation.”*

**Status→ In Progress:**

This is an ongoing requirement in all bids and contracts where reclaimed water is available.

**22.0.B W-2 Enhance Existing Water Conservation Program**

The LAX Master Plan MMRP states in part:

***“Enhance Existing Water Conservation Program.*** *“LAWA will enhance the existing Street Frontage and Landscape Plan for LAX to ensure the ongoing use of water conservation practices at LAX facilities. The intent of this program, to minimize the potential for increased water use due to implementation of the LAX Master Plan program, is also in accordance with regional efforts to ensure adequate water supplies for the future. Features of the enhanced conservation program will include identification of current water conservation practices and an assessment of their effectiveness; identification of alternate future conservation practices; continuation of the practice of retrofitting and installing new low-flow toilets and other water-efficient fixtures in all LAX buildings, as remodeling takes place or new construction occurs; use of Best Management Practices for maintenance; use of water efficient vegetation for landscaping, where possible; and continuation of the use of fixed automatic irrigation for landscaping.”*

**Status→ In Progress:**

Currently, 35% of all landscaped areas at LAX are irrigated by reclaimed water. The number of landscaped areas served is limited to those areas accessible to the reclaimed water supply pipeline. Approximately 40.2 million gallons or 123 acre-feet of water is conserved each year through the use of reclaimed water. Additionally, much of the irrigation system at LAX is monitored and controlled through a centralized computer irrigation control center. This system further conserves valuable water resources.

Buildings and passenger terminals at LAX feature low-flow devices on all toilets and sinks, with telephone numbers prominently posted in all restrooms so that people can notify maintenance staff if they encounter leaky faucets or other water problems. In addition, water used in on-airport car wash facilities is recycled.

LAWA also is working with DWP to determine the feasibility of bringing reclaimed water into the Central Terminal Area for use in the Central Utilities Plant cooling tower. The DWP estimates that this will reduce LAX's water usage by approximately 90 acre/ft per year.

## 23.0 Wastewater

### 23.0.A MM-WW-1 Provide Additional Wastewater Treatment Capacity to Accommodate Cumulative Flows

The LAX Master Plan MMRP states:

***“Provide Additional Wastewater Treatment Capacity to Accommodate Cumulative Flows.*** Additional wastewater capacity within the City of Los Angeles should be provided by the expansion/upgrade of the City's wastewater treatment systems via a combination of improvements to address the projected wastewater [capacity] shortfall resulting from cumulative development. Such improvements could include increasing capacity at the Hyperion Treatment Plant (HTP), building new reclamation capacity upstream of HTP, conservation of potable water, and infiltration/inflow reduction. Implementation of this mitigation measure is the responsibility of the City of Los Angeles Department of Public Works, Bureau of Sanitation. Specific improvements will be identified in the City's IPWP and Wastewater Facilities Plan component of the City's Integrated Resources Plan. The cost for implementing this mitigation measure would be passed on to LAX and other wastewater generators through increased wastewater fees.”

**Status→ No Action Required:**

LAWA has no jurisdiction regarding this mitigation measure which will be implemented by the City of Los Angeles Department of Public Works, Bureau of Sanitation.

## 24.0 Fire Protection

### 24.0.A FP-1 LAFD Design Recommendations

The LAX Master Plan MMRP states in part:

***“LAFD Design Recommendations.*** During the design phase prior to initiating construction of a Master Plan component, LAWA will work with LAFD to prepare plans that contain the appropriate design features applicable to that component, such as those recommended by LAFD. “

**Status→ Ongoing:**

This is an ongoing requirement in all LAWA design contracts.

### 24.0.B PS-1 Fire and Police Facility Relocation Plan

The LAX Master Plan MMRP states:

***“Fire and Police Facility Relocation Plan.*** Prior to any demolition, construction, or circulation changes that would affect LAFD Fire Stations 51, 80, and 95, or on-

*airport police facilities, a Relocation Plan will be developed by LAWA through a cooperative process involving LAFD, LAWAPD, the LAPD LAX Detail, and other airport staff. The performance standards for the plan will ensure maintenance of required response times, response distances, fire flows, and a transition to new facilities such that fire and law enforcement services at LAX will not be significantly degraded. The plan will also address future facility needs, including details regarding space requirement, siting, and design.”*

**Status→ Completed on Fire Station 80:**

This requirement was not triggered in 2010, as there were no demolition construction, or circulation changes affecting relevant fire and police facilities.

24.0.C PS-2 Fire and Police Facility Space and Siting Requirements

The LAX Master Plan MMRP states:

***“Fire and Police Facility Space and Siting Requirements.** During the early design phase for implementation of the Master Plan elements affecting on-airport fire and police facilities, LAWA and/or its contractors will consult with LAFD, LAWAPD, LAPD, and other agencies as appropriate, to evaluate and refine as necessary, program requirements for fire and police facilities. This coordination will ensure that final plans adequately support future facility needs, including space requirements, siting and design.”*

**Status→ Completed on Fire Station 80:**

This requirement was not triggered for in 2010 for any on-airport fire and police facilities.

## 25.0 Law Enforcement

25.0.A LE-1 Routine Evaluation of Manpower and Equipment Needs

The LAX Master Plan MMRP states:

***“Routine Evaluation of Manpower and Equipment Needs.** LAWA will ensure that LAWAPD and LAPD LAX Detail continue to routinely evaluate and provide additional officers, supporting administrative staff, and equipment, to keep pace with forecasted increases in activity and development at LAX in order to maintain a high level of law enforcement services. This will be achieved through LAWA notification to LAWAPD and LAPD regarding pending development and construction and through LAWA review of status reports on law enforcement services at LAX.”*

**Status→ Ongoing:**

LAWA Airport Police (LAWAPD) and LAPD LAX Detail continuously evaluate and monitor staffing levels and provide/request additional officers, support staff, and equipment for forecasted increases in activity and passengers at LAX. LAWAPD takes the lead on participating in the planning and development of construction

activities and updates local law enforcement agencies on a regular basis and as needed.

#### 25.0.B LE-2 Plan Review

***“Plan Review.*** *During the design phase of terminal and cargo facilities and other major airport development, the LAPD, LAWAPD, and other law enforcement agencies will be consulted to review plans so that, where possible, environmental contributors to criminal activity, such as poorly-lit areas, and unsafe design, are reduced.”*

**Status→ Ongoing:**

This is an ongoing requirement in all LAWA design contracts.

### **26.0 Project-Specific Mitigations**

#### 26.1.A MM-HA (CFTP/BWP)-1 Conformance with LAX Master Plan Archaeological Treatment Plan

The Crossfield Taxiway Project and Bradley West Project MMRPs state in part:

***“Conformance with LAX Master Plan Archaeological Treatment Plan.*** *Prior to initiation of grading and construction activities, LAWA will retain an on-site Cultural Resource Monitor (CRM), as defined in the LAX Master Plan MMRP ATP, who will determine if the proposed project area is subject to archaeological monitoring.”*

**CFTP Status→ Completed.**

**BWP Status→ Ongoing:**

This is an ongoing requirement until construction is completed.

#### 26.1.B MM-PA (CFTP/BWP)-1 Conformance with LAX Master Plan Paleontological Management Treatment Plan

The Crossfield Taxiway Project and Bradley West Project MMRPs state in part:

***“Conformance with LAX Master Plan Paleontological Management Treatment Plan.*** *Prior to the initiation of grading and construction activities, LAWA will retain a professional paleontologist, as defined in the Final LAX Master Plan MMRP PMTP, who will determine if the project site exhibits a high or low potential for subsurface resources”*

**CFTP Status→ Completed.**

**BWP Status→ Ongoing:**

This is an ongoing requirement until construction is completed.

### 26.1.C MM-PA (CFTP/BWP)-2 Construction Personnel Briefing

The Crossfield Taxiway Project and Bradley West Project MMRPs state:

***“Construction Personnel Briefing.*** *In accordance with the PMTP, construction personnel will be briefed by the consulting paleontologist in the identification of fossils or fossiliferous deposits and in the correct procedures for notifying the relevant individuals should such a discovery occur.”*

**CFTP Status→ Completed.**

**BWP Status→ Ongoing:**

This is an ongoing requirement until construction is completed.

### 26.1.D MM-BC (CFTP)-1 Conservation of Floral Resources: Southern Tarplant

The Crossfield Taxiway Project MMRP states in part:

***“Conservation of Floral Resources: Southern Tarplant.*** *LAWA or its designee shall prepare a special status plant mitigation program. The loss of the southern tarplant individuals shall be mitigated through seed collection and seeding into a suitable mitigation site within undeveloped property owned by LAWA, determined based on habitat, soil type, moisture levels, and other relevant conditions.”*

**Status→ In Progress:**

The initial mitigation program that commenced in 2010 failed due to inappropriate site conditions, late seeding, and inadequate establishment period and follow-up maintenance and watering. Remedial mitigation commenced in fall of 2010 for MM-BC (CFTP)-1 and MM-BC (BWP)-1 in the southwest corner of the airport

near the water retention basins along Pershing Street. The 90-day establishment report indicates that the first generation of newly planted southern tarplant is successfully growing at the new site. A quantitative monitoring report scheduled for November 2011 will allow LAWA to determine if Year 1 success criteria have been met, which require approximately 200 plants flowering and setting seed. The current qualitative report indicates that the Year 1 success criteria have most likely been exceeded. The ability of the southern tarplant population to sustain itself through Year 3 and to meet the Year 3 success criteria with minimum maintenance is the true litmus test for the success of this project.

### 26.1.E MM-ST (BWP)-1 Trip Reduction Measures

The Bradley West Project MMRP states:

***“Trip Reduction Measures.*** *LAWA will implement the following trip reduction measures:*

*(a) Continue to promote and expand the FlyAway services in accordance with LAX Master Plan Mitigation Measure MM-AQ-3. It is anticipated that the*



*continued expansion of the FlyAway service will promote a shift in mode-share away from the private vehicle mode which would reduce traffic volume using the CTA roadway system.*

*(b) Continue to promote the consolidation of shuttle services (e.g., hotel/motel, off-airport parking, rental cars) or programs to reduce trips associated with these modes.”*

**Status→ In Progress:**

LAWA staff continues to plan for additional FlyAway sites, including in Long Beach, Santa Monica, and Culver City.

26.1.F MM-ST (BWP)-2 Improve the Intersection of Center Way and World Way South

The Bradley West Project MMRP states in part:

***“Improve the Intersection of Center Way and World Way South.*** *Widen World Way South approach on the east side of the roadway to provide an additional right turn lane. The resulting configuration would be a single left turn lane, one through-left turn lane, two through lanes, and two right turn lanes.”*

**Status→ No action required at this time:**

No action is required until there is a 1.1% increase in Central Terminal Area (CTA) summer peak period traffic.

26.1.G MM-ST (BWP)-3 Widen World Way Across from TBIT

The Bradley West Project MMRP states:

***“Widen World Way Across from TBIT.*** *Widen the arrivals-level outer roadway across from TBIT by changing the left-most lane that currently terminates at Center Way to a through/left lane and extending this lane to World Way South.”*

**Status→ In Progress:**

This project was under in design in 2010.

26.1.H MM-ST (BWP)-4 Modify the Intersection of Airport Boulevard and Manchester Avenue (Intersection #9)

The Bradley West Project MMRP states in part:

***“Modify the Intersection of Airport Boulevard and Manchester Avenue (Intersection #9).*** *The eastbound approach to the Airport Boulevard and Manchester Avenue intersection shall be restriped to provide one left-turn lane, two through lanes, and a through/right lane... Implementation of this measure shall occur if/when international passenger activity levels at TBIT increase to 19.7 million annual passengers.”*

**Status→ No action required at this time:**

In 2010, there were 8.6 million international annual passengers at the Tom Bradley International Terminal (TBIT). No action is required until the number of international passengers at TBIT reaches 19.7 million annual passengers.

**26.1.I MM-ST (BWP)-5 Modify the Intersection of Arbor Vitae Street and Aviation Boulevard (Intersection of Imperial Highway and Sepulveda Boulevard (Intersection #71)**

The Bradley West Project MMRP states in part:

***“Modify the Intersection of Arbor Vitae Street and Aviation Boulevard (Intersection #10). The eastbound approach to the Arbor Vitae Street and Aviation Boulevard intersection shall be widened to provide one left-turn lane, two through lanes, and a right-turn lane....Los Angeles and City of Inglewood. Implementation of this measure shall occur if/when international passenger activity levels at TBIT increase to 20.7 million annual passengers.”***

**Status→ No action required at this time:**

In 2010, there were 8.6 million international annual passengers at the Tom Bradley International Terminal (TBIT). No action is required until the number of international passengers at TBIT reaches 20.7 million annual passengers.

**26.1.J MM-ST (BWP)-6 Modify the Intersection of Imperial Highway and Sepulveda Boulevard (Intersection #71)**

The Bradley West Project MMRP states in part:

***“Modify the Intersection of Imperial Highway and Sepulveda Boulevard (Intersection #71). The northbound approach to the Imperial Highway and Sepulveda Boulevard intersection shall be restriped to provide one left-turn lane, three through lanes, and two right-turn lanes. .... Implementation of this measure shall occur if/when international passenger activity levels at TBIT increase to 19.7 million annual passengers.”***

**Status→ No action required at this time:**

In 2010, there were 8.6 million international annual passengers at the Tom Bradley International Terminal (TBIT). This measure will be triggered when the number of international passengers at TBIT reaches 19.7 million annual passengers.

**26.1.K MM-ST (BWP)-7 Modify the Intersection of La Cienega Boulevard and I-405 Ramps N/O Century Boulevard (Intersection #96)**

The Bradley West Project MMRP states in part:

***“Modify the Intersection of La Cienega Boulevard and I-405 Ramps N/O Century Boulevard (Intersection #96). The southbound approach to the La Cienega Boulevard and I-405 Ramps N/O Century Boulevard intersection shall be widened to provide two left-turn lanes and two through lanes....***

*Implementation of this measure shall occur if/when international passenger activity levels at TBIT increase to 20.7 million annual passengers.”*

**Status→ No action required at this time:**

In 2010, there were 8.6 million international annual passengers at the Tom Bradley International Terminal (TBIT). This measure will be triggered when the number of international passengers at TBIT reaches 20.7 million annual passengers.

26.1.L MM-ST (BWP)-8 Modify the Intersection of La Tijera Boulevard and Sepulveda Boulevard (Intersection #101)

The Bradley West Project MMRP states in part:

***“Modify the Intersection of La Tijera Boulevard and Sepulveda Boulevard (Intersection #101). The westbound approach to the La Tijera Boulevard and Sepulveda Boulevard intersection shall be restriped and the traffic signal modified to provide two left-turn lanes, one through lane, and a through/right lane. ... Implementation of this measure shall occur if/when international passenger activity levels at TBIT increase to 18.7 million annual passengers.”***

**Status→ No action required at this time:**

In 2010, there were 8.6 million international annual passengers at the Tom Bradley International Terminal (TBIT). This measure will be triggered when the number of international passengers at TBIT reaches 18.7 million annual passengers

26.1.M MM-ST (BWP)-9 Modify the Intersection of Sepulveda Boulevard and 76th/77th Street (Intersection #136)

The Bradley West Project MMRP states in part:

***“Modify the Intersection of Sepulveda Boulevard and 76th/77th Street (Intersection #136). The eastbound approach to the Sepulveda Boulevard and 76th/77th Street intersection shall be restriped to provide two left-turn lanes, a through/left-turn lane, and one right-turn lane.... Implementation of this measure shall occur if/when international passenger activity levels at TBIT increase to 19.7 million annual passengers.”***

**Status→ No action required at this time:**

In 2010, there were 8.6 million international annual passengers at the Tom Bradley International Terminal (TBIT). This measure will be triggered when the number of international passengers at TBIT reaches 19.7 million annual passengers.

26.1.N MM-ST (BWP)-10 Modify the Intersection of Imperial Highway and Main Street (Intersection #68)

The Bradley West Project MMRP states:

***“Modify the Intersection of Imperial Highway and Main Street (Intersection #68). Modify the median island on the east leg of the intersection to provide a second left turn lane. The resulting westbound configuration would be comprised of a dual left-turn lane and two through lanes.”***

**Status→ In Progress:**

This project currently is under construction.

26.1.O MM-ST (BWP)-11 Modify the Intersection of Imperial Highway and Pershing Drive (Intersection #69)

The Bradley West Project MMRP states:

***“Modify the Intersection of Imperial Highway and Pershing Drive (Intersection #69). Widen the north side of the westbound approach of Imperial Highway to provide a second right-turn lane. The resulting westbound lane configuration would be comprised of one left turn lane, two through lanes, and two right turn lanes.”***

**Status→ In Progress:**

This project currently is under construction.

26.1.P MM-ST (BWP)-12 Distribution of Contractor Employee Parking between the Northwest Construction Staging/Parking Area and the East Contractor Employee Parking Area or Southeast Construction Staging/Parking Area

The Bradley West Project MMRP states in part:

***“Distribution of Contractor Employee Parking between the Northwest Construction Staging/Parking Area and the East Contractor Employee Parking Area or Southeast Construction Staging/Parking Area. General parking for Bradley West Project contractor employees within the Northwest Construction Staging/Parking Area and within the East Contractor Employee Parking Area or Southeast Construction Staging/Parking Area shall be distributed such that neither the northwest area (i.e., Northwest Construction Staging/Parking Area) or the east/southeast area (i.e., East Contractor Employee Parking Area or Southeast Construction Staging/Parking Area) is assigned parking for more than 601 vehicles.”***

**Status→ Ongoing:**

This is an ongoing requirement until construction is completed.

#### 26.1.Q MM-BC (BWP)-1 Conservation of Floral Resources: Southern Tarplant

The Bradley West Project MMRP states in part:

***“Conservation of Floral Resources: Southern Tarplant.*** LAWA or its designee shall prepare a special status plant mitigation program for the southern tarplant. The loss of the southern tarplant individuals shall be mitigated through seed collection and seeding into a suitable mitigation site within undeveloped property owned by LAWA or at a suitable off-site location, determined based on habitat, soil type, moisture levels, and other relevant conditions. One suitable off-site location is the Three Sisters Reserve located on the Palos Verdes Peninsula.”

**Status→ In Progress:**

The initial mitigation program that commenced in 2010 failed due to inappropriate site conditions, late seeding, and inadequate establishment period, and follow-up maintenance and watering. Please see MM-BC (CFTP)-1 for status of remedial mitigation effort.

#### 26.1.R MM-BC (BWP)-2 Conservation of Floral Resources: Lewis' Evening Primrose

The Bradley West Project MMRP states in part:

***“Conservation of Floral Resources: Lewis' Evening Primrose.*** Prior to any work activities (i.e., vegetation clearing, invasive species removal and/or spraying, and sediment removal) on the project site, including construction staging areas, pre-construction focused surveys shall be conducted during the period of March through May by a qualified biologist to determine the presence or absence of Lewis' evening primrose.”

**Status→ Completed:**

Prior to the implementation of construction staging, laydown, and parking areas associated with the Bradley West Project, LAWA conducted focused plant surveys in November 2008 for the Lewis' evening-primrose (*Camissonia lewisii*) and California spineflower (*Mucronea californica*). Neither species was observed during the focused surveys.

#### 26.1.S MM-BC (BWP)-3 Conservation of Floral Resources: California Spineflower

The Bradley West Project MMRP states in part:

***“Conservation of Floral Resources: California Spineflower.*** Prior to any work activities (i.e., vegetation clearing, invasive species removal and/or spraying, and sediment removal) on the project site, including construction staging areas, pre-construction focused surveys shall be conducted during the

*period of March through July by a qualified biologist to determine the presence or absence of California spineflower.”*

**Status→Completed:**

See status of MM-BC (BWP)-2 above.

26.1.T MM-BC (BWP)-4 Conservation of Faunal Resources: Burrowing Owl

The Bradley West Project MMRP states in part:

**“Conservation of Faunal Resources: Burrowing Owl.** *Prior to any work activities (i.e., vegetation clearing, invasive species removal and/or spraying, and sediment removal) within the Southeast Construction Staging/Parking Area (also known as the Continental City site), a survey for burrows by a qualified biologist will be conducted by walking through the suitable habitat within the site in accordance with CDFG-accepted protocols.”*

**Status→ Completed:**

Prior to the implementation of construction staging, laydown, and parking areas associated with the Bradley West Project, LAWA conducted focused surveys in June 2009 for the western burrowing owl (*Athene cunicularia hypugea*). The burrowing owl was not observed during the spring surveys. However, based on previous reports of burrowing owl within the western portion of LAX, it was recommended that monthly surveys be conducted between September and January, during development of the West Construction Staging Area. These surveys were undertaken by the LAX USDA wildlife biologist under contract to LAWA. No burrowing owls were observed during these monthly surveys.

26.1.U MM-BC (BWP)-5 Conservation of Faunal Resources: Loggerhead Shrike

The Bradley West Project MMRP states in part:

**“Conservation of Faunal Resources: Loggerhead Shrike.** *If construction is scheduled to occur during the nesting season for the loggerhead shrike (March 15 to August 15), vegetation that will be impacted by the proposed project shall be removed outside the nesting season if feasible. “*

**Status→ Completed:**

Vegetation that was required to be removed in order to develop construction staging and parking areas associated with the Bradley West Project was removed prior to the nesting season for the loggerhead shrike.

26.1.V MM-BC (BWP)-6 Conservation of Faunal Resources: San Diego Black-Tailed Jackrabbit

The Bradley West Project MMRP states in part:

**“Conservation of Faunal Resources: San Diego Black-Tailed Jackrabbit.** *Prior to the commencement of clearing operations or other activities involving significant soil disturbance at locations identified in Table 4.7-2 with suitable*

*habitat, a survey shall be conducted to locate black-tailed jackrabbits within 100 feet of the outer extent of projected soil disturbance activities.”*

**Status→Completed:**

Prior to clearing operations associated with development of construction staging and parking areas for the Bradley West Project, surveys for the presence of black-tailed jackrabbits were conducted by the LAX USDA wildlife biologist under contract to LAWA. No black-tailed jackrabbits were observed.

26.1.W MM-BC (BWP)-7 Conservation of Floral Resources: Mature Tree Replacement

The Bradley West Project MMRP states in part:

*“**Conservation of Floral Resources: Mature Tree Replacement.** LAWA or its designee shall compensate at a ratio of 2:1 for the loss of mature trees, which would occur as a result of implementation of Northwest Construction Staging/Parking Area.”*

**Status→ In Progress:**

In conjunction with the implementation of the Bradley West Project’s Northwest Construction Staging Area, LAWA entered into letters of agreement with TreePeople, a non-profit environmental organization, to plant 128 native mature trees at Westchester Park and Morningside High School. The mature tree plantings were initiated in 2010 and will continue through 2012.

26.1.X MM-BC (BWP)-8 Conservation of Faunal Resources: Nesting Birds/Raptors

The Bradley West Project MMRP states in part:

*“**Conservation of Faunal Resources: Nesting Birds/Raptors.** To comply with the Migratory Bird Treaty Act, for those areas of the project site that are not actively maintained and have a potential for nesting birds/raptors, if construction is scheduled to occur during the nesting season for birds/raptors (generally February 1 to June 30 for raptors and March 15 to August 15 for nesting birds), vegetation that will be impacted by the proposed project shall be removed outside the nesting season if feasible.”*

**Status→Completed:**

Prior to the removal of trees associated with implementation of the North Construction Staging Area for the Bradley West Project, LAWA conducted surveys for nesting raptors in April 2010. No birds exhibiting breeding behavior or active nests were observed during the survey. Moreover, according to the LAX USDA wildlife biologist, the West Construction Staging Area does not contain suitable habitat for raptors to nest and no nesting raptors have been observed in this area in the past 8 years. As a result, surveys for nesting raptors were not conducted for this construction staging area prior to the removal of vegetation.

### 26.1.Y MM-ET (BWP)-1 Mitigation for Riverside Fairy Shrimp

The Bradley West Project MMRP states in part:

***Mitigation for Riverside Fairy Shrimp.*** *If Riverside fairy shrimp are found to be located on-site, LAWA shall coordinate with FAA and USFWS to initiate consultation under the federal Endangered Species Act and prepare a Mitigation Plan in consultation with the USFWS.*

**Status→Completed:**

Prior to the implementation of the Southeast Construction Staging/Parking Area associated with the Bradley West Project, two wet season surveys and one focused dry season survey for Riverside fairy shrimp (*Streptocephalus woottoni*) were conducted in 2009 and 2010 in accordance with USFWS protocol guidelines. No federally-listed Riverside fairy shrimp were observed within the survey area.

### 26.1.Z MM-BC (SA)-1 Replacement of Habitat Units Associated with the SAIP (Disturbed/Bare Ground and Non-Native Grassland/Ruderal Areas)

The SAIP MMRP states in part:

***Replacement of Habitat Units Associated with the South Airfield Improvement Project.*** *LAWA or its designee shall undertake mitigation for the loss of 17.2 habitat units resulting from implementation of the SAIP. These habitat units shall be replaced at a 1:1 ratio within the FAA-owned habitat preserve at the former Marine Corps Air Station El Toro (El Toro site), or other appropriate site.*

**Status→ In Progress:**

On August 6, 2007, the BOAC approved an MOU between LAWA and the Palos Verdes Peninsula Land Conservancy (PVPLC) for the development of 21 acres of coastal sage/needle grass habitat units in complete fulfillment of LAWA's MM-BC (SA)-1 commitment and partial fulfillment of LAWA's MM-BC-8 commitment. This mitigation plan was approved by both the U.S. Fish & Wildlife Service and the California Department of Fish & Game. The new location near the coast, unlike the previously proposed location at El Toro, is better suited as a replacement site. LAWA funded PVPLC in the amount of \$610,938 for this conservation work to be performed over a three year period. Each year, PVPLC will provide an annual progress report documenting the result of their effort.

In November 2008, the first year of the three year mitigation was completed. PVPLC selected the "3 Sisters Reserve Habitat" as the restoration site. A site restoration plan, containing proposed plant selection and the specifics of the restoration work, was submitted to LAWA for review and approval. On November 20, 2008, LAWA staff inspected the "3 Sisters Reserve Habitat" and approved the site selection. Field work began in 2009 and is coordinated with the annual rain.



Restoration of each specified habitat requires site preparation. All areas to be restored were dominated by exotic species. As part of the site preparation, in January 2009, the PVPLC contracted with a herder to graze 300 goats on the site, removing non-native weeds and trees, initiating the site preparation needed for irrigation installation and native planting and seeding. After three weeks of grazing, the goats were removed and PVLPC field staff took over, removing and chipping over 500 non-native acacia trees. PVPLC staff continued with site preparation throughout the spring and summer, targeting non-native weeds and removing thatch to increase the survival success of the native plants and seeds to be planted. In August, Nakae & Associates was contracted to install irrigation in the 13-acre coastal sage scrub habitat zone and the irrigation installation was completed in October. The planting and seeding began in October 2009.

Approximately 7,930 native container plants and 778 pounds of native seed were planted between late October and December 31, 2009. All of the container plants and native seed were collected on lands managed by the PVPLC and propagated at the PVPLC's native plant nursery in San Pedro in 2008 and 2009. PVPLC staff will continue monitoring the progress of the project through vegetation transect sampling and bird surveys.

## **27.0 Awards and Achievements**

### 27.1 Award of Excellence for Use of Environmentally Friendly Concrete

In 2010, LAWA received the Excellence in Concrete Award presented annually by the Southern California chapter of the American Concrete Institute in recognition of "excellence in environmental usage of concrete on the LAX Crossfield Taxiway Project." As part of the project, a 1,600 space parking lot was constructed to accommodate airline tenants who were being displaced by the new taxiway.

The project team incorporated the use of pervious concrete into construction of the parking lot. Pervious concrete is a special type of concrete with a very high degree of porosity. This concrete provides an environmentally friendly surface that allows stormwater to flow through it, thereby reducing runoff from the parking lot. The parking lot is the largest pervious concrete project in California.

### 27.2 Alternative Fuels

LAWA's Alternative Fuels Program began in 1993. The program is based on LAWA's commitment to take a leadership role in clean air efforts through the use of vehicles and equipment powered by alternative fuels. Alternative fuels are defined as zero to low-emission fuel, other than traditional fossil fuels such as gasoline and diesel.

Alternative fuels currently in use by LAWA include:

- Liquefied natural gas (LNG)
- Compressed natural gas (CNG)
- Electricity

- Solar electricity
- Propane

### Policy

In April 1999, by Resolution 20609, the Board of Airport Commissioners formally adopted the Los Angeles World Airports Alternative Fuels Vehicle Program. Recognizing the environmental benefits to be derived from alternative fuel vehicles, this policy states, in part, that “Los Angeles World Airports is committed to identifying and replacing existing fossil fuel vehicles and equipment with alternative fuel vehicles and equipment, including vehicles powered by compressed natural gas, liquefied natural gas, electricity, and other clean burning alternative fuels.”

### Program Elements

- Replace existing fossil fuel powered vehicles and equipment with alternative fuel vehicles (AFVs) whenever possible during the scheduled vehicle and equipment replacement program.
- Investigate the cleanest fuels available for all applications.
- Develop and maintain fueling infrastructure with the goal of minimizing fuel cost and maximizing the use of AFVs in the fleet.
- Continue the research, training, and communication necessary to insure a successful program and serve as a resource for companies and other agencies interested in understanding the principles and benefits of using alternative fuels.

### Current Fleet at LAX

- 193 CNG sedans
- 259 CNG buses and light/medium/heavy trucks
- 56 electric trucks, forklifts, man-lifts
- 22 LNG buses and heavy trucks
- 39 propane trucks, forklifts
- 28 Hybrid sedans, SUV's, trucks

Total: 597 units, or 63% of fleet

### Accomplishments

- Over 63% of LAWA's fleet vehicles and equipment at LAX are AFVs. Fleet includes over 597 AFVs.
- 100% of the LAX courtesy shuttle fleet is powered by natural gas.
- Designed and built a state-of-the-art, high-technology LNG/LCNG fueling station at LAX.
- Acquired over \$5 million in grant funding to offset the differential cost of AFVs.
- Partnered with the Department of Water and Power to install 32 public access electric vehicle charging stations at LAX.
- Partnered with Praxair, BP, SCAQMD, California Energy Commission, and the U.S. DOE to build the first retail hydrogen fueling station at an airport.

- The AFV program has been recognized as one of the most successful airport AFV programs in the nation and a world-class model for airports and other agencies. Awards and recognition include:
  - Clean Air Awards from the Coalition for Clean Air and South Coast Air Quality Management District
  - Certificate of Distinguished Achievement from the California Natural Gas Vehicle Coalition
  - Clean Cities Certificate for participation in the U.S. Department of Energy's Clean Cities Program
  - Recognized by the U.S. Department of Energy Clean Cities Program as a "success story for airports"

## 27.2 Rideshare

Each year, LAWA's Rideshare Program saves over 8 million vehicle miles, over 600,000 gallons of gasoline, over 8 billion pounds of air pollutants, thousands of dollars in insurance and vehicle depreciation costs, and countless hours spent driving on Southern California's over-burdened streets and freeways. LAWA's multi-faceted Rideshare Program includes 65 vanpools, 82 carpool program participants, 320 free monthly transit passes, and numerous marketing and advocacy activities to recruit and retain program participants. Currently, about 25% of LAWA's employees are participating in the Rideshare Program, saving over 1,000 vehicle trips to LAWA facilities every day.

In 2010, LAWA won its 14<sup>th</sup> consecutive Rideshare Diamond Award for "Innovative Rideshare Strategy" from L.A. County Metro, Orange County Transportation Authority (OCTA), and the Ventura County Transportation Commission (VCTC). This award was for assisting in the relocation of 350 LAWA employees to the new administrative offices at Skyview Center, 6053 Century Blvd. The move threatened to break up 36 vanpools and 12 carpools. Instead, LAWA Rideshare actively reorganized existing vanpool and carpool groups to serve the new building, changed transit passes to regional passes to accommodate the new bus routes, and established a new office location at Skyview Center to assist employees working there.

Twenty-two vanpool riders were asked to change vanpools, which allowed 11 groups to make one fewer stop, saving time and fuel. Currently, 21 vanpools stop at Skyview, providing 97 employees with an efficient ride to work. In addition, 44 employees are riding transit to Skyview. In total, 141 of approximately 350 LAWA employees now working at Skyview are in the LAWA Rideshare Program. This is over 40% of the LAWA employees at that location.

In 2010, LAWA also met the required Average Vehicle Ridership (AVR) Target under SCAQMD Rule 2202 for the 6<sup>th</sup> consecutive year.

## 28.0 Summary

To date, all applicable mitigation measures adopted for the LAX Master Plan MMRP are in the process of being implemented or have been completed. LAWA complied with some mitigation measures by developing program plans, and satisfied others incorporating them into LAX Master Plan project designs and/or construction specifications. The majority of the “Stand-Alone” mitigation plans have been completed or are in-progress. All applicable mitigation measures triggered by the CFTP and BWP are being implemented. LAWA will continue to monitor and report annually on the progress of the LAX Master Plan MMRP as implementation of the program progresses.

## **APPENDIX A**

### **LAX MASTER PLAN MMRP AS ADOPTED SEPTEMBER 2004**

#### **REFERENCE**

**LAWA Website:**

**[http://www.ourlax.org/pub\\_MMRP.aspx](http://www.ourlax.org/pub_MMRP.aspx)**

**for a copy of the document**

## **APPENDIX B**

### **MMRP (NEW MEASURES, REVISED MEASURES, SAIP SPECIFIC MEASURES, CFTP SPECIFIC MEASURES, AND BWP SPECIFIC MEASURES)**

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## USERS GUIDE

The contents of this document constitute the Mitigation Monitoring and Reporting Program (MMRP) applicable to projects developed under the Los Angeles International Airport (LAX) Master Plan. The MMRP specifies the monitoring and reporting requirements related to implementation of Master Plan Commitments and Mitigation Measures set forth in the LAX Master Plan Final Environmental Impact Report (FEIR), which is a program EIR that addresses the overall Master Plan, as well as the implementation of additional mitigation measures, if any, set forth in subsequent environmental review documents that tier off of the Master Plan FEIR, but are specific to an individual project. In addition to the FEIR and subsequent related environmental review documents completed in accordance with the requirements of the California Environmental Quality Act (CEQA), this MMRP includes the Master Plan Commitments and Mitigation Measures set forth in the LAX Master Plan Improvements Final Environmental Impact Statement (FEIS) and the related Federal Aviation Administration (FAA) Record of Decision (ROD) completed in accordance with the requirements of the National Environmental Policy Act (NEPA).

The basic framework of, and requirements for, the MMRP were established in conjunction with approval of the LAX Master Plan in December 2004, and are anticipated to remain in effect throughout implementation of the Master Plan. If, additional new mitigation measures are required in conjunction with subsequent environmental (i.e., CEQA) review of individual projects proposed under the Master Plan, the MMRP will be updated to include such additional project-specific measures. These new project-specific mitigation measures will be added at the end of the MMRP to supplement, but will not replace or duplicate the Master Plan Commitments and Mitigation Measures that otherwise apply based on the MMRP adopted for the Master Plan. The tab dividers of this document define the location of: (1) the LAX Master Plan MMRP (i.e., the "base" document); (2) a delineation of administrative refinements made to the LAX Master Plan MMRP, based on certain refinements to Master Plan commitments and mitigation measures occurring in conjunction with the Los Angeles City Council certification of the FEIR in December 2004; and (3) additional project-specific mitigation measures identified in conjunction with CEQA environmental review documents completed subsequent to the Master Plan FEIR.

The MMRP Index, which begins on the following page, provides a comprehensive delineation of all Master Plan commitments, Master Plan mitigation measures, and project-specific mitigation measures adopted to date, and indicates where within this document the completed text of each measure can be found, as well as an indication of the origin of each measure (i.e., the LAX Master Plan FEIR, the LAX Master Plan FEIS/ROD, and individual project EIR such as the South Airfield Improvements Project FEIR). **The MMRP Index provides the most current and comprehensive delineation of which Master Plan commitments and mitigation measures are included within the overall MMRP, recognizing that if, other new mitigation measures are added, the MMRP Index will be updated accordingly.**

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Master Plan Commitments/ Mitigation Measures	Potential Impact Being Addressed	Timing of Implementation	Monitoring Frequency	Actions Indication Compliance	
<i>Historical/Architectural and Archaeological/Cultural Resources</i>					
<b>MM-HA-11</b>  <b>Monitoring Agency:</b>	<b>Navigational Aids Relocation and Improvements.</b> Prior to initiation of any grading and/or excavation activities associated with the proposed improvement and relocation of navigational aids, the FAA shall prepare, or cause to be prepared, an archaeological treatment plan (ATP) that ensures the long-term protection and proper treatment of any previously unknown significant archaeological resources, including any Native American remains, encountered during such grading and/or excavation within the Coastal Zone. Pursuant to Title 36, Code of Federal Regulations (CFR) Part 800, the draft ATP shall be submitted by the FAA to the California State Historic Preservation Officer (SHPO), the California Coastal Commission staff archaeologist, the California Native American Heritage Commission and interested parties for 30-days for review and comment. The final ATP, which incorporates the review comments, shall be submitted by FAA to the SHPO, and the California Coastal Commission staff archaeologist for review and approval. The ATP shall include a monitoring plan, research design, and data recovery plan. The ATP shall be consistent with the Secretary of the Interior's Standards and Guidelines for Archaeological Documentation; California Office of Historic Preservation's (OHP) Archaeological Resources Management Report, Recommended Contents and Format (1989), and the Guidelines for Archaeological Research Design (1991); and shall also take into account the ACHP's publication Treatment of Archaeological Properties: A Handbook. The ATP shall also be consistent with the Department of the Interior's Guidelines for Federal Agency Responsibility under Section 110 of the National Historic Preservation Act (NHPA). The ATP shall include a requirement that a qualified archaeologist be retained by the FAA, or its designee, to monitor the subject grading and excavation activities. The qualified archaeologist shall meet the Secretary of the Interior's Professional Qualifications Standards. The project archaeologist shall be empowered to halt construction activities in the immediate area if potentially significant resources are identified. Test excavations may be necessary to reveal whether such findings are significant or insignificant. In the event of notification by the project archaeologist that a potentially	Potential to unexpectedly encounter and impact subsurface archaeological resources, including Native American remains, during grading and excavation associated with relocation of existing navigational aids located within the coastal zone.	Prior to initiation of grading and/or excavation activities associated with the proposed improvement and relocation of navigational aids in coastal zone.	Once.	Completion of an archaeological treatment plan (ATP) specific to subject grading/excavation activities.



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	<p>significant or unique archaeological/cultural find has been unearthed, the FAA shall be notified and grading operations shall cease immediately in the affected area until the geographic extent and scientific value of the resource can be reasonably verified. The ATP shall also include a requirement that, should any significant archaeological resource or Native American remains be encountered, a Native American monitor shall be retained following consultation with the Native American Heritage Commission, in order to establish the Most Likely Descendent (MLD) associated with the resource/remains.</p>				
<i>Environmental Justice</i>					
<p><b>MM-EJ-1</b>  <b>Monitoring Agency:</b></p>	<p><b>Expedite Residential Soundproofing for Qualifying Property Owners.</b> Prior to commencing operations on the new runway (Alternative A) or relocated runway (Alternatives C and D) related to the northern runway complex, LAWA will increase funding and technical assistance in order to complete residential soundproofing related to LAX aircraft noise within the City of Inglewood and Los Angeles County to the extent feasible, and will seek federal funding assistance from the FAA. Soundproofing shall be offered and provided to all property owners who have not previously received soundproofing and who qualify and choose to participate in the ANMP program, including those who are within the current ANMP boundaries, and those who would be newly exposed to the 65 CNEL or greater noise contour due to commissioning of the northern runway complex. Following fulfillment of existing commitments within the current ANMP, those who would be newly exposed shall be identified based on modeled noise contours prepared at the time the northern runway improvements are designed in order to expedite completion of soundproofing to the extent feasible prior to the commissioning of the northern runway complex. Completion of soundproofing to the extent feasible accepts that: 1) LAWA and the FAA shall offer assistance and funding to the City of Inglewood and Los Angeles County but cannot control their efforts; 2) certain properties may not qualify or may not otherwise be feasible to mitigate; and 3) some property owners may choose not to participate in the ANMP.</p>	<p>Following relocation of existing runways in the northern runway complex, there is the potential for residential development to be newly exposed to the 65 CNEL and significantly impacted until noise attenuation improvements are completed at those residences that qualify for soundproofing.</p>	<p>Prior to commencing operations on the new (relocated) runway.</p>	<p>Once</p>	<p>Confirm notification of eligibility for soundproofing to residences that would be newly exposed to 65 CNEL due to runway relocation.</p>

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<i>Land Use</i>					
<b>MM-LU-3</b>  <b>Monitoring Agency:</b>  <b>LAWA</b>	<b>Conduct Study of the Relationship Between Aircraft Noise Levels and the Ability of Children to Learn.</b> Current studies of aircraft noise and the ability of children to learn have not resulted in the development of a statistically reliable predictive model of the relative effect of changes in aircraft noise levels on learning. Therefore a comprehensive study shall be initiated by LAWA to determine what, if any, measurable relationship may be present between learning and the disruptions caused by aircraft noise at various levels. An element of the evaluation shall be the setting of an acceptable replacement threshold of significance for CEQA purposes for classroom disruption by both specific and sustained aircraft noise events.	Classroom disruption due to exposure to high single event or cumulative noise levels	Initiation of study upon City Council approval of the LAX Plan	Once, upon approval of the study by LAWA	LAWA approval of completed study
<b>MM-LU-4</b>  <b>Monitoring Agency:</b>  <b>LAWA</b>	<b>Provide Additional Sound Insulation for Schools Shown by MM-LU-3 to be Significantly Impacted by Aircraft Noise.</b> Prior to completion of the study required by Mitigation Measure MM-LU-3, Conduct Study of the Relationship Between Aircraft Noise Levels and the Ability of Children to Learn, and within six months of the commissioning of any relocated runways associated with implementation of the LAX Master Plan, LAWA shall conduct interior noise measurements at schools that could be newly exposed to noise levels that exceed the interim LAX interior noise thresholds for classroom disruption of 55 dB L max, 65 dB Lmax, or 35 Leq(h), as presented in Section 4.1, <i>Noise</i> , of the Final EIR for CEQA purposes. All school classroom buildings (except those within schools subject to an aviation easement) that are found through the noise measurements to exceed the interim interior noise thresholds, as compared to the 1996 baseline conditions presented in the Final EIR, would become eligible for soundproofing under the ANMP.  Upon completion of the study required by Mitigation Measure MM-LU-3 and acceptance of its results by peer review of industry experts, any schools found to exceed a newly established CEQA threshold of significance for classroom disruption based on comparison with 1996 baseline conditions due to implementation of the LAX Master Plan, shall be eligible for participation in the ANMP administered by LAWA, unless they are subject to an	Classroom disruption due to exposure to noise levels in excess of threshold of significance established in MM-LU-3	Within six (6) months of commissioning of any relocated runways (for interim LAX interior noise thresholds component); and upon completion of the study in Mitigation Measure MM-LU-3 (for MM-LU-3 component)	Annually	Conduct noise measurements based on interim LAX interior noise thresholds and on newly established noise thresholds set by MM-LU-3, and make schools eligible for ANMP participation, as appropriate

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	existing avigation easement. A determination of which schools become eligible will be made following application of the new threshold based on measured data.				
<i>Hydrology and Water Quality</i>					
<b>HWQ-1</b>  <b>Monitoring Agency:</b>  <b>LAWA</b>	<p><b>Conceptual Drainage Plan.</b> Once a Master Plan alternative is selected, and in conjunction with its design, LAWA will develop a conceptual drainage plan of the area within the boundaries of the Master Plan alternative (in accordance with FAA guidelines and to the satisfaction of the City of Los Angeles Department of Public Works, Bureau of Engineering). The purpose of the drainage plan will be to assess area-wide drainage flows as related to the Master Plan project area, and at a level of detail sufficient to identify the overall improvements necessary to provide adequate drainage capacity to prevent flooding. The conceptual drainage plan will provide the basis and specifications from which detailed drainage improvement plans will be designed in conjunction with site engineering specific to each Master Plan project. Best Management Practices (BMPs) will be incorporated to minimize the effect of airport operations on surface water quality and to prevent a net increase in pollutant loads to surface water resulting from the selected Master Plan alternative.</p> <p>To evaluate drainage capacity, LAWA will use either the Peak Rate Method specified in Part G - Storm Drain Design of the City of Los Angeles' Bureau of Engineering Manual or the Los Angeles County Modified Rational Method, both of which are acceptable to the LADPW. In areas within the boundary of the selected alternative where the surface water runoff rates are found to exceed the capacity of the storm water conveyance infrastructure with the potential to cause flooding, LAWA will take measures to either reduce peak flow rates or increase the structure's capacity. These drainage facilities will be designed to ensure that they adequately convey storm water runoff and prevent flooding by adhering to the procedures set forth by the Peak Rate Method/Los Angeles County Modified Rational Method.</p>	Significant changes in surface hydrology or adverse impacts to surface water quality due to new development associated with the Master Plan	Prior to issuance of a grading/building permit for the first Master Plan project involving substantial surface alternations or substantial changes to existing operations	Once, upon completion of conceptual drainage plan	Completion of conceptual drainage plan

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<p>Methods to reduce the peak flow of surface water runoff could include:</p> <ul style="list-style-type: none"> <li>◆ Decreasing impervious area by removing unnecessary pavement or utilizing porous concrete or modular pavement</li> <li>◆ Building storm water detention structures</li> <li>◆ Diverting runoff to pervious areas (reducing directly-connected impervious areas)</li> <li>◆ Diverting runoff to outfalls with additional capacity (reducing the total drainage area for an individual outfall)</li> <li>◆ Redirecting storm water flows to increase the time of concentration</li> </ul> <p>Measures to increase drainage capacity could include:</p> <ul style="list-style-type: none"> <li>◆ Increasing the size and slope (capacity) of storm water conveyance structures (pipes, culverts, channels, etc.).</li> <li>◆ Increasing the number of storm water conveyance structures and/or outfalls.</li> </ul> <p>To evaluate the effect of the selected Master Plan alternative on surface water quality, the Conceptual Drainage Plan will address water quality and drainage issues by specifying source control, structural, and treatment control BMPs with the objective of reducing the discharge of pollutants from the stormwater conveyance system to the maximum extent practicable. Once BMPs are identified, an updated pollutant load estimate will be calculated that takes into account reductions from treatment control BMPs. These BMPs will be applied to both existing and future sources with the goal of achieving no net increase in loadings of pollutants of concern to receiving water bodies. Subsequently, LAWA will prepare Standard Urban Stormwater Mitigation Plans (SUSMP) for individual projects associated with the selected alternative during project design and review based on the Conceptual Drainage Plan, as required by the LARWCQB. The purpose of these SUSMPs will be to evaluate water quality impacts associated with individual project components at a design level of detail, as required by LARWQCB, and to identify specific BMPs that will be</p>				

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	<p>incorporated into the project design. LAWA will therefore address water quality issues, including erosion and sedimentation, and comply with the SUSMP requirements by designing the storm water system through incorporation of the structural and treatment control BMPs specified in the SUSMP.</p> <p>The following list includes some of the BMPs that could be employed to infiltrate or treat storm water runoff and dry weather flows, and control peak flow rates.</p> <ul style="list-style-type: none"> <li>◆ Vegetated swales and strips</li> <li>◆ Oil/Water separators</li> <li>◆ Clarifiers</li> <li>◆ Media filtration</li> <li>◆ Catch basin inserts and screens</li> <li>◆ Continuous flow deflective systems</li> <li>◆ Bioretention and infiltration</li> <li>◆ Detention basins</li> <li>◆ Manufactured treatment units</li> <li>◆ Hydrodynamic devices</li> </ul> <p>Other structural BMPs may also be selected from the literature and the many federal, state and local guidance documents available. Performance of structural BMPs varies considerably based on their design. USEPA has published estimated ranges of pollutant removal efficiencies for structural BMPs based on substantial document review.</p>				
<i>Biotic Communities</i>					
<p><b>MM-BC-1</b></p> <p><b>Monitoring Agency:</b></p> <p><b>LAWA</b></p>	<p><b>Conservation of State-Designated Sensitive Habitat Within and Adjacent to the El Segundo Blue Butterfly Habitat Restoration Area.</b> FAA is responsible for conservation measures related to the relocation of navigational aids, while LAWA is responsible for all other conservation measures. All necessary steps shall be taken to ensure that the state-designated sensitive habitats within and adjacent to the Habitat Restoration Area are conserved and protected during construction, operation, and maintenance.</p>	<p>Temporary construction impacts to sensitive areas and degradation of state-designated sensitive habitats</p>	<p>Preconstruction/const ruction</p>	<p>Once, upon completion of pre-construction evaluation and then on-going during construction if within 100 feet of the Habitat Restoration Area; Annually</p>	<p>Completion of pre-construction evaluation and presence of environmental monitor when construction is within 100 feet of state-designated sensitive</p>

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<p>These steps shall, at a minimum, include the following:</p> <p><i>Implementation of construction avoidance measures in areas where construction or staging are adjacent to the Habitat Restoration Area. Prior to the initiation of construction of LAX Master Plan components to be located adjacent to the Habitat Restoration Area, a pre-construction evaluation shall be conducted to identify and flag specific areas of state-designated sensitive habitats located within 100 feet of construction areas. Subsequent to the pre-construction evaluation, a pre-construction meeting shall be conducted and written construction provided avoidance measures to be implemented in areas adjacent to state-designated sensitive habitats. Construction avoidance measures include erecting a 10-foot-high tarped chain-link fence where the construction or staging area is adjacent to state-designated sensitive habitats to reduce the transport of fugitive dust particles related to construction activities. Soil stabilization, watering or other dust control measures, as feasible and appropriate, shall be implemented to reduce fugitive dust emissions during construction activities within 2,000 feet of the El Segundo Blue Butterfly Habitat Restoration Area, with a goal to reduce fugitive dust emissions by 90 to 95 percent. In addition, to the extent feasible, no grading or stockpiling for construction activities should take place within 100 feet of a state-designated sensitive habitat. LAWA or its designee shall incorporate provisions for the identification of additional construction avoidance measures to be implemented adjacent to state-designated sensitive areas. All construction avoidance measures that address Best Management Practices shall be clearly stated within construction bid documents. In addition, provisions shall be included in all construction bid documents requiring the presence of a qualified environmental monitor. Construction drawings shall indicate vegetated areas within the Habitat Restoration Area as "Off-Limits Zone."</i></p> <p><i>Ongoing maintenance and management efforts for the El Segundo Blue Butterfly Habitat Restoration Area. LAWA or its designee shall ensure that maintenance and management efforts prescribed in the Habitat Management Plan (HMP) for the Habitat Restoration</i></p>			during operation and maintenance	habitat; Periodic Monitoring Report

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	Area shall continue to be carried out as prescribed.				
<b>MM-BC-2</b>  <b>Monitoring Agency:</b>  <b>LAWA</b>	<b>Conservation of Floral Resources: Lewis' Evening Primrose.</b> FAA is responsible for conservation measures related to the relocation of navigational aids, while LAWA is responsible for all other conservation measures. A plan shall be prepared and implemented to compensate for the loss of individuals of the sensitive Lewis' evening primrose, currently located at the westerly end of the north runway and within the Habitat Restoration Area. Seed shall be collected from those plants to be removed, and properly clean and store the collected seed until used. If possible, seeds shall be collected in multiple years to ensure an adequate seed supply for planting. A mitigation site of suitable habitat equal to the area of impact shall be delineated within areas of the Los Angeles/El Segundo Dunes as described in the "Los Angeles/El Segundo Dunes Habitat Restoration Plan." Collected seed shall be broadcast (distributed) after the first wetting rain. A monitoring plan shall be implemented to monitor the establishment of individuals of Lewis' evening primrose for a period of not more than five years. Performance criteria shall include the establishment of an equal number of plants as that impacted in the first year following the distribution of seed within the mitigation site. Performance criteria shall also include confirmation of recruitment for two years following the first year flowering is observed and establishment of individuals throughout the mitigation area within three years following the first year flowering is observed. Monitoring shall be undertaken in the manner set forth in the "Los Angeles/El Segundo Dunes Habitat Restoration Plan"..	Loss of individuals of Lewis' evening primrose	At least five (5) years prior to initiation of construction of North Runways	As per Conservation Plan for Lewis' Evening Primrose	Preparation of Conservation Plan for Lewis' Evening Primrose; Periodic Monitoring Report
<b>MM-BC-9</b>  <b>Monitoring Agency:</b>  <b>LAWA</b>	<b>Conservation of Faunal Resources.</b> FAA is responsible for conservation measures related to the relocation of navigational aids, while LAWA is responsible for all other conservation measures. LAWA or its designee shall develop and implement a relocation and monitoring plan to compensate for the loss of 1.34 habitat units (0.3 habitat units + 1.04 habitat units) of occupied western spadefoot toad habitat and for the loss of western spadefoot toad individuals currently in the southwestern portion of the AOA. LAWA or its designee shall identify possible relocation sites in consultation with the CDFG and USFWS and shall develop and implement a monitoring plan to monitor the success of the relocated	Loss of habitat occupied by sensitive species	Preparation of Conservation Plan for Faunal Resources within three (3) years of City Council approval of the LAX Plan; Implementation per Conservation Plan. Toad relocation and monitoring component of the	As per Conservation Plan for Faunal Resources	Preparation of Conservation Plan for Faunal Resources; Periodic Monitoring Report

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<p>tadpoles for a period of not more than five years. LAWA or its designee shall relocate the western spadefoot toad population currently inhabiting three locations on the AOA. One potential site is the Madrona Marsh Nature Center in Torrance, 20 miles south of LAX, which supports several vernal pools and one large pond capable of supporting western spadefoot toads. Spadefoot toad experts suggest the best approach to accomplish relocation is to transport tadpoles and metamorphs only, as adults return to their birth site. Site preparation shall include confirmation by a permitted biologist that no predators, such as mosquitofish or bullfrogs, are present within the proposed relocation site or in waterways surrounding the relocation site. The CDFG has suggested that if the first relocation effort is not successful, another attempt should be made the following year. Therefore, western spadefoot toads shall be collected two consecutive years prior to construction activities taking place in existing occupied spadefoot toad habitat. In addition, since the western spadefoot toad is known to become reproductively mature within three years, an additional performance criterion shall be the identification of tadpoles at the relocation site between years three and four. The success criteria should be 50 percent survival of all tadpoles and metamorphs for the first, second, and third years following the last relocation. This shall be accomplished through a five-year monitoring plan, with bi-monthly monitoring between January 31 and June 1, to document the success of this relocation effort.</p> <p>LAWA or its designee shall develop and implement a relocation and monitoring plan to compensate for the loss of 2.38 habitat units of occupied San Diego black-tailed jackrabbit habitat located within the AOA. LAWA or its designee shall relocate the San Diego black-tailed jackrabbit population currently inhabiting the AOA. Relocation efforts shall be coordinated with CDFG. The San Diego black-tailed jackrabbit shall be captured on the AOA using live traps and shall be released into the Habitat Restoration Area. Compensation for the loss of 2.38 habitat units shall be the utilization of at least 2.38 habitat units within the Los Angeles/El Segundo Dunes by the San Diego black-tailed jackrabbit individuals relocated to the site. Black-tailed jackrabbit is currently</p>		<p>Conservation Plan to be undertaken in connection with MM-ET-1 (Riverside Fairy Shrimp Habitat Restoration)</p>		



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<p>absent for the Los Angeles/El Segundo Dunes. Opportunities for compensation for the loss of 2.38 habitat units include 13.52 habitat units from restoration of Non-Native Grassland/Ruderal habitat to a Valley Needlegrass Grassland; 14.4 habitat units from removal and restoration of 50 percent of the existing roadways to Southern Fore dune; and 59.68 habitat units from restoration of Disturbed Dune Scrub/Fore dune to Southern Fore dune. LAWA or its designee shall implement a monitoring plan to monitor the success of the relocated individuals for a period of not more than five years. Performance criteria shall include confirmed success of survival for three years of the San Diego black-tailed jackrabbit within the Habitat Restoration Area. This shall be accomplished through a quarterly monitoring plan to document the success or failure of this relocation effort.</p> <p>LAWA or its designee shall compensate for the loss of areas utilized by loggerhead shrike currently located on the western airfield and composed of 10.83 habitat units (equivalent to 83.25 acres). Compensation for the loss of 10.83 habitat units of habitat utilized by the loggerhead shrike shall be the utilization of at least 10.83 habitat units within the Los Angeles/El Segundo Dunes. Opportunities for compensation for the loss of 10.83 habitat units include 13.52 habitat units from restoration of Non-Native Grassland/Ruderal habitat to a Valley Needlegrass Grassland; 14.4 habitat units from removal and restoration of 50 percent of the existing roadways to Southern Fore dune; and 59.68 habitat units from restoration of Disturbed Dune Scrub/Fore dune to Southern Fore dune. Compensation for the loss of at least 10.83 habitat units shall take place prior to construction. LAWA or its designee shall implement a monitoring program for a period of not more than five years. Performance criteria shall include the use of at least 10.83 habitat units of improved habitat by the loggerhead shrike for foraging and nesting. Monitoring shall take place quarterly for the first three years and biannually thereafter. Monitoring shall be timed appropriately to include monitoring during the breeding period, which is between February and June.</p> <p>As a means of minimizing incidental take of active nests of</p>				

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	<p>loggerhead shrike, LAWA or its designee shall have all areas to be graded surveyed by a qualified biologist at least 14 days before construction activities begin to ensure maximum avoidance to active nests for loggerhead shrike. Construction avoidance measures shall include flagging of all active nests for loggerhead shrike and a 300 feet wide buffer area shall be designated around the active nests. A biological monitor shall be present to ensure that the buffer area is not infringed upon during the active nesting season, March 15 to August 15. In addition, LAWA or its designee shall require that vegetation clearing within the designated 300 feet buffer be undertaken after August 15 and before March 15.</p> <p>The FAA or LAWA as appropriate, or the respective designee of each, shall conduct pre-construction surveys to determine the presence of individuals of sensitive arthropod species, the silvery legless lizard, the San Diego horned lizard, and the burrowing owl within the proposed area of impact within the Los Angeles/El Segundo Dunes. Surveys will be conducted at the optimum time to observe these species as described in Section 6.1 of the "Los Angeles/El Segundo Dunes Habitat Restoration Plan." Should an individual be observed, they will be relocated to suitable habitat for that species within the Habitat Restoration Area. Prior to construction, the FAA or its designee shall develop and implement a relocation plan to avoid the potential loss of individuals from the installation of navigational aids and associated service roads. This relocation plan is provided in the "Los Angeles/El Segundo Dunes Habitat Restoration Plan". Relocation efforts shall be undertaken by a qualified biologist, in coordination with CDFG.</p>				
<p><b>MM-BC-13</b></p> <p><b>Monitoring Agency:</b></p> <p><b>LAWA</b></p>	<p><b>Replacement of State-Designated Sensitive Habitats.</b> FAA is responsible for conservation measures related to the relocation of navigational aids, while LAWA is responsible for all other conservation measures. Mitigation shall be undertaken for the loss of State-designated sensitive habitat within the Los Angeles/El Segundo Dunes, including the Habitat Restoration Area. Installation of navigational aids and associated service roads under</p>	<p>Loss of state designated sensitive habitat</p>	<p>Preparation of Replacement Plan for State-Designated Sensitive Habitats prior to relocation of navigational aids; Implementation per</p>	<p>As per Replacement Plan for State-Designated Sensitive Habitats</p>	<p>Preparation of Replacement Plan for State-Designated Sensitive Habitats; Periodic Monitoring Report</p>

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<b>Master Plan Commitments/ Mitigation Measures</b>	<b>Potential Impact Being Addressed</b>	<b>Timing of Implementation</b>	<b>Monitoring Frequency</b>	<b>Actions Indication Compliance</b>
<p>Alternative D would result in impacts to 66,675 square feet (1.53 acres) of State-designated sensitive habitat within the Los Angeles/El Segundo Dunes, square feet (0.24 acre) are within habitat occupied by the El Segundo blue butterfly. Impacts to 1.53 acres of State-designated sensitive habitat within the Los Angeles/El Segundo Dunes shall be replaced at a ratio of 2:1 within the Los Angeles/El Segundo Dunes as described in the "Los Angeles/El Segundo Dunes Habitat Restoration Plan". Additionally the removal of existing navigational aides no longer required to assist aircraft approaching from the west has the potential to disturb an estimated 1.4 acres of State-designated habitat within the Los Angeles/El Segundo Dunes. These 1.4 acres will be replaced at a ratio of 2:1 as described in the "Los Angeles/El Segundo Dunes Habitat Restoration Plan". The replacement of State-designated sensitive habitat shall be undertaken through restoration of 2.8 acres as described in the "Los Angeles/El Segundo Dunes Habitat Restoration Plan." The restoration and enhancement of biotic communities as related to the establishment or enhancement of wildlike habitat shall consider and comply with the provisions of FAA Advisory Circular 150/5200-33 regarding hazardous wildlife attractants on or near airports. Additionally, such restoration and enhancement shall take into account, as appropriate, the Memorandum of Agreement between the FAA and other federal agencies, including the US Fish and Wildlife Service (USFWS), pertaining to environmental conditions that could contribute to aircraft-wildlife strikes.</p> <p>Valley Needlegrass Grassland restoration efforts consist of site preparation, propagation and planting of Valley Needlegrass Grassland species, and maintenance and monitoring of the restoration site as described in the "Los Angeles/El Segundo Dunes Habitat Restoration Plan."</p> <p>Southern Foredune restoration efforts consist of site preparation, propagation, and planting of the species characteristic of the Southern Foredune community at the Los Angeles/El Segundo Dunes, and maintenance and monitoring of the restoration site as described in the "Los Angeles/El Segundo Dunes Habitat</p>		Replacement Plan		

**LAX MASTER PLAN ALTEARNITIVE D  
MITIGATION MONITORING & REPORTING PROGRAM  
REVISED MITIGATION MEASURES**

<b>Master Plan Commitments/ Mitigation Measures</b>		<b>Potential Impact Being Addressed</b>	<b>Timing of Implementation</b>	<b>Monitoring Frequency</b>	<b>Actions Indication Compliance</b>
	Restoration Plan." Replacement of the 10,597 square feet (0.24 acre) of habitat occupies by the El Segundo Blue Butterfly shall be undertaken as described in Mitigation Measure MM-ET-4, El Segundo Blue Butterfly Conservation: Habitat Restoration.				
<b>MM-ET-4</b>  <b>Monitoring Agency:</b>  <b>LAWA</b>	<b>El Segundo Blue Butterfly Conservation: Habitat Restoration.</b> FAA is responsible for conservation measures related to the relocation of navigational aids, while LAWA is responsible for all other conservation measures. All necessary steps shall be taken to avoid the flight season of the El Segundo blue butterfly (June 14 - September 30) when undertaking installation of navigational aids and associated service roads proposed under Master Plan Alternative D within habitat occupied by the El Segundo blue butterfly. Installation of navigational aids within the Habitat Restoration Area should be required to take place between October 1st and May 31st. In conformance with the Biological Opinion, activities associated with navigational aids development shall be limited to the existing roads and proposed impacts areas as depicted in the Final EIR. Coast buckwheat shall be planted a minimum of three years prior to the impact, not only to allow for establishment of the plants, but also to ensure that the plants are mature enough to bloom. The plantings of coast buckwheat shall be located within the southwest corner of subsite 23 of the Habitat Restoration Area, as depicted in Figure F5-5, and shall encompass 3 acres as described in the "Los Angeles/El Segundo Dunes Habitat Restoration Plan" (1.25 acres of which is in conformance with the Biological Opinion). Coast buckwheat plants will be planted at an initial density of 200 plants per acre to ensure the long term planting density target (130 plants per acre). Coast buckwheat plants will be placed in clusters or groupings based on microtopographic features present within subsite 23 to better support the El Segundo Blue Butterfly, which is known to prefer large clusters of plants for nectaring and shelter. As possible, depending on the location and condition of individual plants, FAA and LAWA shall salvage existing coast buckwheat plants and any larvae on the plant or pupae in the soil below the plant that would be removed to accommodate the replacement navigational aids to further conserve this species. These plants shall be salvaged immediately prior to the	Loss of habitat occupied by endangered El Segundo blue butterfly	Preparation of Habitat Restoration Plan for El Segundo Blue Butterfly 3 years prior to construction activities within its habitat, or as approved by USFWS; Monitoring for a period of not more than 5 years	As per Habitat Restoration Plan for the El Segundo Blue Butterfly	Preparation of Habitat Restoration Plan for El Segundo Blue Butterfly; Periodic Monitoring Report

**LAX MASTER PLAN ALTEARNITIVE D  
MITIGATION MONITORING & REPORTING PROGRAM  
REVISED MITIGATION MEASURES**

<b>Master Plan Commitments/ Mitigation Measures</b>	<b>Potential Impact Being Addressed</b>	<b>Timing of Implementation</b>	<b>Monitoring Frequency</b>	<b>Actions Indication Compliance</b>
<p>installation of the replacement navigational aids outside of the butterfly flight season. These salvaged plants shall be transported in a suitable container and replanted after the onset of winter rains in subsite 23 near the restored area as described in MM-BC-13, Replacement of State-Designated Sensitive Habitats. This area shall be the designated mitigation site for planting coast buckwheat and the site to which El Segundo blue butterfly pupae shall be relocated. Gathering of coast buckwheat seed shall take place from September 15 through June 1. Propagation and planting methodologies successfully employed by LAWA during 1984 through 1994 restoration efforts shall be employed for propagation of additional coast buckwheat plants. An existing irrigation system proximal to subsite 23 will be used to increase the success of the restoration effort. Prior to navigational aid installation, a permitted and qualified biologist shall salvage El Segundo blue butterfly larvae in coordination with the USFWS in order to minimize impacts to the butterfly. Based on LAWA's restoration experience within the Habitat Restoration Area, occupation of restored habitat can occur within two to three years of restoration efforts. Therefore, there would be no net loss in acres or value of occupied habitat. Additionally, after the navigational aid system is in place and during the first subsequent flight season of the El Segundo blue butterfly, LAWA shall document El Segundo blue butterfly behavior with respect to the lighting system and submit a monitoring report to USFWS.</p> <p>Lastly, LAWA shall coordinate with the USFWS to create educational materials on the El Segundo blue butterfly for integration into LAWA's public outreach program.</p>				

**LAX MASTER PLAN ALTERNATIVE D  
MITIGATION MONITORING & REPORTING PROGRAM**

Master Plan Commitments/ Mitigation Measures	Potential Impact Being Addressed	Timing of Implementation	Monitoring Frequency	Actions Indicating Compliance		
<b>Surface Transportation (Off-Airport)</b>						
<b>MM-ST-6 Monitoring Agency: LAWA</b>	<b>Add New Traffic Lanes.</b> Traffic lanes shall be added to select intersections to the satisfaction of LADOT or other appropriate jurisdiction, sufficient to increase the capacity of the intersection without unnecessarily reducing sidewalk widths, removing on-street parking, or encroaching onto other land uses. By 2008: Arbor Vitae Street & La Cienega Boulevard, Aviation Boulevard & Century Boulevard, Aviation Boulevard & 111th Street, Aviation Boulevard & Imperial Highway, Centinela Avenue & Sepulveda Boulevard, Continental City Drive , I-105 ramps & Imperial Highway, La Cienega Boulevard & 111 <sup>th</sup> Street, Lincoln Boulevard & 83rd Street, Centinela Avenue & La Cienega Boulevard, Century Boulevard & Hawthorne Boulevard/La Brea Avenue, I-405 northbound off-ramp & Imperial Highway. By 2015: Imperial Highway & Main Street, Imperial Highway & Pershing Drive, Lincoln Boulevard & Manchester Boulevard, Sepulveda Boulevard & 79 <sup>th</sup> St/80 <sup>th</sup> St.	Traffic congestion and delays as they relate to the LAX Master Plan program activities	By 2008 or 2015, or prior to certificate of occupancy for associated project component, as specified in the Transportation Improvements Phasing Plan	Once, at issuance of certificate of occupancy of related project	Acceptance of construction by LADOT and LADPW, or affected jurisdiction	
<b>MM-ST-7 Monitoring Agency: LAWA</b>	<b>Restripe Existing Facilities.</b> Existing traffic lanes shall be restriped to the satisfaction of LADOT or other appropriate jurisdiction, so that additional lane capacity will be provided without adding any new pavement to the intersection or road segment. By 2008: Airport Boulevard & Arbor Vitae Street, Aviation Boulevard & El Segundo Boulevard, Aviation Boulevard & Imperial Highway, Centinela Avenue and La Cienega Boulevard, Century Boulevard & Sepulveda Boulevard, Florence Avenue & La Cienega Boulevard, La Cienega Boulevard & Manchester Avenue, La Tijera Boulevard & Sepulveda Boulevard, Manchester Avenue & Sepulveda Boulevard, Hawthorne Boulevard & Imperial Highway. By 2015: Aviation Boulevard & Manchester Boulevard, Century Boulevard & La Cienega Boulevard, Grand Avenue & Vista del Mar, La Tijera Boulevard & Manchester Avenue, Arbor Vitae Street & Inglewood Avenue.	Traffic congestion and delays as they relate to the LAX Master Plan program activities	By 2008 or 2015, or prior to certificate of occupancy for associated project component, as specified in the Transportation Improvements Phasing Plan	Once, at issuance of certificate of occupancy of related project	Approval of restriping by LADOT or affected jurisdiction	

**LAX MASTER PLAN ALTERNATIVE D  
MITIGATION MONITORING & REPORTING PROGRAM**

Master Plan Commitments/ Mitigation Measures	Potential Impact Being Addressed	Timing of Implementation	Monitoring Frequency	Actions Indicating Compliance		
<b>Surface Transportation (Off-Airport)</b>						
<b>MM-ST-8 Monitoring Agency: LAWA</b>	<b>Add ATSAC, ATCS or Equivalent.</b> Automated Traffic Surveillance and Control (ATSAC) or Adaptive Traffic Control System (ATCS) capability or equivalent shall be added to select intersections to the satisfaction of LADOT or other appropriate jurisdiction. The improved capability will result in a more effective traffic signal network. By 2008: Aviation Boulevard & El Segundo Boulevard, Aviation Boulevard and Rosecrans Boulevard, El Segundo Boulevard & Sepulveda Boulevard, Florence Avenue and La Cienega Boulevard, Mariposa Avenue & Sepulveda Boulevard, Rosecrans Avenue & Sepulveda Boulevard, Hawthorne Boulevard & Imperial Highway, Century Boulevard & Inglewood Avenue, Imperial Highway & Inglewood Avenue, . By 2015: Arbor Vitae Street & La Brea Avenue, Aviation Boulevard & Manchester Avenue, El Segundo Boulevard & La Cienega Boulevard, Sepulveda Boulevard and 83 <sup>rd</sup> Street, Centinela Avenue E/O La Brea Avenue (link), Imperial Highway W/O Hawthorne Boulevard (link), El Segundo Boulevard W/O Hawthorne Boulevard (link), Sepulveda Boulevard N/O Rosecrans Boulevard (link).	Traffic congestion and delays as they relate to the LAX Master Plan program activities	By 2008 or 2015, or prior to certificate of occupancy for associated project component, as specified in the Transportation Improvements Phasing Plan	Once, at issuance of certificate of occupancy of related project	Approval of signal upgrade from LADOT and LADPW, or appropriate jurisdiction	
<b>MM-ST-10 Monitoring Agency: LAWA</b>	<b>Modify Signal Phasing.</b> The traffic signal phasing of select intersections shall be modified to the satisfaction of LADOT or other appropriate jurisdiction, to allow more efficient use of the intersections, particularly those that will experience a notable change in traffic characteristics as a result of the project. By 2008: Douglas Street & Imperial Highway, El Segundo Boulevard & Sepulveda Boulevard, Florence Avenue & La Cienega Boulevard, Imperial Highway & Sepulveda Boulevard, La Cienega Boulevard & Manchester Avenue, Lincoln Boulevard & 83rd Street, Manchester Avenue & Sepulveda Boulevard. By 2015: Highland Avenue/Vista del Mar & Rosecrans	Traffic congestion and delays as they relate to the LAX Master Plan program activities	By 2008 or 2015, or prior to certificate of occupancy for associated project component, as specified in the Transportation Improvements Phasing Plan	Once, at issuance of certificate of occupancy of related project	Approval of signal improvement from LADOT or appropriate jurisdiction	

**LAX MASTER PLAN ALTERNATIVE D  
MITIGATION MONITORING & REPORTING PROGRAM**

Master Plan Commitments/ Mitigation Measures	Potential Impact Being Addressed	Timing of Implementation	Monitoring Frequency	Actions Indicating Compliance		
<b>Surface Transportation (Off-Airport)</b>						
	Boulevard, Imperial Highway & Vista del Mar.					
<b>MM-ST-15 Monitoring Agency: LAWA MM-ST-15 (continued)</b>	<b>Provide Fair-Share Contributions to Transit Improvements.</b> Provide fair-share contributions to benefit transit to and from LAX to the satisfaction of LADOT and/or other appropriate jurisdiction or agency. By 2008: Aviation Boulevard and Imperial Highway, Jefferson Boulevard & Lincoln Boulevard, La Tijera Boulevard & Sepulveda Boulevard, Lincoln Boulevard & Teale Street, I-105 W/B off-ramp at Sepulveda Boulevard, Overland Avenue S/O Venice Boulevard (link). By 2015: Howard Hughes Parkway & Sepulveda Boulevard, Lincoln Boulevard & Manchester Avenue, Sepulveda Boulevard & 76th Street/77th Street, Lincoln Boulevard S/O Venice Boulevard (link), Lincoln Boulevard S/O Jefferson Boulevard (link).	Traffic congestion and delays as they relate to the LAX Master Plan program activities	By 2008 or 2015, or prior to certificate of occupancy for associated project component, as specified in the Transportation Improvements Phasing Plan	Once, at issuance of certificate of occupancy of related project	Approval of fair-share contribution by LADOT or appropriate jurisdiction and/or agency	
<b>MM-ST-16 Monitoring Agency: LAWA</b>	<b>Provide Fair-Share Contribution to LA County's Project to Extend the Marina Expressway.</b> Provide fair-share contribution to Los Angeles County's project to extend the Marina Expressway (Route 90) to Admiralty Way or complete alternative off-site improvements at the following intersections: By 2015: Bali Way & Lincoln Boulevard, Lincoln Boulevard & Marina Expressway, Lincoln Boulevard & Mindanao Way	Traffic congestion and delays as they relate to the LAX Master Plan program activities	By 2008 or 2015, or prior to certificate of occupancy for associated project component, as specified in the Transportation Improvements Phasing Plan	Once, at issuance of certificate of occupancy of related project	Approval of fair-share contribution or alternative improvement by LADOT and/or Los Angeles County	



**SOUTH AIRFIELD IMPROVEMENT PROJECT  
MITIGATION MONITORING & REPORTING PROGRAM  
FOR NEW MITIGATION MEASURES<sup>1</sup>**

Master Plan Commitments/ Mitigation Measures		Potential Impact Being Addressed	Timing of Implementation	Monitoring Frequency	Actions Indicating Compliance
<i><b>Biotic Communities</b></i>					
<b>MM-BC (SA)-1</b>  <b>Monitoring Agency:</b>  <b>LAWA</b>	<b>Replacement of Habitat Units Associated with the South Airfield Improvement Project.</b> LAWA or its designee shall undertake mitigation for the loss of 17.2 habitat units resulting from implementation of the SAIP. These habitat units shall be replaced at a 1:1 ratio within the FAA owned habitat preserve at the former Marine Corps Air Station El Toro (El Toro site), or other appropriate site.	Impacts on Disturbed/Bare Ground and Non-Native Grassland/Ruderal areas	Preparation of Replacement Plan prior to or concurrent with commissioning of relocated Runway 7R-25L	As per Replacement Plan for Habitat Units	Preparation of Replacement Plan for Habitat Units; Periodic Monitoring Report
<b>MM-BC (SA)-2</b>  <b>Monitoring Agency:</b>  <b>LAWA</b>	<b>Conservation of Faunal Resources Associated with the South Airfield Improvement Project.</b> Directed surveys for the San Diego black-tailed jackrabbit and the loggerhead shrike shall be undertaken by a qualified wildlife biologist at least 14 days before construction activities. LAWA or its designee shall relocate any observed San Diego black-tailed jackrabbit individuals currently inhabiting the SAIP project areas. Relocation efforts shall be coordinated with CDFG.	Impacts on San Diego black-tailed jackrabbit habitat and loggerhead shrike habitat	Initiated and completed prior to or concurrent with commissioning of relocated Runway 7R-25L	As per Replacement Plan for Habitat Units	Preparation of Replacement Plan for Habitat Units; Periodic Monitoring Report

<sup>1</sup> The South Airfield Improvement Project is subject to many of the LAX Master Plan Commitments and Mitigation Measures adopted in conjunction with the LAX Master Plan Final EIR. See User Guide located at front of the MMRP.

**CROSSFIELD TAXIWAY PROJECT  
MITIGATION MONITORING & REPORTING PROGRAM  
FOR NEW MITIGATION MEASURES<sup>1</sup>**

CFTP-Specific Mitigation Measures	Potential Impact Being Addressed	Timing of Implementation	Monitoring Frequency	Actions Indicating Compliance	
<b>Historical/Architectural and Archaeological/Cultural Resources</b>					
<b>MM-HA (CFTP)-1</b>  <b>Monitoring Agency:</b>  <b>LAWA</b>	<b>Conformance with LAX Master Plan Archaeological Treatment Plan:</b> Prior to initiation of grading and construction activities, LAWA will retain an on-site Cultural Resource Monitor (CRM), as defined in the LAX Master Plan MMRP ATP, who will determine if the proposed project area is subject to archaeological monitoring. As defined in the ATP, areas are not subject to archaeological monitoring if they contain redeposited fill or have previously been disturbed. The CRM will compare the known depth of redeposited fill or disturbance to the depth of planned grading activities, based on a review of construction plans. If the CRM determines that the proposed project site is subject to archaeological monitoring, a qualified archaeologist (an archaeologist who satisfies the Secretary of the Interior's Professional Qualifications Standards [36 CFR 61]) shall be retained by LAWA to inspect excavation and grading activities that occur within native material. The extent and frequency of inspection shall be defined based on consultation with the archaeologist. Following initial inspection of excavation materials, the archaeologist may adjust inspection protocols as work proceeds.	Potential to unexpectedly encounter and impact subsurface archaeological resources, including Native American remains, during grading and excavation associated with construction of the CFTP	Prior to initiation of grading and/or excavation activities associated with the construction of the CFTP	As per the Cultural Resource Monitor determining proposed project area being subject to archaeological monitoring, the extent and frequency of inspection shall be defined based on consultation with the archeologist	Conformance with LAX Master Plan Archaeological Treatment Plan

<sup>1</sup> The Crossfield Taxiway Project is subject to many of the LAX Master Plan Commitments and Mitigation Measures adoption in conjunction with the LAX Master Plan Final EIR. See User Guide at front of MMRP.

**CROSSFIELD TAXIWAY PROJECT  
MITIGATION MONITORING & REPORTING PROGRAM  
FOR NEW MITIGATION MEASURES<sup>1</sup>**

CFTP-Specific Mitigation Measures	Potential Impact Being Addressed	Timing of Implementation	Monitoring Frequency	Actions Indicating Compliance	
<b>Paleontological Resources</b>					
<b>MM-PA (CFTP)-1</b>  <b>Monitoring Agency:</b>  <b>LAWA</b>	<b>Conformance with LAX Master Plan Paleontological Management Treatment Plan:</b> Prior to the initiation of grading and construction activities, LAWA will retain a professional paleontologist, as defined in the Final LAX Master Plan MMRP PMTP, who will determine if the project site exhibits a high or low potential for subsurface resources. If the project site is determined to exhibit a high potential for subsurface resources, paleontological monitoring will be conducted in accordance with the procedures stipulated in the PMTP. If the project site is determined to exhibit a low potential for subsurface deposits, excavation need not be monitored as per the PMTP. In the event that paleontological resources are discovered, the procedures outlined in the PMTP for the identification of resources will be followed.	Potential to unexpectedly encounter and impact subsurface paleontological resources during grading and excavation associated with construction of the CFTP	Prior to initiation of grading and/or excavation activities associated with the construction of the CFTP	As per the professional paleontologist determining proposed project area being subject to paleontological monitoring, the extent and frequency of inspection shall be defined based on procedures outlined in the PMTP	Conformance with LAX Master Plan Paleontological Management Treatment Plan
<b>MM-PA (CFTP)-2</b>  <b>Monitoring Agency:</b>  <b>LAWA</b>	<b>Construction Personnel Briefing:</b> In accordance with the PMTP, construction personnel will be briefed by the consulting paleontologist in the identification of fossils or fossiliferous deposits and in the correct procedures for notifying the relevant individuals should such a discovery occur.	Potential to unexpectedly encounter and impact subsurface paleontological resources during grading and excavation associated with construction of the CFTP	Prior to initiation of grading and/or excavation activities associated with the construction of the CFTP	Once	Completion of briefing of construction personnel on identification of fossils or fossiliferous deposits and notification procedures in accordance with the PMTP

**CROSSFIELD TAXIWAY PROJECT  
MITIGATION MONITORING & REPORTING PROGRAM  
FOR NEW MITIGATION MEASURES<sup>1</sup>**

CFTP-Specific Mitigation Measures	Potential Impact Being Addressed	Timing of Implementation	Monitoring Frequency	Actions Indicating Compliance	
<b>Biotic Communities</b>					
<p><b>MM-BC (CFTP)-1</b></p> <p><b>Monitoring Agency:</b> <b>LAWA</b></p>	<p><b>Conservation of Floral Resources: Southern Tarplant.</b> LAWA or its designee shall prepare a special status plant mitigation program. The loss of the southern tarplant individuals shall be mitigated through seed collection and seeding into a suitable mitigation site within undeveloped property owned by LAWA, determined based on habitat, soil type, moisture levels, and other relevant conditions.</p> <p>A qualified Seed Collector shall monitor the tarplant phenology to determine the appropriate timing for seed collection. Tarplant seed shall be collected from all tarplants within the impact area, which shall be delineated in the field with lath and flagging by a Qualified Biologist. The Biologist shall ensure that seed shall only be collected from plants that will be impacted by the CFTP. Upon completion of seed collection, the seed collector shall clean the seeds to prepare for the seeding effort.</p> <p>A mitigation plan shall be developed at a level of detail necessary for successful program implementation by a Landscape Contractor. The detailed program shall contain the following items:</p> <ul style="list-style-type: none"> <li>◆ <i>Responsibilities and qualifications of the personnel to implement and supervise the plan.</i> The plan shall specify the responsibilities and qualifications of the personnel who will supervise and implement the mitigation plan, including LAWA, Technical Specialists, and Maintenance Personnel.</li> </ul>	<p>Impacts on the loss of the southern tarplant individuals</p>	<p>Preparation of a special status plant mitigation program prior to relocation/ construction of the existing American Airlines employee parking lot</p>	<p>As per special status plant mitigation program for southern tarplant resources; Regular site visits (i.e. monthly, quarterly) for no more than 5 years or until germination, flowering and seed set of at least 29 individuals (100 percent of the original population size)</p>	<p>Preparation of special status plant mitigation program; Periodic Monitoring Report</p>

**CROSSFIELD TAXIWAY PROJECT  
MITIGATION MONITORING & REPORTING PROGRAM  
FOR NEW MITIGATION MEASURES<sup>1</sup>**

CFTP-Specific Mitigation Measures	Potential Impact Being Addressed	Timing of Implementation	Monitoring Frequency	Actions Indicating Compliance
<ul style="list-style-type: none"> <li>◆ <i>Site selection.</i> The site for the mitigation shall be determined in coordination with LAWA, and shall be located in a suitable area within the boundaries of LAX. The appropriate site shall consist of approximately 0.14 acre and shall have suitable hydrology, soils, and other factors necessary for the establishment of the southern tarplant. Such suitable sites exist within the boundaries of LAX, including but not limited to areas within LAX Northside and in the southwestern portion of the airport, west of the south airfield complex.</li> <li>◆ <i>Site preparation and planting implementation.</i> The plan shall include specifications for seed collection and storage and guidelines for on-site preparation. The guidelines shall contain specifications for (1) existing native species protection; (2) trash and weed removal; (3) soil treatments (e.g., imprinting and decompacting); (4) temporary irrigation installation as needed; (5) erosion control measures (e.g., rice or willow wattles); and (6) seed application.</li> <li>◆ <i>Schedule.</i> A schedule shall be developed, which includes planting, to occur in late fall and early winter (between October and January 30).</li> <li>◆ <i>Maintenance plan/guidelines.</i> A three to five year maintenance plan shall include (1) weed control; (2) herbivory control; (3) trash removal; (4) irrigation system maintenance; (5) maintenance training; and (6) replacement seeding, if necessary. Ten percent of the original seed collected shall be stored in the event it is needed for replacement seeding.</li> </ul>				

**CROSSFIELD TAXIWAY PROJECT  
MITIGATION MONITORING & REPORTING PROGRAM  
FOR NEW MITIGATION MEASURES<sup>1</sup>**

CFTP-Specific Mitigation Measures	Potential Impact Being Addressed	Timing of Implementation	Monitoring Frequency	Actions Indicating Compliance
<p>◆ <i>Monitoring plan.</i> The monitoring plan shall include the following success criteria:</p> <ul style="list-style-type: none"> <li>- Germination, flowering and seed set of at least 17 individuals (60 percent of the original population size) in year one;</li> <li>- Germination, flowering and seed set of at least 23 individuals (80 percent of the original population size) by year three;</li> <li>- Germination, flowering and seed set of at least 29 individuals (100 percent of the original population size) by year five.</li> </ul> <p>If these success criteria are not met, or are unlikely to be met within the required time periods, remedial measures will be required.</p> <p>This plan may include qualitative and quantitative monitoring. Qualitative monitoring includes site visits at regular intervals (i.e., monthly, quarterly, etc.) to determine the overall general performance of the site and maintenance needs. Quantitative monitoring is conducted on an annual basis and includes data collection specific to the performance standards established in the monitoring plan.</p> <p><i>Long-term preservation.</i> Long-term preservation of the site shall also be outlined in the conceptual mitigation plan to ensure that future development does not impact the mitigation site.</p>				

**Mitigation Monitoring and Reporting Program  
Bradley West Project-Specific Mitigation Measures**

Bradley West Project-Specific Mitigation Measures	Impact Being Addressed	Timing of Implementation	Monitoring Frequency	Actions Indicating Compliance	
<b>Surface Transportation</b>					
<b>MM-ST (BWP)-1</b>  <b>Monitoring Agency:</b>  <b>LAWA</b>	<b>Trip Reduction Measures.</b> LAWA will implement the following trip reduction measures:  (a) Continue to promote and expand the FlyAway services in accordance with LAX Master Plan Mitigation Measure MM-AQ-3. It is anticipated that the continued expansion of the FlyAway service will promote a shift in mode-share away from the private vehicle mode which would reduce traffic volume using the CTA roadway system.  (b) Continue to promote the consolidation of shuttle services (e.g., hotel/motel, off-airport parking, rental cars) or programs to reduce trips associated with these modes.	Traffic congestion and delays along on-airport roadways during airport operations	Ongoing programs	Annually	Status updates/confirmation in annual MMRP progress report
<b>MM-ST (BWP)-2</b>  <b>Monitoring Agency:</b>  <b>LAWA</b>	<b>Improve the Intersection of Center Way and World Way South.</b> Widen World Way South approach on the east side of the roadway to provide an additional right turn lane. The resulting configuration would be a single left turn lane, one through-left turn lane, two through lanes, and two right turn lanes.  During the Future (2013) Without Project overall airport peak hour the intersection of Center Way and World Way South operates at a V/C of 0.978 which is LOS E. With an intersection operating at a LOS E condition, the volume to capacity ratio can be increased by 0.01 without generating an impact. This	Traffic congestion and delays at the intersection of Center Way and World Way South during airport operations	When traffic levels reach the conditions specified in the measure	(1) Prior to implementation of intersection improvements, this measure will be monitored annually to determine whether CTA average daily traffic volumes in the peak month (August) have	Confirmation that the subject intersection improvement has been completed

**Mitigation Monitoring and Reporting Program  
Bradley West Project-Specific Mitigation Measures**

Bradley West Project-Specific Mitigation Measures	Impact Being Addressed	Timing of Implementation	Monitoring Frequency	Actions Indicating Compliance
<p>equates to an increase in the intersection's V/C ratio from 0.978 to 0.988, or approximately 1.1 percent (i.e., 0.988/0.978) in the critical movement traffic volume without triggering an impact. LAWA will monitor traffic conditions at this intersection to determine when an estimated impact has been "triggered" in accordance with the LOS thresholds described above. Specifically, LAWA will monitor future CTA average daily traffic volumes in August to determine when CTA average daily traffic volumes have increased by more than 1.1 percent relative to the Future (2013) Without Project average daily traffic volumes. In addition, LAWA will record turning movement volumes at this intersection annually during the airport's peak month (August). When the August average daily CTA volumes have increased by 1.1 percent as compared to the Future (2013) Without Project estimated volume, LAWA will complete a V/C analysis using the same intersection methodology described in the Bradley West Draft EIR (Section 4.1.3.7) to determine if an impact has occurred. The mitigation measure would be constructed once both (a) the CTA average daily traffic volumes are 1.1 percent greater than the Future (2013) Without Project and (b) the V/C for the intersection meets or exceeds 0.988. The intersection analysis would be subject to approval by LADOT regarding timing of the mitigation measure.</p>			<p>increased by more than 1.1 percent relative to the Future (2013) Without Project average daily traffic volumes, based on annual passenger activity reports. (2) Following implementation of intersection improvements, the monitoring frequency will be reduced to once, upon completion of subject intersection improvement</p>	



**Mitigation Monitoring and Reporting Program  
Bradley West Project-Specific Mitigation Measures**

<b>Bradley West Project-Specific Mitigation Measures</b>		<b>Impact Being Addressed</b>	<b>Timing of Implementation</b>	<b>Monitoring Frequency</b>	<b>Actions Indicating Compliance</b>
<b>MM-ST (BWP)-3</b>  <b>Monitoring Agency:</b>  <b>LAWA</b>	<b>Widen World Way Across from TBIT.</b> Widen the arrivals-level outer roadway across from TBIT by changing the left-most lane that currently terminates at Center Way to a through/left lane and extending this lane to World Way South.	Traffic congestion and delays along on-airport roadways during airport operations	The subject widening shall occur in conjunction with the project-related construction at TBIT, which is anticipated to be completed in 2013	Once, upon completion of subject roadway widening	Confirmation that the subject roadway widening has been completed
<b>MM-ST (BWP)-4</b>  <b>Monitoring Agency:</b>  <b>LAWA</b>	<b>Modify the Intersection of Airport Boulevard and Manchester Avenue (Intersection #9).</b> The eastbound approach to the Airport Boulevard and Manchester Avenue intersection shall be restriped to provide one left-turn lane, two through lanes, and a through/right lane. Three parking spaces on the south side of Manchester Avenue west of Belford Avenue and two parking spaces on the south side of Manchester Avenue east of Belford Avenue shall be restricted during the PM peak period. Alternatively, the westbound approach to the Airport Boulevard and Manchester Avenue intersection shall be restriped and the traffic signal modified to provide two left-turn lanes, two through lanes, and a right-turn lane. This mitigation measure will be implemented to the standards and satisfaction of the City of Los Angeles. Implementation of this measure shall occur if/when international passenger activity levels at TBIT increase to 19.7 million annual passengers.	Traffic congestion and delays at the intersection of Airport Boulevard and Manchester Avenue during airport operations	If/when international passenger activity levels at TBIT increase to 19.7 million annual passengers	(1) Prior to implementation of the intersection improvements, this measure will be monitored annually to determine whether TBIT passenger activity levels have reached 19.7 MAP, based on annual passenger activity reports. (2) Following implementation of the intersection improvement, the monitoring frequency will be reduced to	Confirmation that the subject intersection improvement has been completed

**Mitigation Monitoring and Reporting Program  
Bradley West Project-Specific Mitigation Measures**

<b>Bradley West Project-Specific Mitigation Measures</b>		<b>Impact Being Addressed</b>	<b>Timing of Implementation</b>	<b>Monitoring Frequency</b>	<b>Actions Indicating Compliance</b>
				occurring just once, upon completion of the intersection improvement	
<b>MM-ST (BWP)-5</b>  <b>Monitoring Agency:</b>  <b>LAWA</b>	<b>Modify the Intersection of Arbor Vitae Street and Aviation Boulevard (Intersection #10).</b> The eastbound approach to the Arbor Vitae Street and Aviation Boulevard intersection shall be widened to provide one left-turn lane, two through lanes, and a right-turn lane. This mitigation measure will be implemented to the standards and satisfaction of the City of Los Angeles and City of Inglewood. Implementation of this measure shall occur if/when international passenger activity levels at TBIT increase to 20.7 million annual passengers.	Traffic congestion and delays at the intersection of Arbor Vitae Street and Aviation Boulevard during airport operations	If/when international passenger activity levels at TBIT increase to 20.7 million annual passengers	(1) Prior to implementation of the intersection improvement, this measure will be monitored annually to determine whether TBIT passenger activity levels have reached 20.7 MAP, based on annual passenger activity reports. (2) Following implementation of the intersection improvement, the monitoring frequency will be reduced to occurring just once, upon completion of the intersection	Confirmation that the subject intersection improvement has been completed

**Mitigation Monitoring and Reporting Program  
Bradley West Project-Specific Mitigation Measures**

<b>Bradley West Project-Specific Mitigation Measures</b>		<b>Impact Being Addressed</b>	<b>Timing of Implementation</b>	<b>Monitoring Frequency</b>	<b>Actions Indicating Compliance</b>
				improvement	
<p><b>MM-ST (BWP)-6</b></p> <p><b>Monitoring Agency:</b></p> <p><b>LAWA</b></p>	<p><b>Modify the Intersection of Imperial Highway and Sepulveda Boulevard (Intersection #71).</b> The northbound approach to the Imperial Highway and Sepulveda Boulevard intersection shall be restriped to provide one left-turn lane, three through lanes, and two right-turn lanes. While restriping this intersection as described above would mitigate this impact, an alternative would be to widen the east side of Sepulveda Boulevard south of Imperial Highway to provide one left-turn lane, three through lanes, and two right-turn lanes on the northbound approach. However, provided the right-of-way is available, the provision of additional travel lane area would require disruption of traffic flows, generation of construction-related air pollutant emissions and noise impacts, and therefore the restriping is recommended rather than the widening. This mitigation measure will be implemented to the standards and satisfaction of the City of Los Angeles, City of El Segundo, and Caltrans. Implementation of this measure shall occur if/when international passenger activity levels at TBIT increase to 19.7 million annual passengers.</p>	<p>Traffic congestion and delays at the intersection of Imperial Highway and Sepulveda Boulevard during airport operations</p>	<p>If/when international passenger activity levels at TBIT increase to 19.7 million annual passengers</p>	<p>(1) Prior to implementation of the intersection improvement, this measure will be monitored annually to determine whether TBIT passenger activity levels have reached 19.7 MAP, based on annual passenger activity reports. (2) Following implementation of the intersection improvement, the monitoring frequency will be reduced to occurring just once, upon completion of the intersection improvement</p>	<p>Confirmation that the subject intersection improvement has been completed</p>

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Bradley West Project-Specific Mitigation Measures**

<b>Bradley West Project-Specific Mitigation Measures</b>		<b>Impact Being Addressed</b>	<b>Timing of Implementation</b>	<b>Monitoring Frequency</b>	<b>Actions Indicating Compliance</b>
<b>MM-ST (BWP)-7</b>  <b>Monitoring Agency:</b>  <b>LAWA</b>	<b>Modify the Intersection of La Cienega Boulevard and I-405 Ramps N/O Century Boulevard (Intersection #96).</b> The southbound approach to the La Cienega Boulevard and I-405 Ramps N/O Century Boulevard intersection shall be widened to provide two left-turn lanes and two through lanes. This mitigation measure will be implemented to the standards and satisfaction of the City of Los Angeles, City of Inglewood, and Caltrans. Implementation of this measure shall occur if/when international passenger activity levels at TBIT increase to 20.7 million annual passengers.	Traffic congestion and delays at the intersection of La Cienega Boulevard and I-405 Ramps N/O Century Boulevard during airport operations	If/when international passenger activity levels at TBIT increase to 20.7 million annual passengers	(1) Prior to implementation of the intersection improvement, this measure will be monitored annually to determine whether TBIT passenger activity levels have reached 20.7 MAP, based on annual passenger activity reports. (2) Following implementation of the intersection improvement, the monitoring frequency will be reduced to occurring just once, upon completion of the intersection improvement	Confirmation that the subject intersection improvement has been completed
<b>MM-ST (BWP)-8</b>  <b>Monitoring Agency:</b>	<b>Modify the Intersection of La Tijera Boulevard and Sepulveda Boulevard (Intersection #101).</b> The westbound approach to the La Tijera Boulevard and Sepulveda Boulevard intersection shall be restriped	Traffic congestion and delays at the intersection of La Tijera Boulevard and	If/when international passenger activity levels at TBIT	(1) Prior to implementation of the intersection improvement, this	Confirmation that the subject intersection improvement has been completed

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Bradley West Project-Specific Mitigation Measures**

<b>Bradley West Project-Specific Mitigation Measures</b>		<b>Impact Being Addressed</b>	<b>Timing of Implementation</b>	<b>Monitoring Frequency</b>	<b>Actions Indicating Compliance</b>
<b>LAWA</b>	and the traffic signal modified to provide two left-turn lanes, one through lane, and a through/right lane. This mitigation measure will be implemented to the standards and satisfaction of the City of Los Angeles. Implementation of this measure shall occur if/when international passenger activity levels at TBIT increase to 18.7 million annual passengers.	Sepulveda Boulevard during airport operations	increase to 18.7 million annual passengers	measure will be monitored annually to determine whether TBIT passenger activity levels have reached 18.7 MAP, based on annual passenger activity reports. (2) Following implementation of the intersection improvement, the monitoring frequency will be reduced to occurring just once, upon completion of the intersection improvement	

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Bradley West Project-Specific Mitigation Measures**

<b>Bradley West Project-Specific Mitigation Measures</b>		<b>Impact Being Addressed</b>	<b>Timing of Implementation</b>	<b>Monitoring Frequency</b>	<b>Actions Indicating Compliance</b>
<p><b>MM-ST (BWP)-9</b></p> <p><b>Monitoring Agency:</b></p> <p><b>LAWA</b></p>	<p><b>Modify the Intersection of Sepulveda Boulevard and 76th/77th Street (Intersection #136).</b> The eastbound approach to the Sepulveda Boulevard and 76th/77th Street intersection shall be restriped to provide two left-turn lanes, a through/left-turn lane, and one right-turn lane. This mitigation measure will be implemented to the standards and satisfaction of the City of Los Angeles. Implementation of this measure shall occur if/when international passenger activity levels at TBIT increase to 19.7 million annual passengers.</p>	<p>Traffic congestion and delays at the intersection of Sepulveda Boulevard and 76th/77th Street during airport operations</p>	<p>If/when international passenger activity levels at TBIT increase to 19.7 million annual passengers</p>	<p>(1) Prior to implementation of the intersection improvement, this measure will be monitored annually to determine whether TBIT passenger activity levels have reached 19.7 MAP, based on annual passenger activity reports. (2) Following implementation of the intersection improvement, the monitoring frequency will be reduced to occurring just once, upon completion of the intersection improvement</p>	<p>Confirmation that the subject intersection improvement has been completed</p>
<p><b>MM-ST (BWP)-10</b></p> <p><b>Monitoring Agency:</b></p>	<p><b>Modify the Intersection of Imperial Highway and Main Street (Intersection #68).</b> Modify the median island on the east leg of the intersection to provide a second left turn lane. The resulting westbound</p>	<p>Traffic congestion and delays at the intersection of Imperial Highway and Main</p>	<p>The preparation of intersection improvement plans, pursuit of</p>	<p>Once, upon completion of the subject intersection</p>	<p>Confirmation that the subject intersection improvement has been completed</p>

**Mitigation Monitoring and Reporting Program  
Bradley West Project-Specific Mitigation Measures**

<b>Bradley West Project-Specific Mitigation Measures</b>		<b>Impact Being Addressed</b>	<b>Timing of Implementation</b>	<b>Monitoring Frequency</b>	<b>Actions Indicating Compliance</b>
<b>LAWA</b>	configuration would be comprised of a dual left-turn lane and two through lanes.	Street due to peak construction traffic	necessary approvals, and scheduling for receipt of contractor estimates/bids shall commence immediately upon approval of the Bradley West Project	improvement	
<b>MM-ST (BWP)-11</b> <b>Monitoring Agency:</b> <b>LAWA</b>	<b>Modify the Intersection of Imperial Highway and Pershing Drive (Inter-section #69).</b> Widen the north side of the westbound approach of Imperial Highway to provide a second right-turn lane. The resulting westbound lane configuration would be comprised of one left turn lane, two through lanes, and two right turn lanes.	Traffic congestion and delays at the intersection of Imperial Highway and Pershing Drive due to peak construction traffic	The preparation of intersection improvement plans, pursuit of necessary approvals, and scheduling for receipt of contractor estimates/bids shall commence immediately upon approval of the Bradley West Project	Once, upon completion of the subject intersection improvement	Confirmation that the subject intersection improvement has been completed
<b>MM-ST (BWP)-12</b> <b>Monitoring Agency:</b>	<b>Distribution of Contractor Employee Parking between the Northwest Construction Staging/Parking Area and the East Contractor Employee Parking Area or Southeast Construction Staging/Parking Area.</b> General parking for Bradley	Traffic congestion and delays at off-airport intersections during project construction	Prior to start of construction of the Bradley West Project	Once, prior to finalization of construction bid documents for activities that	Confirmation that construction bid documents for activities involving the subject parking areas

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<b>Bradley West Project-Specific Mitigation Measures</b>		<b>Impact Being Addressed</b>	<b>Timing of Implementation</b>	<b>Monitoring Frequency</b>	<b>Actions Indicating Compliance</b>
<b>LAWA</b>	West Project contractor employees within the Northwest Construction Staging/Parking Area and within the East Contractor Employee Parking Area or Southeast Construction Staging/Parking Area shall be distributed such that neither the northwest area (i.e., Northwest Construction Staging/Parking Area) or the east/southeast area (i.e., East Contractor Employee Parking Area or Southeast Construction Staging/Parking Area) is assigned parking for more than 601 vehicles. Should the need for contractor employees' daily general parking exceed 601 vehicles in either of these areas (northwest area or east/southeast area), the additional increment of daily parking demand shall be assigned to the other area.			would use the subject contractor employee parking areas	include the parking limitations specified in the measure



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Bradley West Project-Specific Mitigation Measures		Impact Being Addressed	Timing of Implementation	Monitoring Frequency	Actions Indicating Compliance
<b>Historical/Architectural and Archaeological/Cultural Resources</b>					
<b>MM-HA (BWP)-1</b>  <b>Monitoring Agency:</b>  <b>LAWA</b>	<b>Conformance with LAX Master Plan Archaeological Treatment Plan.</b> Prior to initiation of grading and construction activities, LAWA will retain an on-site Cultural Resource Monitor (CRM), as defined in the LAX Master Plan MMRP ATP, who will determine if the proposed project area is subject to archaeological monitoring. As defined in the ATP, areas are not subject to archaeological monitoring if they contain redeposited fill or have previously been disturbed. The CRM will compare the known depth of redeposited fill or disturbance to the depth of planned grading activities, based on a review of construction plans. If the CRM determines that the proposed project site is subject to archaeological monitoring, a qualified archaeologist (an archaeologist who satisfies the Secretary of the Interior's Professional Qualifications Standards [36 CFR 61]) shall be retained by LAWA to inspect excavation and grading activities that occur within native material. The extent and frequency of inspection shall be defined based on consultation with the archaeologist. Following initial inspection of excavation materials, the archaeologist may adjust inspection protocols as work proceeds.	Potential to unexpectedly encounter and impact subsurface archaeological resources, including Native American remains, during grading and excavation associated with construction of the Bradley West Project	Prior to initiation of grading and/or excavation activities associated with the construction of the Bradley West Project	The extent and frequency of inspection shall be defined based on consultation with the qualified archaeologist if the Cultural Resource Monitor determines that the project area is subject to archaeological monitoring	Conformance with LAX Master Plan Archaeological Treatment Plan

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Bradley West Project-Specific Mitigation Measures		Impact Being Addressed	Timing of Implementation	Monitoring Frequency	Actions Indicating Compliance
<b>Paleontological Resources</b>					
<b>MM-PA (BWP)-1</b> <b>Monitoring Agency:</b> <b>LAWA</b>	<b>Conformance with LAX Master Plan Paleontological Management Treatment Plan.</b> Prior to the initiation of grading and construction activities, LAWA will retain a professional paleontologist, as defined in the Final LAX Master Plan MMRP PMTP, who will determine if the project site exhibits a high or low potential for subsurface resources. If the project site is determined to exhibit a high potential for subsurface resources, paleontological monitoring will be conducted in accordance with the procedures stipulated in the PMTP. If the project site is determined to exhibit a low potential for subsurface deposits, excavation need not be monitored as per the PMTP. In the event that paleontological resources are discovered, the procedures outlined in the PMTP for the identification of resources will be followed.	Potential to unexpectedly encounter and impact subsurface paleontological resources during grading and excavation associated with construction of the Bradley West Project	Prior to initiation of grading and/or excavation activities associated with the construction of the Bradley West Project	The extent and frequency of inspection shall be defined based on procedures outlined in the PMTP if the professional paleontologist determines that the project area is subject to paleontological monitoring	Conformance with LAX Master Plan Paleontological Management Treatment Plan
<b>MM-PA (BWP)-2</b> <b>Monitoring Agency:</b> <b>LAWA</b>	<b>Construction Personnel Briefing.</b> In accordance with the PMTP, construction personnel will be briefed by the consulting paleontologist in the identification of fossils or fossiliferous deposits and in the correct procedures for notifying the relevant individuals should such a discovery occur.	Potential to unexpectedly encounter and impact subsurface paleontological resources during grading and excavation associated with construction of the Bradley West Project	Prior to initiation of grading and/or excavation activities associated with the construction of the Bradley West Project	Once, prior to the initiation of grading and/or excavation activities	Completion of briefing of construction personnel on identification of fossils or fossiliferous deposits and notification procedures in accordance with the PMTP

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Bradley West Project-Specific Mitigation Measures	Impact Being Addressed	Timing of Implementation	Monitoring Frequency	Actions Indicating Compliance	
<b>Biotic Communities</b>					
<p><b>MM-BC (BWP)-1</b></p> <p><b>Monitoring Agency:</b></p> <p><b>LAWA</b></p>	<p><b>Conservation of Floral Resources: Southern Tarplant.</b> LAWA or its designee shall prepare a special status plant mitigation program for the southern tarplant. The loss of the southern tarplant individuals shall be mitigated through seed collection and seeding into a suitable mitigation site within undeveloped property owned by LAWA or at a suitable off-site location, determined based on habitat, soil type, moisture levels, and other relevant conditions. One suitable off-site location is the Three Sisters Reserve located on the Palos Verdes Peninsula.</p> <p>A qualified Seed Collector shall monitor the tarplant phenology to determine the appropriate timing for seed collection. Tarplant seed shall be collected from all tarplants within the impact area, which shall be delineated in the field with lath and flagging by a qualified biologist. The biologist shall ensure that seed shall only be collected from plants that will be impacted by the Bradley West Project. Upon completion of seed collection, the seed collector shall clean the seeds to prepare for the seeding effort.</p> <p>A mitigation plan shall be developed at a level of detail necessary for successful program implementation by a landscape contractor. The detailed program shall contain the following items:</p> <ul style="list-style-type: none"> <li>◆ <i>Responsibilities and qualifications of the personnel to implement and supervise the plan.</i> The plan shall specify the responsibilities and</li> </ul>	<p>Loss of southern tarplant individuals</p>	<p>Preparation of a special status plant mitigation program upon project approval and prior to initiation of construction of the Bradley West Project</p>	<p>As per special status plant mitigation program for southern tarplant ; Regular site visits (i.e., monthly, quarterly) for no more than 5 years or until germination, flowering and seed set of at least 300 individuals (100 percent of the original population size)</p>	<p>Preparation of special status plant mitigation program; periodic monitoring report, at least annually</p>

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Bradley West Project-Specific Mitigation Measures	Impact Being Addressed	Timing of Implementation	Monitoring Frequency	Actions Indicating Compliance
<p>qualifications of the personnel who will supervise and implement the mitigation plan, including LAWA, Technical Specialists, and Maintenance Personnel.</p> <ul style="list-style-type: none"> <li>◆ <i>Site selection.</i> The site for the mitigation shall be determined in coordination with LAWA, and shall be located in a suitable area within the boundaries of LAX or at a suitable off-site location. The appropriate site shall consist of approximately 0.76 acre and shall have suitable hydrology, soils, and other factors necessary for the establishment of the southern tarplant. Such suitable sites exist within the boundaries of LAX, including but not limited to areas within LAX Northside and in the southwestern portion of the airport, west of the south airfield complex. If a site at LAX is selected, site selection will occur in consultation with LAWA's USDA Wildlife Hazard Biologist and will be consistent with FAA Advisory Circular No. 150/5200-33 "Hazardous Wildlife Attractants on or Near Airports" and LAWA's "LAX Wildlife Hazard Mitigation Plan" to avoid increasing wildlife hazards to aircraft.</li> <li>◆ <i>Site preparation and planting implementation.</i> The plan shall include specifications for seed collection and storage and guidelines for on-site preparation. The guidelines shall contain specifications for (1) existing native species protection; (2) trash and weed removal; (3) soil treatments (e.g., imprinting and decompacting); (4) temporary irrigation installation as needed; (5) erosion control measures (e.g., rice or willow</li> </ul>				

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Bradley West Project-Specific Mitigation Measures	Impact Being Addressed	Timing of Implementation	Monitoring Frequency	Actions Indicating Compliance
<p>wattles); and (6) seed application.</p> <ul style="list-style-type: none"> <li>◆ <i>Schedule.</i> A schedule shall be developed, which includes planting, to occur in late fall and early winter (between October and January 30).</li> <li>◆ <i>Maintenance plan/guidelines.</i> A three to five year maintenance plan shall include (1) weed control; (2) herbivory control; (3) trash removal; (4) irrigation system maintenance; (5) maintenance training; and (6) replacement seeding, if necessary. Ten percent of the original seed collected shall be stored in the event it is needed for replacement seeding.</li> <li>◆ <i>Monitoring plan.</i> The monitoring plan shall include the following success criteria:               <ul style="list-style-type: none"> <li>- Germination, flowering and seed set of 60 percent of the original population size in year one;</li> <li>- Germination, flowering and seed set of 80 percent of the original population size by year three;</li> <li>- Germination, flowering and seed set of 100 percent of the original population size by year five.</li> </ul> </li> </ul> <p>If these success criteria are not met, or are unlikely to be met within the required time periods, remedial measures will be required. Such measures could include reseeding, transplanting container plants or selection of an alternative site if required.</p> <p>This plan may include qualitative and quantitative monitoring. Qualitative monitoring includes site visits at regular intervals (i.e., monthly, quarterly,</p>				

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	<p>etc.) to determine the overall general performance of the site and maintenance needs. Quantitative monitoring is conducted on an annual basis and includes data collection specific to the performance standards established in the monitoring plan.</p> <ul style="list-style-type: none"> <li>◆ <i>Long-term preservation.</i> Long-term preservation of the site shall also be outlined in the conceptual mitigation plan to ensure that future development does not impact the mitigation site.</li> </ul>				
<p><b>MM-BC (BWP)-2</b></p> <p><b>Monitoring Agency:</b></p> <p><b>LAWA</b></p>	<p><b>Conservation of Floral Resources: Lewis' Evening Primrose.</b> Prior to any work activities (i.e., vegetation clearing, invasive species removal and/or spraying, and sediment removal) on the project site, including construction staging areas, pre-construction focused surveys shall be conducted during the period of March through May by a qualified biologist to determine the presence or absence of Lewis' evening primrose. Known populations of this species shall be monitored to determine the best time to conduct the surveys. The surveys shall follow guidelines developed by the CNPS and the CDFG. If this species is not observed, no further mitigation shall be required. If this plant species is observed on-site, a qualified botanist and LAWA shall evaluate the number of individuals, their location and the type of impact that would occur to determine if the anticipated impact would result in a substantial adverse effect or substantial net reduction in the population, given the species' rarity and abundance. If impacts are deemed not significant, no additional measures are warranted.</p>	<p>Potential loss of Lewis' evening primrose individuals that would result in a substantial adverse effect or substantial net reduction in population</p>	<p>Prior to any work activities, pre-construction focused surveys during the period of March through May to determine the presence or absence of Lewis' evening primrose. If it is determined that a substantial net reduction in population would occur, preparation of a special status plant mitigation program prior to initiation of construction of the Bradley West</p>	<p>If required, as per special status plant mitigation program for Lewis' evening primrose; regular site visits (e.g., quarterly, annually) for no more than 5 years or until germination, flowering and seed set of at least an equal number of plants impacted</p>	<p>If required, preparation of special status plant mitigation program; periodic monitoring report, at least annually</p>

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<p>If it is determined that a substantial net reduction in population would occur, LAWA or its designee shall prepare and implement a plan to compensate for the loss of individuals of the sensitive Lewis' evening primrose. LAWA or its designee shall collect seed from those plants to be removed, and properly clean and store the collected seed until used. A mitigation site of suitable habitat equal to the area of impact shall be delineated within the boundaries of LAX or at a suitable off-site location. If a site at LAX is selected, site selection will occur in consultation with LAWA's USDA Wildlife Hazard Biologist and will be consistent with FAA Advisory Circular No. 150/5200-33 "Hazardous Wildlife Attractants on or Near Airports" and LAWA's "LAX Wildlife Hazard Mitigation Plan" to avoid increasing wildlife hazards to aircraft. Collected seed shall be broadcast (distributed) after the first wetting rain. LAWA or its designee shall implement a monitoring plan to monitor the establishment of individuals of Lewis' evening primrose for a period of not more than five years. Performance criteria shall include the establishment of an equal number of plants as that impacted in the first year following the distribution of seed within the mitigation site. Performance criteria shall also include confirmation of recruitment for two years following the first year flowering is observed and establishment of individuals throughout the mitigation area within three years following the first year flowering is observed.</p>		Project		

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<p><b>MM-BC (BWP)-3</b></p> <p><b>Monitoring Agency:</b></p> <p><b>LAWA</b></p>	<p><b>Conservation of Floral Resources: California Spineflower.</b> Prior to any work activities (i.e., vegetation clearing, invasive species removal and/or spraying, and sediment removal) on the project site, including construction staging areas, pre-construction focused surveys shall be conducted during the period of March through July by a qualified biologist to determine the presence or absence of California spineflower. Known populations of this species shall be monitored to determine the best time to conduct the surveys. The surveys shall follow guidelines developed by the CNPS and the CDFG. If this species is not observed, no further mitigation shall be required. If this plant species is observed on-site, a qualified botanist and LAWA shall evaluate the number of individuals, their location and the type of impact that would occur to determine if the anticipated impact would result in a substantial adverse effect or substantial net reduction in the population, given the species' rarity and abundance. If impacts are deemed not significant, no additional measures are warranted.</p> <p>If impacts to California spineflower are found to be adverse, LAWA or its designee shall prepare and implement a plan to compensate for the loss of individuals of the sensitive California spineflower. LAWA or its designee shall collect seed from those plants to be removed, and properly clean and store the collected seed until used. A mitigation site of suitable habitat equal to the area of impact shall be delineated within the boundaries of LAX or at a suitable off-site location. If a site at LAX is selected,</p>	<p>Potential loss of California spineflower individuals that would result in a substantial adverse effect or substantial net reduction in population</p>	<p>Prior to any work activities, pre-construction focused surveys during the period of March through July to determine the presence or absence of California spineflower. If it is determined that a substantial net reduction in population would occur, preparation of a special status plant mitigation program prior to initiation of construction of the Bradley West Project</p>	<p>If required, as per special status plant mitigation program for California Spineflower; regular site visits (e.g., quarterly, annually) for no more than 5 years or until germination, flowering and seed set of at least an equal number of plants impacted</p>	<p>If required, preparation of special status plant mitigation program; periodic monitoring report, at least annually</p>



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	<p>site selection will occur in consultation with LAWA's USDA Wildlife Hazard Biologist and will be consistent with FAA Advisory Circular No. 150/5200-33 "Hazardous Wildlife Attractants on or Near Airports" and LAWA's "LAX Wildlife Hazard Mitigation Plan" to avoid increasing wildlife hazards to aircraft. Collected seed shall be broadcast (distributed) after the first wetting rain. LAWA or its designee shall implement a monitoring plan to monitor the establishment of individuals of California spineflower for a period of not more than five years. Performance criteria shall include the establishment of an equal number of plants as that impacted in the first year following the distribution of seed within the mitigation site. Performance criteria shall also include confirmation of recruitment for two years following the first year flowering is observed and establishment of individuals throughout the mitigation area within three years following the first year flowering is observed.</p>				
<p><b>MM-BC (BWP)-4</b> <b>Monitoring Agency:</b> <b>LAWA</b></p>	<p><b>Conservation of Faunal Resources: Burrowing Owl.</b> Prior to any work activities (i.e., vegetation clearing, invasive species removal and/or spraying, and sediment removal) within the Southeast Construction Staging/Parking Area (also known as the Continental City site), a survey for burrows by a qualified biologist will be conducted by walking through the suitable habitat within the site in accordance with CDFG-accepted protocols. If the site contains burrows that could be used by burrowing owls, four surveys will be conducted during the burrowing owl breeding season (April 15 through July</p>	<p>Potential loss of burrowing owl individuals</p>	<p>Prior to any work activities within the Southeast Construction Staging/Parking Area, a survey for burrows that could be used by burrowing owls and, if burrows are present, four additional surveys</p>	<p>If required, monthly removal of burrows between September and January every year during construction period. If nesting owls are identified during the four surveys,</p>	<p>If required, preparation of Habitat Restoration Plan including periodic monitoring report, at least annually. Removal of burrows annually, if present, until entire staging area is in use; reports submitted periodically, at least annually, during construction or</p>

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<p>15). If an active burrow is observed during the nesting season, disturbance of the owls would constitute a significant impact and the burrow will be protected until nesting activity has ended to ensure compliance with Section 3503.5 of the California Fish and Game Code. Nesting activity for burrowing owl normally occurs from February 1 through August 31. To protect any active burrow, the following restrictions are required between February 1 and August 31 (or until burrows are no longer active as determined by a qualified biologist): (1) clearing limits will be established a minimum of 300 feet in any direction from any occupied nest and (2) access and surveying will be restricted within 200 feet of any occupied nest. Any encroachment into the 300/200 foot buffer area around the known nest will only be allowed if it is determined by a qualified biologist that the proposed activity will not disturb the nest occupants. These avoidance measures will be coordinated with LAWA's USDA Wildlife Hazard Biologist and will be consistent with FAA Advisory Circular No. 150/5200-33 "Hazardous Wildlife Attractants on or Near Airports" and LAWA's "LAX Wildlife Hazard Management Plan."</p> <p>If nesting individuals are observed, LAWA or its designee will develop and implement a habitat replacement plan to compensate for the loss of habitat associated with use of the site for construction staging and parking. The objective of the habitat replacement plan will be to replace the habitat value to be lost with equal or greater habitat value. The habitat replacement will occur at an off-site location to avoid</p>		<p>between April 15 and July 15 followed by monthly removal of any burrows onsite between September and January until such time as the entire staging area is in active use</p>	<p>protection of active burrows between February 1 and August 31</p>	<p>until entire staging area is in use</p>

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Bradley West Project-Specific Mitigation Measures**

<b>Bradley West Project-Specific Mitigation Measures</b>		<b>Impact Being Addressed</b>	<b>Timing of Implementation</b>	<b>Monitoring Frequency</b>	<b>Actions Indicating Compliance</b>
	<p>potential conflicts with aircraft activities at LAX. Off-site locations for habitat replacement may include Madrona Marsh Nature Center in Torrance, Three Sisters Reserve located on the Palos Verdes Peninsula, or another location deemed appropriate.</p> <p>Whether or not any nesting burrowing owls are identified on-site, after the end of the nesting period (August 31), LAWA or its designee will remove all burrows from the site on a monthly basis between September and January. Removal may include physically collapsing the burrows or installing one-way doors in burrow entrances. Such maintenance will continue annually until such time as the entire staging area is in active use.</p>				
<p><b>MM-BC (BWP)-5</b> <b>Monitoring Agency:</b> <b>LAWA</b></p>	<p><b>Conservation of Faunal Resources: Loggerhead Shrike.</b> If construction is scheduled to occur during the nesting season for the loggerhead shrike (March 15 to August 15), vegetation that will be impacted by the proposed project shall be removed outside the nesting season if feasible. If this is not feasible, a qualified biologist shall inspect the shrubs/trees at least 14 days prior to construction activities to ensure that no nesting shrike are present. If a nest is present, construction avoidance measures shall include flagging of all active nests and a 300-foot wide buffer area around the active nests. These construction avoidance measures will be coordinated with LAWA's USDA Wildlife Hazard Biologist and will be consistent with FAA Advisory Circular No. 150/5200-33 "Hazardous Wildlife Attractants on or Near Airports"</p>	Potential loss of nesting loggerhead shrike individuals	If construction is scheduled to occur between March 15 and April 15, removal of vegetation outside the nesting season, if feasible. If not feasible, pre-construction surveys 14 days prior to construction	If nests are present, a Biological Monitor shall be present between March 15 and August 15	Removal of vegetation between August 16 and March 14 prior to initiation of construction followed by a report of activities. Alternatively, if required, pre-construction surveys 14 days prior to construction occurring between March 15 and April 15. If required, establishment of construction avoidance measures and onsite monitoring between

**Mitigation Monitoring and Reporting Program  
Bradley West Project-Specific Mitigation Measures**

<b>Bradley West Project-Specific Mitigation Measures</b>		<b>Impact Being Addressed</b>	<b>Timing of Implementation</b>	<b>Monitoring Frequency</b>	<b>Actions Indicating Compliance</b>
	and LAWA's "LAX Wildlife Hazard Mitigation Plan" to avoid increasing wildlife hazards to aircraft. In addition, a Biological Monitor shall be present to ensure the buffer area is not infringed upon and vegetation clearing within the designated 300-foot buffer only takes place from August 16 to March 14.				March 15 and August 15 and written report documenting construction avoidance measures undertaken; reports submitted periodically, at least annually, during construction or until vegetation has been removed
<b>MM-BC (BWP)-6</b> <b>Monitoring Agency:</b> <b>LAWA</b>	<b>Conservation of Faunal Resources: San Diego Black-Tailed Jackrabbit.</b> Prior to the commencement of clearing operations or other activities involving significant soil disturbance at locations identified in Table 4.7-2 with suitable habitat, a survey shall be conducted to locate black-tailed jackrabbits within 100 feet of the outer extent of projected soil disturbance activities. The locations of any observed jackrabbits shall be clearly marked and identified on the construction plans. If this species is present, a monitoring biologist shall be on-site during any clearing to flush the jackrabbit from occupied habitat areas immediately prior to brush-clearing and earth-moving activities. The monitoring biologist shall have authority to halt construction activities until individual jackrabbits can be removed from the construction impact areas to assure that the jackrabbit shall not be directly impacted by brush-clearing and earth-moving equipment in a manner that also allows for construction activities on a timely basis.	Potential loss of San Diego black-tailed jackrabbit individuals	Prior to commencement of clearing operations or other activities involving significant soil disturbance within the Northwest Construction Staging/Parking Area, West Construction Staging Area, or Southeast Construction Staging/Parking Area	If species is present, a monitoring biologist shall be onsite prior to and during any brush-clearing and earth-moving activities	If required, onsite monitoring during brush-clearing and earth-moving activities and written documentation of field activities submitted periodically, at least annually, during construction or until all clearing and soil disturbance at identified locations is complete

**Mitigation Monitoring and Reporting Program  
Bradley West Project-Specific Mitigation Measures**

<b>Bradley West Project-Specific Mitigation Measures</b>		<b>Impact Being Addressed</b>	<b>Timing of Implementation</b>	<b>Monitoring Frequency</b>	<b>Actions Indicating Compliance</b>
<p><b>MM-BC (BWP)-7</b> <b>Monitoring Agency:</b> <b>LAWA</b></p>	<p><b>Conservation of Floral Resources: Mature Tree Replacement.</b> LAWA or its designee shall compensate at a ratio of 2:1 for the loss of mature trees, which would occur as a result of implementation of Northwest Construction Staging/Parking Area. The species of newly planted replacement trees shall be local native tree species to the extent feasible. Each mitigation tree shall be at least a 15-gallon or larger specimen. The replacement will be implemented within the boundaries of LAX or at a suitable off-site location. If mitigation occurs within LAX boundaries, the replacement site and tree species will be determined in consultation with LAWA's USDA Wildlife Hazard Biologist and will be consistent with FAA Advisory Circular No. 150/5200-33 "Hazardous Wildlife Attractants on or Near Airports" and LAWA's "LAX Wildlife Hazard Mitigation Plan" to avoid increasing wildlife hazards to aircraft.</p>	<p>Potential loss of mature trees</p>	<p>Prior to removal of mature trees within the Northwest Construction Staging/Parking Area</p>	<p>If mitigation occurs within LAX boundaries, periodic site visits to ensure trees are established, at least annually</p>	<p>Replacement of trees, if required and monitoring report one year following planting</p>
<p><b>MM-BC (BWP)-8</b> <b>Monitoring Agency:</b> <b>LAWA</b></p>	<p><b>Conservation of Faunal Resources: Nesting Birds/Raptors.</b> To comply with the Migratory Bird Treaty Act, for those areas of the project site that are not actively maintained and have a potential for nesting birds/raptors, if construction is scheduled to occur during the nesting season for birds/raptors (generally February 1 to June 30 for raptors and March 15 to August 15 for nesting birds), vegetation that will be impacted by the proposed project shall be removed outside the nesting season if feasible. If this is not feasible, then a qualified biologist shall inspect the shrubs/trees prior to project activities to ensure that no nesting birds/raptors are present. If the</p>	<p>Potential loss of nesting birds/raptors subject to the Migratory Bird Treaty Act</p>	<p>If construction occurs between February 1 and August 15, removal of vegetation outside the nesting season, if feasible. If not feasible, pre-construction surveys</p>	<p>If active nests are present and may be impacted, a Biological Monitor shall be present during those periods when construction activities will occur near active nest areas</p>	<p>If required, establishment of buffer zones and construction avoidance measures between February 1 and August 15 and written report documenting construction avoidance measures undertaken; reports submitted periodically,</p>

**Mitigation Monitoring and Reporting Program  
Bradley West Project-Specific Mitigation Measures**

<b>Bradley West Project-Specific Mitigation Measures</b>		<b>Impact Being Addressed</b>	<b>Timing of Implementation</b>	<b>Monitoring Frequency</b>	<b>Actions Indicating Compliance</b>
	<p>biologist finds an active nest within the construction area and determines that the nest may be impacted, the biologist will delineate an appropriate buffer zone; the size of the buffer zone will depend on the species and the type of construction activity, and will be determined in consultation with CDFG. Only construction activities (if any) that have been approved by a Biological Monitor will take place within the buffer zone until the nest is vacated. The biologist shall serve as a construction monitor during those periods when construction activities shall occur near active nest areas to ensure that no inadvertent impacts on these nests shall occur. These construction avoidance measures will be coordinated with LAWA's USDA Wildlife Hazard Biologist and will be consistent with FAA Advisory Circular No. 150/5200-33 "Hazardous Wildlife Attractants on or Near Airports" and LAWA's "LAX Wildlife Hazard Mitigation Plan" to avoid increasing wildlife hazards to aircraft.</p>				at least annually, during construction or until vegetation is removed
<b>Endangered and Threatened Species of Flora and Fauna</b>					
<p><b>MM-ET (BWP)-1</b> <b>Monitoring Agency:</b> <b>LAWA</b></p>	<p><b>Mitigation for Riverside Fairy Shrimp.</b> If Riverside fairy shrimp are found to be located on-site, LAWA shall coordinate with FAA and USFWS to initiate consultation under the federal Endangered Species Act and prepare a Mitigation Plan in consultation with the USFWS. The plan shall provide mitigation for direct impacts to affected habitat through salvage and relocation of soil containing Riverside fairy shrimp. The receiver site of the soil and cysts shall be equal or</p>	<p>Potential loss of Riverside fairy shrimp individuals at Southeast Construction Staging/Parking Area</p>	<p>If required, preparation of Mitigation Plan for Riverside fairy shrimp prior to clearing or other construction activities within the Southeast</p>	<p>If required, monthly during the first year following relocation of cyst-bearing soils, quarterly in years 2-4, biannually in years 5, 7 and 9,</p>	<p>If required, preparation of Mitigation Plan for Riverside Fairy Shrimp; annual monitoring reports due to USFWS on September 1 of each specified monitoring year</p>

**Mitigation Monitoring and Reporting Program  
Bradley West Project-Specific Mitigation Measures**

<b>Bradley West Project-Specific Mitigation Measures</b>	<b>Impact Being Addressed</b>	<b>Timing of Implementation</b>	<b>Monitoring Frequency</b>	<b>Actions Indicating Compliance</b>
<p>greater in biological value, as determined by the USFWS.</p> <p>Specific requirements of the Mitigation Plan shall be subject to the Section 7 consultation with USFWS, but generally will require that soils containing embedded cysts of the Riverside fairy shrimp be salvaged and translocated to created Riverside fairy shrimp habitat at a suitable site. One potential site is the Madrona Marsh Nature Center in Torrance, 20 miles south of LAX. Responsibility for habitat creation and maintenance of the created habitat may be transferred to a LAWA designee at any time with USFWS approval.</p> <p>Soils containing embedded cysts of the Riverside fairy shrimp shall not be translocated to the created habitat until the habitat is established and has met certain success criteria specified during Section 7 consultation. Success criteria for the created habitat will likely include holding water for a minimum of 60 days, having less than 10 percent absolute cover exotic herbaceous species within the created habitat, having less than 20 percent absolute cover of exotic herbaceous species within 300 feet of the area from limits of the created habitat, removal of all non-herbaceous plant species within the created habitat and 300 feet from the created habitat annually, and providing suitable water quality for Riverside fairy shrimp. Duration of inundation, exotic species removal, and water quality analyses may be undertaken within the first year after habitat creation. The performance criteria for percent absolute cover of</p>		<p>Construction Staging/Parking Area; Implementation per Mitigation Plan</p>	<p>annually in year 10</p>	

**Mitigation Monitoring and Reporting Program  
Bradley West Project-Specific Mitigation Measures**

<b>Bradley West Project-Specific Mitigation Measures</b>	<b>Impact Being Addressed</b>	<b>Timing of Implementation</b>	<b>Monitoring Frequency</b>	<b>Actions Indicating Compliance</b>
<p>exotic herbaceous species within 300 feet of the area from limits of the created habitat may be redesignated by mutual agreement of FAA, LAWA, and USFWS.</p> <p>Upon meeting success criteria and approval from the USFWS, soils containing embedded cysts of the Riverside fairy shrimp may be brought to the created habitat. LAWA shall make every effort to collect all cyst-bearing soils from the entire surface area of the occupied habitat, however it is expected that some small number of undetected individual cysts will remain in the soil. Soil containing the cysts shall be salvaged and translocated during the dry season to minimize damage to the cysts during transport. The soil shall be collected using a hand trowel, removed in chunks, and kept out of direct sunlight to ensure viability. Soil shall be stored in properly labeled boxes or bags with adequate ventilation. The soils shall then be deposited and spread out in small basins or pool-like areas of similar size without active mechanical compaction to minimize potential damage to the cysts. Any potential indirect environmental impacts resulting from habitat construction activities shall be compliant with best management practices and terms and conditions stipulated by the permitting agencies.</p> <p>LAWA or its designee, in conjunction with the USFWS and a qualified wildlife biologist, shall also develop a program to monitor created habitat for the presence of Riverside fairy shrimp as described in the Mitigation Plan. LAWA shall be responsible for implementing a monitoring and reporting program to demonstrate successful achievement of the performance standards</p>				



**Mitigation Monitoring and Reporting Program  
Bradley West Project-Specific Mitigation Measures**

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<p>to be determined in consultation with USFWS for off-site relocation over a 10-year period:</p> <ul style="list-style-type: none"> <li>◆ Monthly during the first year, following relocation of soils containing embedded cysts of the Riverside fairy shrimp</li> <li>◆ Quarterly in the second, third, and fourth years, following relocation of soils containing embedded cysts of the Riverside fairy shrimp</li> <li>◆ Biannually in the fifth, seventh, and ninth years, following relocation of soils containing embedded cysts of the Riverside fairy shrimp</li> <li>◆ Annually in the tenth year, following relocation of soils containing embedded cysts of the Riverside fairy shrimp</li> </ul> <p>LAWA shall provide the USFWS with annual monitoring reports as specified in the Mitigation Plan. The monitoring report, due on September 1 of each specified monitoring year, shall provide information regarding the implementation of habitat creation, restoration, and maintenance activities. The yearly report shall also discuss the effectiveness of the project as it pertains to the existing condition of the created habitat and Riverside fairy shrimp population. To measure the effectiveness of the created habitat, the FAA and LAWA shall work with the USFWS to develop long-term goals and objectives as part of their habitat creation plan.</p>				

## **APPENDIX C**

### **LAX MASTER PLAN MMRP PROGRAM PLAN STATUS UPDATE**

**LAX Master Plan Mitigation Measures and Reporting Program (MMRP)  
Program Plan Status Update  
December 2010**

No.	Program Plan Title	Program Plan Description	Master Plan Commitments/Mitigation Measures Addressed	Status (as of December 2010)
1	Aircraft Noise Abatement Program (ANAP) (existing)	The ANAP sets forth LAWA's noise abatement traffic, flight, and runway use procedures and includes ground operations restrictions and other airport noise abatement procedures, restrictions, and regulations involving aircraft operations.	MM-N-4: Update the Aircraft Noise Abatement Program elements as applicable to adapt to the future airfield configuration	Ongoing: LAWA Noise Management Section provides ongoing updates to ANAP, which will include updates based on modifications to the LAX airfield configuration, as appropriate.
2	Aircraft Noise Mitigation Program (ANMP) (existing)	The ANMP describes the ongoing efforts by LAWA to convert existing incompatible land uses surrounding each of its three noise impacted airports to compatible land uses through the implementation of two noise mitigation strategies: (1) sound insulation of structures; and (2) the acquisition of property followed by the conversion of its incompatible land use to compatible land use (land recycling).	MM-LU-1 : Implement revised ANMP MM-LU-2 : Incorporate residential dwelling units exposed to single event awakenings into ANMP	Ongoing: Existing program is in place with periodic report updates to the County of Los Angeles.
3	Master Plan for Air Quality (MPAQ)	The MPAQ identifies the air quality mitigation requirements for the LAX Master Plan. Briefly stated, the objectives of the MPAQ are to maintain or reduce air emissions associated with the construction and operation of the LAX Master Plan to levels equal to (or less than) the thresholds of significance and, at a minimum, keep these emissions below the levels forecasted in the LAX Master Plan EIR.	MM-AQ-1 : LAX Master Plan – Air Quality Mitigation Plan for Air Quality MM-AQ-2 : Construction-Related Mitigation Measures MM-AQ-3 : Transportation-Related Mitigation Measures MM-AQ-4 : Operations-Related Mitigation Measures	In Progress: Master Plan for Air Quality (MPAQ) consists of 4 main parts:  MM-AQ-1: Completed in October 2005 and adopted by City Council on January 11, 2006  MM-AQ-2: Completed in October 2005 and adopted by City Council on January 11, 2006  MM-AQ-3: Ongoing in conjunction with re-evaluation of the FlyAway Program.  MM-AQ-4: Ongoing. LAWA completed the GSE Inventory and is in the process of developing a GSE conversion plan for implementation at LAX. The overall framework for MM-AQ-4 plan continues to be developed, including evaluation of infrastructure to support eGSE.
4	Ground Transportation Outreach Program (GTOP)	The GTOP establishes appropriate mechanisms to involve and coordinate with other major airport-area development projects to the extent feasible, to ensure that the cumulative impacts of construction traffic in the airport area are coordinated and minimized.	MM-ST-14: Ground Transportation/Construction Coordination Office Outreach Program C-1: Establishment of a GT/CCO	Completed: Final Ground Transportation Outreach Program issued in May 2006.
5	Construction Transportation Management Plan (CTMP)	The CTMP provides additional information regarding the measures from the LAX Master Plan MMRP related to the management of construction traffic during the implementation of the Master Plan. Surface transportation mitigation measures which are unrelated to the movement of construction traffic are not included in this plan.	ST-9: Construction Deliveries ST-12: Designated truck delivery hours ST-14: Construction employee shift hours ST-16: Designated haul routes ST-17: Maintenance of haul routes ST-18: Construction Traffic Management Plan ST-19: Closure restrictions of existing roadways ST-20: Stockpile locations ST-21: Construction employee parking locations ST-22: Designated truck routes	Completed: Final Plan dated May 2005.
6	Archaeological Treatment Plan (ATP)	The ATP focuses on the long-term protection and proper treatment of unexpected archaeological discoveries of federal, State, and/or local significance that might be encountered during construction activities of the LAX Master Plan projects. The purpose of the ATP is to achieve compliance with Section 106 of the National Historic Preservation Act (NHPA), the CEQA, and the environmental guidelines of local agencies.	MM-HA-1 : Historic American Buildings Survey (HABS) MM-HA-2 : Historic educational materials MM-HA-4 : Archaeological discovery MM-HA-5 : Archaeological monitoring MM-HA-6 : Excavation and recovery MM-HA-7 : Administration MM-HA-8 : Archaeological/Cultural Monitoring Report MM-HA-9 : Artifact curation MM-HA-10 : Archaeological notification	Completed: Final Plan approved by the FAA and other outside agencies in early 2006.

7	Paleontological Management Treatment Plan (PMTP)	The PMTP focuses on the identification, recovery, proper treatment, and long-term protection and archival conservation of expected and unexpected paleontological discoveries of federal, State, and/or local significance that might be encountered during construction activities of the LAX Master Plan projects.	MM-PA-1: Paleontological Qualification and Treatment Plan MM-PA-2 : Paleontological authorization MM-PA-3 : Paleontological monitoring specification MM-PA-4 : Paleontological resources collection MM-PA-5 : Fossil preparation MM-PA-6 : Fossil donation MM-PA-7 : Paleontological reporting	Completed: Final Draft issued December 2005 by LAWA's Environmental Management Division (now Environmental Service Division). LAWA sent the PMTP to the Vertebrate Section of the County of LA Museum on January 11, 2006.
8	Conceptual Drainage Plan (CDP)	The CDP provides an overview of drainage and water quality conditions, capacities, constraints, regulatory framework, and analysis methodologies and identifies options for addressing the LAX Master Plan Alternative D impacts. The CDP provides the basis by which detailed drainage improvement plans shall be designed in conjunction with site engineering specific to each LAX Master Plan improvement project.	HWQ-1: Develop detailed drainage plan	Completed: Draft CDP issued in June 2005 and finalized in December 2005. Consistency Certification received from the Coastal Commission in December 2005.
9	Procedures for Handling of Contaminated Materials during Construction	This procedure focuses on pre-existing, previously unknown contaminated materials that may be encountered or are first released, spilled, or generated during construction at any phase or project of the LAX Master Plan implementation.	HM-2: Handling of contaminated materials encountered during construction	Completed: Final document issued in December 2005.
10	Utilities Relocation Program (URP)	The URP provides a framework to address potential impacts on the existing utilities and to minimize interference with the existing utilities associated with the LAX Master Plan construction.	PU-1: Develop a Utilities Relocation Plan E-2: coordination with utility providers DA-3: undergrounding of utility lines	Completed: Final Report completed in May 2005.
11	Street Frontage & Landscape Development Plan (SFLDP) (Existing)	The SFLDP provides integrated and coordinated landscape design guidelines for new development along the perimeter areas of LAX. It is not intended as a commitment by LAWA to affect and/or change existing conditions.	LU-4 : Neighborhood Compatibility Program LU-5 : Comply with City of LA Transportation Element Bicycle Plan DA-1 : Provide and Maintain Airport Buffer Areas DA-2 : Update and Integrate Design Plans and Guidelines W-1 : Maximize Use of Reclaimed Water W-2 : Enhance Existing Water Conservation Program	Completed: Final SFLDP completed on March 2, 2005.
12	Water Conservation Program (WCP)	LAWA's Sustainability Objectives include increased water conservation in all airport facilities and for all operations, with specific targets for increasing use of reclaimed water for landscaping and other non-potable uses, planting of drought-resistant vegetation, and installation of low-flow fixtures. LAWA's Sustainable Airport, Design and Construction Guidelines include the encouragement of water efficiency and conservation in construction design.	W-2: Enhance Existing Water Conservation Program	Completed: The Water Conservation Program is addressed as components in LAWA's Sustainability Plan, Annual Sustainability Report, and LAWA's Sustainable Airport Planning, Design and Construction Guidelines (LSAG).
13	Landscape Maintenance Program (LMP)	Program is being developed.	LU-2: Establishment of an LMP for parcels acquired due to airport expansion DA-1: Provide and maintain airport buffer areas	In Progress: LAWA ensures that any newly acquired properties are fenced, landscaped, and regularly maintained. In addition, LAWA is currently developing procedures that will form the basis of the LMP.
14	Residential & Business Relocation Plan (Draft Relocation Plan) (DRP)	The DRP provides procedures for implementing LAWA's LAX MP Relocation Assistance Program (RAP) in accordance with applicable laws, regulations, and policies. The Uniform Act and Title 49 CFR Part 24 serve as the basis for the policies and procedures established in this plan.	RBR-1: Residential and Business Relocation Program MM-RBR-1: Planning for business relocation MM-RBR-2: Relocation opportunities through ANMP	In Progress: Draft Relocation Plan approved by the BOAC in Dec 2004. The Final Plan will be developed when Master Plan improvements requiring acquisition are advanced to more detailed planning.
15	Fire & Police Facility Program (FPFP)	Based on current implementation of the Master Plan Program, fire and police facilities are planned on an individual basis in consultation with LAFD, LAWAPD, LAPD, and other agencies as appropriate.	PS-1: Fire and Police Facility Relocation Plan PS-2: Fire and Police Facility space and siting requirements	Completed for Fire Station 80. This requirement was not triggered for other on-airport fire and police facilities.
16	Solid Waste Recycling Plan (SWRP):	LAWA developed an enhanced Recycling Plan for LAX in 2010.	SW-1: Implement an Enhanced Recycling Program	Completed. LAWA developed an enhanced Recycling Plan in 2010 that continues to be implemented.

## **APPENDIX D**

### **SUMMARY STATUS OF STAND-ALONE MITIGATION PLANS**

## “Stand-Alone” Mitigation Plans

“Stand-alone” mitigation plans are derived from specific mitigation measures to address the overall impacts of the LAX Master Plan. These stand-alone plans are not linked to any particular project within the LAX Master Plan. Stand-alone plans are divided into five (5) major impact areas: Noise, Air Quality, Biotic Communities, Hydrology and Water Quality, and Environmental Justice. Table 1 below provides a summary status of all “stand-alone” mitigation plans. Brief descriptions of each stand-alone plan are discussed in the following subsections.

Table 1: "Stand-Alone" Mitigation Plans - Summary Status			Completed	In Progress	Existing Policy	Future Plan
<i>Noise and Land Use Mitigation Plans</i>						
4.0.A	N-1	Maintenance of Aircraft Noise Abatement Program			X	
4.0.B	MM-N-4	Update the Aircraft Noise Abatement Program				X
4.0.C	MM-N-5	Conduct Part 161 Study		X		
5.0.E	MM-LU-1	Implement Revised Aircraft Noise Mitigation Program		X		
5.0.F	MM-LU-2	Incorporate Residential Dwelling Units Exposed to Single Event Awakenings Threshold into Aircraft Noise Mitigation Program		X		
5.0.G	MM-LU-3	Conduct Study of the Relationship Between Aircraft Noise Levels and the Ability for Children to Learn		X		
5.0.H	MM-LU-4	Provide additional sound insulation for schools shown by MM-LU-3 to be significantly impacted by aircraft noise				X
5.0.I	MM-LU-5	Upgrade and Expand Noise Monitoring Program	X			
<i>Environmental Justice</i>						
9.0.A	EJ-1	Aviation Curriculum		X		
9.0.B	EJ-2	Aviation Academy		X		
9.0.C	EJ-3	Job Outreach Center		X		
9.0.D	EJ-4	Community Mitigation Monitoring		X		
<i>Air Quality Mitigation Plans</i>						
10.0.A	AQ-1	Air Quality Source Apportionment Study		X		
10.0.B	AQ-2	School Air Filters				X
10.0.C	AQ-3	Mobile Health Research Lab				X
10.0.D	MM-AQ-1	Mitigation Plan for Air Quality	X			
10.0.E	MM-AQ-2	Construction-Related Mitigation Measures	X			
10.0.F	MM-AQ-3	Transportation-Related Mitigation Measures		X		
10.0.G	MM-AQ-4	Operations-Related Mitigation Measures		X		
<i>Hydrology and Water Quality</i>						
11.0.A	HWQ-1	Develop Conceptual Drainage Plan	X			
<i>Biotic Communities</i>						
14.0.D	MM-BC-8	Replacement of Habitat Units		X		
14.0.E	MM-BC-9	Conservation of Faunal Resources		X		
15.0.A	MM-ET-1	Riverside Fairy Shrimp Habitat Restoration		X		