INITIAL STUDY CHECKLIST

LEAD AGENCY Los Angeles World Airport (LAWA)	**COUNCIL DISTRICT** Council District 11	**DATE** August 22, 2013
RESPONSIBLE AGENCIES: City of Los Angeles		
PROJECT TITLE/NO. Los Angeles International Airport (LAX) Runway 6L-24R Safety Area and Associated Improvements		**CASE NO.**

PROJECT DESCRIPTION:

The intent of the proposed Project is to comply with the "Transportation, Treasury, Housing and Urban Development, the Judiciary, District of Columbia, and Independent Agencies Appropriations Act, 2006" (Public Law [P.L.] 109-115), November 30, 2005. P.L. 109-115 requires completion of Runway Safety Area (RSA) improvements by airport sponsors that hold a certificate under Title 14, Code of Federal Regulations (CFR), Part 139, *Certification and Operations: Land Airports Serving Certain Air Carriers*, such as LAX, to meet Federal Aviation Administration (FAA) airport design standards by December 31, 2015. LAWA prepared an RSA Practicability Study and concluded that the existing RSA for Runway 6L-24R does not meet current FAA airport design standards and improvements to the RSA were needed. Additionally, Runway 6L-24R, as the primary arrivals runway on the north airfield, handles a large amount of traffic. Due to heavy usage over the years, sections of the pavement have deteriorated and need reconstruction to ensure safe operations and extend the useful life of the runway.

The Project would include (1) implementing declared distances by reducing the Runway 6L accelerate-stop distance available (ASDA) and landing distance available (LDA) by 359 feet; (2) realigning portions of two service roads; (3) covering a portion of the Argo Ditch; (4) rehabilitating portions of the Runway 6L-24R pavement; (5) relocating or removing security gates and an Air Operations Area (AOA) fence; and (6) parking area closures. The proposed Project would not result in increased or decreased aviation activity at LAX compared to existing conditions, and would not increase runway length or move the runway to the north.

ENVIRONMENTAL SETTING:

The proposed Project is located on the north airfield of LAX. Surrounding land uses include vacant land and the Westchester Golf Course (both on LAX property), and residential and recreational uses within the community of Westchester further to the north; the Westchester Business District and airport-related parking to the northeast and east; the Central Terminal Area (CTA), maintenance and operations facilities, the LAX Fuel Farm, and West Remote gates to the south; and the LAX/El Segundo Dunes, including open space, navigational aids, airport-related safety and utility facilities, and miscellaneous uses to the west. The north airfield complex includes two parallel runways (6L-24R and 6R-24L), several taxiways, grass infields, airfield lighting and signage, and underground utilities.

PROJECT LOCATION:

The proposed Project is located on the north airfield of LAX in the City of Los Angeles with the CTA and World Way West to the south; Sepulveda Boulevard to the east; Westchester Parkway and Lincoln Boulevard to the north; and Pershing Drive to the west. The proposed Project site is bordered to the north, south, and east by airport facilities. To the west of the proposed Project site is vacant, open land and the Pacific Ocean.

PLANNING DISTRICT Los Angeles International Airport Plan Los Angeles International Airport Specific Plan	**STATUS:** ☐ **PRELIMINARY** ☐ **PROPOSED** ☒ **ADOPTED** December 14, 2004
EXISTING ZONING LAX - A Zone: Airport Airside Sub-Area	☒ **DOES CONFORM TO PLAN** ☐ **DOES NOT CONFORM TO PLAN** ☐ **NO DISTRICT PLAN**
PLANNED LAND USE & ZONE Airport related airside uses	
SURROUNDING LAND USES North – Airport Uses; East – Airport Uses, Industrial and Commercial; South – Airport Uses; West – Open Space	

DETERMINATION (To be completed by Lead Agency)	
On the basis of this initial evaluation:	
☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.	
☐ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions on the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.	
☒ I find the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.	
☐ I find the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.	
☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.	
	CITY PLANNER
SIGNATURE	**TITLE**

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

☐	Aesthetics	☐	Agriculture and Forestry Resources	☒	Air Quality
☒	Biological Resources	☐	Cultural Resources	☐	Geology/Soils
☒	Greenhouse Gas Emissions	☒	Hazards & Hazardous Materials	☒	Hydrology/Water Quality
☐	Land Use/Planning	☐	Mineral Resources	☒	Noise
☐	Population/Housing	☐	Public Services	☐	Recreation
☒	Transportation/Traffic	☐	Utilities/Service Systems	☒	Mandatory Findings of Significance

INITIAL STUDY CHECKLIST	
PROPONENT NAME Los Angeles World Airports	**PHONE NUMBER** 800.919.3766
PROPONENT ADDRESS 1 World Way, Room 218, Los Angeles, CA 90045	
PROPONENT NAME Los Angeles World Airports	**DATE SUBMITTED** August 22, 2013
PROPOSAL NAME Los Angeles International Airport (LAX) Runway 6L-24R RSA and Associated Improvements	

ENVIRONMENTAL IMPACTS	(Explanations of all potentially and less than significant impacts are required to be attached on separate sheets)			
	Potentially Significant Impact	**Less Than Significant with Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
I. AESTHETICS. Would the project:				
a. Have a substantial adverse effect on a scenic vista?	☐	☐	☐	☒
b. Substantially damage scenic resources including but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☒
c. Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☐	☐	☒
d. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☐	☒
II. AGRICULTURE AND FORESTRY RESOURCES. Would the project:				
a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program in the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒
b. Conflict with the existing zoning for agricultural use, or a Williamson Act Contract?	☐	☐	☐	☒
c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland-zoned Timberland Production (as defined by Government Code Section 51104(g))?	☐	☐	☐	☒
d. Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
e. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒
III. AIR QUALITY. Would the project:				
a. Conflict with or obstruct implementation of the applicable air quality plan?	☒	☐	☐	☐
b. Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☒	☐	☐	☐

ENVIRONMENTAL IMPACTS		(Explanations of all potentially and less than significant impacts are required to be attached on separate sheets)			
		Potentially Significant Impact	**Less Than Significant with Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
c.	Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air-quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	☒	☐	☐	☐
d.	Expose sensitive receptors to substantial pollutant concentrations?	☒	☐	☐	☐
e.	Create objectionable odors affecting a substantial number of people?	☒	☐	☐	☐
IV.	**BIOLOGICAL RESOURCES.** Would the project:				
a.	Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	☐	☒	☐	☐
b.	Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	☒	☐	☐	☐
c.	Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☒	☐	☐	☐
d.	Interfere substantially with the movement of any resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☒	☐	☐
e.	Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☒
f.	Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒

ENVIRONMENTAL IMPACTS		(Explanations of all potentially and less than significant impacts are required to be attached on separate sheets)			
		Potentially Significant Impact	**Less Than Significant with Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
V.	**CULTURAL RESOURCES.** Would the project:				
a.	Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?	☐	☐	☒	☐
b.	Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	☐	☒	☐	☐
c.	Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☒	☐	☐
d.	Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	☐	☒
VI.	**GEOLOGY AND SOILS.** Would the project:				
a.	Expose people or structures to potential substantial adverse effects, including the risk of loss, injury or death involving:				
i)	Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☒	☐
ii)	Strong seismic ground shaking?	☐	☐	☒	☐
iii)	Seismic-related ground failure, including liquefaction?	☐	☐	☐	☒
iv)	Landslides?	☐	☐	☐	☒
b.	Would the project result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
c.	Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	☐	☐	☒	☐
d.	Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	☐	☐	☒	☐
e.	Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	☐	☐	☐	☒

ENVIRONMENTAL IMPACTS		(Explanations of all potentially and less than significant impacts are required to be attached on separate sheets)			
		Potentially Significant Impact	**Less Than Significant with Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
VII.	**GREENHOUSE GAS EMISSIONS.** Would the project:				
a.	Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☒	☐	☐	☐
b.	Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☒	☐	☐	☐
VIII.	**HAZARDS AND HAZARDOUS MATERIALS.** Would the project:				
a.	Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐
b.	Create a significant hazard to the public or the environment through the reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment?	☐	☐	☒	☐
c.	Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☒	☐	☐	☐
d.	Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	☒
e.	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☒	☐
f.	For a project within the vicinity of a private airstrip, would the project result in a safety hazard for the people residing or working in the project area?	☐	☐	☐	☒
g.	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☒	☐	☐
h.	Expose people or structures to the risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	☐	☐	☐	☒

ENVIRONMENTAL IMPACTS	(Explanations of all potentially and less than significant impacts are required to be attached on separate sheets)			
	Potentially Significant Impact	**Less Than Significant with Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
IX. HYDROLOGY AND WATER QUALITY. Would the project:				
a. Violate any water quality standards or waste discharge requirements?	☐	☐	☒	☐
b. Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (i.e., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned land uses for which permits have been granted)?	☐	☐	☒	☐
c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	☒	☐	☐	☐
d. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site?	☒	☐	☐	☐
e. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	☐	☐	☒	☐
f. Otherwise substantially degrade water quality?	☐	☐	☒	☐
g. Place housing within a 100-year flood hazard area as mapped on federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	☐	☐	☐	☒
h. Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	☐	☐	☐	☒
i. Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	☐	☐	☐	☒
j. Inundation by seiche, tsunami, or mudflow?	☐	☐	☐	☒
X. LAND USE AND PLANNING. Would the project:				
a. Physically divide an established community?	☐	☐	☐	☒

ENVIRONMENTAL IMPACTS		(Explanations of all potentially and less than significant impacts are required to be attached on separate sheets)			
		Potentially Significant Impact	**Less Than Significant with Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
b.	Conflict with any applicable land use plan, policy or regulation of an agency with jurisdiction over the project (including, but not limited to, the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	☒
c.	Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	☒
XI.	**MINERAL RESOURCES.** Would the project:				
a.	Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒
b.	Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	☐	☐	☐	☒
XII.	**NOISE.** Would the project result in:				
a.	Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☒	☐	☐	☐
b.	Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	☒	☐	☐	☐
c.	A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☒	☐
d.	A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☒	☐	☐	☐
e.	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☒	☐	☐	☐
f.	For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

ENVIRONMENTAL IMPACTS	(Explanations of all potentially and less than significant impacts are required to be attached on separate sheets)			
	Potentially Significant Impact	**Less Than Significant with Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
XIII. POPULATION AND HOUSING. Would the project:				
a. Induce substantial population growth in an area either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☐	☒
b. Displace substantial numbers of existing housing necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒
c. Displace substantial numbers of people necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒
XIV. PUBLIC SERVICES.				
Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:				
a. Fire protection?	☐	☒	☐	☐
b. Police protection?	☐	☐	☐	☒
c. Schools?	☐	☐	☐	☒
d. Parks?	☐	☐	☐	☒
e. Other public facilities?	☐	☐	☐	☒
XV. RECREATION.				
a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☒
b. Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☐	☒

ENVIRONMENTAL IMPACTS		(Explanations of all potentially and less than significant impacts are required to be attached on separate sheets)			
		Potentially Significant Impact	**Less Than Significant with Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
XVI.	**TRANSPORTATION/TRAFFIC.** Would the project:				
a.	Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation, including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	☒	☐	☐	☐
b.	Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	☒	☐	☐	☐
c.	Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	☒	☐	☐	☐
d.	Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☐	☒
e.	Result in inadequate emergency access?	☐	☐	☐	☒
f.	Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	☐	☐	☐	☒
XVII.	**UTILITIES AND SERVICE SYSTEMS.** Would the project:				
a.	Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☒	☐
b.	Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☒	☐
c.	Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☒	☐
d.	Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☐	☐	☒	☐

ENVIRONMENTAL IMPACTS		(Explanations of all potentially and less than significant impacts are required to be attached on separate sheets)			
		Potentially Significant Impact	**Less Than Significant with Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
e.	Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☒	☐
f.	Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	☒	☐
g.	Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☒	☐
XVIII.	**MANDATORY FINDINGS OF SIGNIFICANCE.**				
a.	Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☒	☐	☐	☐
b.	Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects).	☒	☐	☐	☐
c.	Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☒	☐	☐	☐

1. Project Description

1.1 Introduction

The Los Angeles World Airports (LAWA) is planning Runway Safety Area (RSA) improvements and pavement rehabilitation of Runway 6L-24R at Los Angeles International Airport (LAX). This Initial Study is evaluating the RSAs for Runway 6L-24R and not the entire north runway complex since the Federal Aviation Administration (FAA) makes an RSA determination on each runway, not the runway complex or the airport as a whole. Therefore, this proposed Project has independent utility from any future proposed RSA work on Runway 6R-24L and the RSA work on Runway 7L-25R in the south runway complex of the airport. The purpose of the RSA improvement is to comply with "The Transportation, Treasury, Housing and Urban Development, the Judiciary, The District of Columbia, and Independent Agencies Appropriations Act, 2006" (Public Law 109-115)[1], which states that all RSAs at 14 Code of Federal Regulations (CFR) Part 139 airports[2] must meet Federal Aviation Administration (FAA) design standards to the extent practicable by December 31, 2015. FAA Order 5200.8, *Runway Safety Area Program*, states that "the RSA is intended to provide a measure of safety in the event of an aircraft's excursion from the runway by significantly reducing the extent of personal injury and aircraft damage during overruns, undershoots and veer-offs." The standards for RSA dimensions are contained in FAA Advisory Circular (AC) 150/5300-13A, *Airport Design*. FAA direction in determining whether a specific RSA improvement is practicable appears in FAA Order 5200.9, *Financial Feasibility and Equivalency of Runway Safety Area Improvements and Engineered Material Arresting Systems*.

As detailed in AC 150/5300-13A, an RSA is defined as "an identified surface surrounding the runway prepared and suitable for reducing the risk of damage to airplanes in the event of an undershoot, overshoot, or excursion from the runway." The RSA has dimensional requirements as well as clearing, grading, and drainage requirements. An additional safety-related function is to provide greater accessibility for firefighting and emergency rescue vehicles during any incidents.

Per FAA AC 150/5300-13A, the dimensional requirements for an RSA are based on the aircraft the runway is designed to accommodate. The Airport Reference Code (ARC) is a coding system used to relate airport design criteria to the operational and physical characteristics of the aircraft intended to operate on a particular runway. **Table 1** lists FAA ARC and corresponding restrictions. The first part of a runway's ARC is a letter that represents the Aircraft Approach Category (AAC) and relates to the aircraft approach speed (operational characteristics). The second component of the ARC, depicted by a Roman numeral, is the Airplane Design Group (ADG) and relates to either the aircraft wingspan or tail height (physical characteristics); whichever is

[1] *The Transportation, Treasury, Housing and Urban Development, the Judiciary, The District of Columbia, and Independent Agencies Appropriations Act, 2006* (Public Law [P.L.] 109-115), November 30, 2005.

[2] 14 Code of Federal Regulations (CFR) Part 139 airports are U.S. airports that are certified by FAA to allow commercial passenger aircraft operations.

most restrictive to an aircraft's safe movement on the airport. The AAC and the ADG together are the basis for establishing RSA dimensions.

Table 1: FAA Airport Reference Code Classifications

AIRCRAFT APPROACH CATEGORY	AIRCRAFT APPROACH SPEED	AIRPLANE DESIGN GROUP	AIRCRAFT WINGSPAN	TAIL HEIGHT
A	Up to 91 knots	I	Up to 49 feet	Up to 20 feet
B	Greater than or equal to 91 knots but less than 121 knots	II	Greater than or equal to 49 feet but less than 79 feet	Greater than or equal to 20 feet but less than 30 feet
C	Greater than or equal to 121 knots but less than 141 knots	III	Greater than or equal to 79 feet but less than 118 feet	Greater than or equal to 30 feet but less than 45 feet
D	Greater than or equal to 141 knots but less than 166 knots	IV	Greater than or equal to 118 feet but less than 171 feet	Greater than or equal to 45 feet but less than 60 feet
E	Greater than or equal to 166 knots	V	Greater than or equal to 171 feet but less than 214 feet	Greater than or equal to 60 feet but less than 66 feet
		VI	Greater than or equal to 214 feet but less than 262 feet	Greater than or equal to 66 feet but less than 80 feet

SOURCE: U.S. Department of Transportation, Federal Aviation Administration, AC 150/5300-13A, *Airport Design*, September 28, 2012.
PREPARED BY: Ricondo & Associates, Inc., July 2013.

Runway 6L-24R has an ARC designation of D-V. ARC D-V aircraft generally consist of wide-body aircraft, such as the Boeing 747, Airbus A340, and A350. RSA dimensions for D-V aircraft are outlined in **Table 2**.

Table 2: RSA Dimensional Requirements

RUNWAY SAFETY AREA (RSA) DIMENSIONS AND GRADE LIMITATIONS	APPROACH CATEGORY C & D (FT)
RSA Width	500
RSA Length Prior to Landing	600
RSA Length Beyond the Runway	1,000

DISTANCE BEYOND RUNWAY END	TRANSVERSE GRADING
Initial 200 feet	1.5% to 5% grade, no positive
Beyond 200 feet [1/]	Maximum ± 5%

NOTES:

1/ No penetration of approach surface permitted.

SOURCE: AC 150/5300-13A, *Airport Design*, September 28, 2012.
PREPARED BY: Ricondo & Associates, Inc., July 2013.

In addition to dimensional requirements, the FAA has established specific design standards for RSAs[3] which include:

- Areas shall be cleared and graded with no potentially hazardous ruts, humps, depressions, or other surface variations;
- RSA grading must allow adequate drainage to prevent the accumulation of water. The installation of storm sewers is permissible within the RSA, but the elevation of the storm water inlets may not vary more than three inches from the surrounding surface elevation. The RSA limits for longitudinal and transverse grading are also outlined in Table 2.
- Capable, under dry conditions, of supporting snow removal equipment, Aircraft Rescue and Fire Fighting (ARFF) equipment, and the occasional passage of aircraft without causing damage to the aircraft; and
- Free of objects, except for objects that need to be located in the runway safety area because of their function.

The function of the RSA is to create a buffer between the runway pavement and non-movement areas. Takeoffs and landings are generally regarded as the most critical phases of flight where more than 60 percent of aircraft accidents occur. During these segments, airplanes are subject to a variety of controls and operational factors including a runway's usable operating dimensions. A growing list of RSA-related accidents has contributed to the concern that airports do not provide adequate safety areas to reduce injury to persons and property. As a result, state and federal legislation was enacted in an effort to standardize safety area requirements. The FAA coordinated a study in 1990 which identified airports currently not in compliance with RSA design requirements for all Part 139 airports, including LAX. Recognizing the significant safety enhancement afforded by RSA improvements, the FAA issued Order 5200.8, *Runway Safety Area Program*, in an effort to guide the improvement process by identifying potential alternatives to the traditional cleared and graded safety areas.

In accordance with Order 5200.8, the FAA made a determination in 2006 for Runway 6L-24R that "the existing RSA does not meet standards but is practicable to improve." Based on the requirements of Public Law 109-115, the FAA requested that LAWA evaluate and determine whether the runways at LAX meet current FAA RSA design standards. LAWA prepared an RSA Practicability Study for Runways 6L-24R and 6R-24L that included evaluations of RSA alternatives.[4] For this effort, LAWA established an RSA Study Working Group to provide input and evaluate the various RSA alternatives and to ensure that the needs of the various airport users were considered. The RSA Study Working Group was comprised of representatives from various divisions within LAWA, FAA, and airlines operating at LAX. The study concluded that Runways 6R, 24L, and 24R do not meet

[3] U.S. Department of Transportation, Federal Aviation Administration, Advisory Circular 150/5300-13A, *Airport Design*, September 28, 2012.

[4] Ricondo and Associates, *Runways 6L-24R & 6R-24L Safety Area (RSA) Practicability Study for Los Angeles International Airport*, January 2010.

applicable FAA RSA design standards.[5] In accordance with Public Law 109-115, LAWA is improving the RSAs for Runway 6L-24R to meet FAA design standards, to the extent practicable, and to minimize disruptions to airfield operations.

The Project would include (1) implementing declared distances by reducing the Runway 6L accelerate-stop distance available (ASDA) and landing distance available (LDA) by 359 feet; (2) realigning portions of two service roads; (3) covering a portion of the Argo Ditch; (4) rehabilitating portions of the Runway 6L-24R pavement; (5) relocating or removing security gates and an Air Operations Area (AOA) fence; and (6) parking area closures. The proposed Project would not result in increased or decreased aviation activity at LAX compared to existing conditions, and would not increase runway length or move the runway to the north.

1.2 Environmental Setting

Los Angeles International Airport is located at the western edge of the City of Los Angeles (see **Figure 1**). Runway 6L-24R, the northernmost runway, and Runway 6R-24L, the inboard runway, form the northern airfield complex at LAX. In addition to the runways, there are a number of taxiways and airfield operations service roads located within this area. The Argo Ditch lies to the north of Runway 6L-24R. North of the Argo Ditch is LAX Northside, a 340+-acre area that lies between the airfield and the Westchester and Playa del Rey communities. Surrounding land uses include vacant land and the Westchester Golf Course (both on LAX property), and residential and recreational uses within the community of Westchester to the north; the Westchester Business District and airport-related parking to the northeast and east; airport uses including the Central Terminal Area (CTA), maintenance and operations facilities, the LAX Fuel Farm, and West Remote gates to the south; and the Dunes, including open space, navigational aids, airport-related safety and utility facilities, and miscellaneous uses to the west.

The Airport itself is located within a highly developed, urbanized area consisting of airport, commercial, transportation (i.e., interstate highways) and residential uses. To the north of LAX are the City of Los Angeles communities of Westchester and Playa del Rey, to the east are the City of Inglewood and the Los Angeles County unincorporated community of Lennox, to the south are the City of El Segundo and the Los Angeles County unincorporated community of Del Aire, and to the west is the Pacific Ocean. Regional access to LAX is provided by the San Diego Freeway (Interstate 405), which is a north-south freeway east of LAX, and the Century Freeway or Glenn Anderson Freeway (Interstate 105), which is an east-west freeway south of LAX. Major roadways serving LAX include Sepulveda Boulevard, Century Boulevard, Imperial Highway, and Lincoln Boulevard.

[5] Evaluation of the RSAs associated with Runways 7L-25R and 7R-25L (the south runway complex) were performed as a separate study. RSA improvements associated with Runway 7L-25R are undergoing separate environmental evaluation; Runway 7R-25L was brought into compliance with RSA standards as part of the South Airfield Improvement Project. RSA improvements for Runway 6R-24L are being evaluated by LAWA and will undergo separate environmental evaluation.

SOURCES: Los Angeles County, 2010, 2011 (city boundary, streets); LAX Airport Layout Plan, Ricondo & Associates, Inc., 2010 (runways, taxiways, terminal area, ariport property boundary).
National Geographic World Map, ESRI Database, 2011.
PREPARED BY: Ricondo & Associates, Inc., July 2013.

NORTH 0 3,000 ft.

FIGURE 1

General Location and Vicinity Map

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1.3 Land Use and Zoning Designation

The Project site is located entirely within the City of Los Angeles LAX Plan area, as well as the LAX Specific Plan area, and is designated in the LAX Plan as "Airport Airside". Permitted uses for Airport Airside include, but are not limited to, runways, taxiways, aircraft gates, maintenance areas, airfield operation areas, air cargo areas, passenger handling facilities, fire protection facilities, and other ancillary airport facilities.

The LAX Specific Plan establishes additional regulations and standards consistent with the LAX Plan for the airport. The LAX Specific Plan designates the Project site as Airport Airside (LAX-A Zone). Permitted uses in LAX-A Zone include, but are not limited to: surface and structured parking lots; aircraft under power; airline maintenance and support; air cargo facilities; commercial passenger vehicle staging and holding area; helicopter operations; navigational aids; runways, taxiways, aircraft parking aprons, and service roads; passenger handling facilities; run-up enclosures; and other ancillary airport facilities. The zoning for the site is "'LAX' Los Angeles International Airport Specific Plan Zone," which incorporates the regulations of the LAX Specific Plan (LAMC §12.19.1.). The proposed Project is consistent with the LAX Plan and LAX Specific Plan and its land use and zoning designations.

1.4 Relationship to Existing Plans and Documents

The 2004 LAX Master Plan is the comprehensive development program for LAX properties, including runway and taxiway system modernization, redevelopment of terminal areas, airport maintenance areas, airport access improvement and passenger safety, security, and convenience enhancements. The proposed Project complies with the LAX Master Plan objectives to improve safety at LAX. The Final EIR for the LAX Master Plan included analysis of the environmental impacts of future development at LAX. The LAX Master Plan Final EIR contains Master Plan commitments and mitigation measures that apply to the LAX property, including the Project site.

LAWA is in the process of studying alternatives to address safety and airfield configuration issues associated with the North airfield, which includes Runway 6L-24R and Runway 6R-24L. Some of the alternatives under consideration include relocation of Runway 6L-24R to the north or relocation of Runway 6R-24L to the south. These alternatives include the incorporation of RSAs that fully comply with FAA design standards into the selected alternative. However, because the ultimate runway configurations have not been approved by the FAA, in the interim, LAWA and FAA have agreed to improve the existing RSAs as described herein as required by Public Law 109-115.

1.5 Project Characteristics

1.5.1 EXISTING CONDITIONS

The North Airfield includes two parallel runways (6L-24R and 6R-24L), several taxiways, grass infields, airfield lighting and signage, and underground utilities north of the LAX passenger terminals. Runway 6L-24R is 8,925 feet long and 150 feet wide and is the northernmost runway used primarily for arrivals; Runway 6R-24L is 10,285 feet long and 150 feet wide. In addition to the runways, there are a number of taxiways and airfield operations roadways located within this area, as well as a Los Angeles Department of Water and Power 24-inch water main.

As illustrated in **Figure 2**, the RSA for Runway 6L-24R is 500 feet wide for the full length of the runway; it extends 1,000 feet from the west end of the runway and 841 feet from the east end. The RSA at the west end meets all FAA requirements for arriving and departing aircraft operations. The RSA at the east end meets the 600-foot length requirement prior to the Runway 24R arrival threshold for landings, but it is 159 feet short of meeting the 1,000-foot requirement beyond the runway end for Runway 6L arrivals and departures.

In addition to the dimensional deficiencies listed above, other areas of non-compliance include:

- Portions of a service road and drainage ditch north of the runway are located within the RSA dimensions; and
- Portions of a service road south of the runway are located within the RSA dimensions.

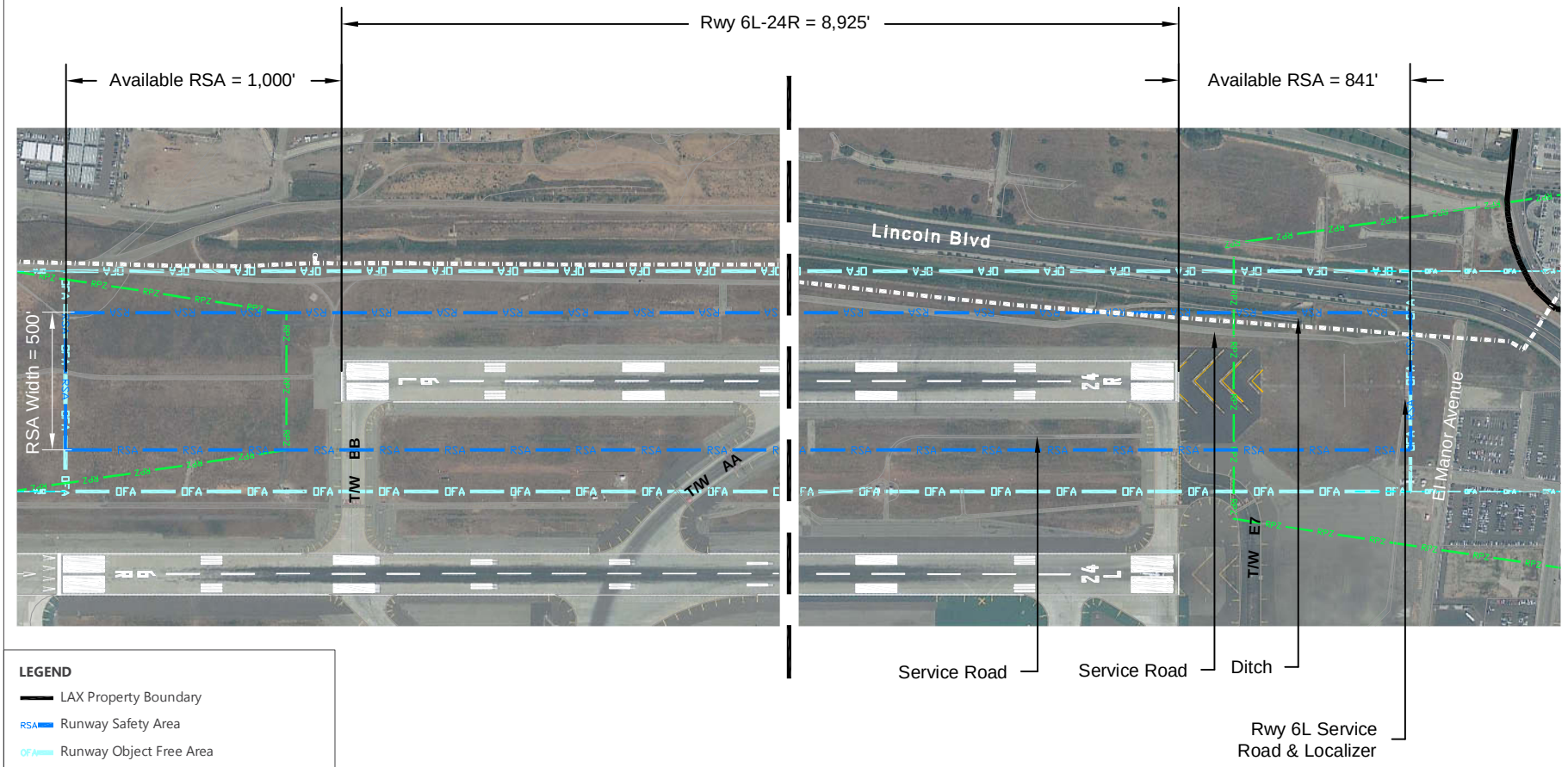
Objects located east of the runway that would fall within the 1,000-foot RSA dimension include, but are not limited to, the Runway 6L localizer, a service road, a perimeter fence, parking areas, and a portion of a public sidewalk along Lincoln Boulevard. **Figure 3** depicts the areas of non-compliance for Runway 6L-24R.

1.5.1.1 Existing Pavement of Runway 6L-24R

Runway 6L-24R is the primary arrivals runway on the north airfield. As such, portions of this runway handle a large amount of traffic. Due to heavy usage over the years, sections of the pavement have deteriorated and are in need of rehabilitation. The current Pavement Condition Index (PCI) rating for these pavements varies from 0 to 70, indicating that portions of the runway pavements are in a poor (0) to fair (70) condition.

1.5.2 RUNWAY 6L-24R IMPROVEMENTS

The proposed Project would involve the covering of portions of the Argo Ditch and the relocation of a portion of a service road along Lincoln Boulevard and relocation of a portion of a service road south of the runway. The relocated service road along Lincoln Boulevard would become the limiting object, providing for a 641-foot RSA beyond the Runway 24R end. In order to provide a 1,000-foot standard RSA on that end, declared distances (see below) would be implemented, reducing the Runway 6L Accelerate-Stop Distance Available and Landing Distance Available by 359 feet, from 8,925 feet to 8,566 feet. This alternative would also provide the required minimum 600 feet of RSA prior to the Runway 24R landing threshold. No improvements are required on the Runway 6L end.



SOURCE: Federal Aviation Administration, *Advisory Circular 150/5300-13A, Airport Design,* September 28, 2012; Landrum & Brown, *Los Angeles International Airport, Airport Layout Plan,* 2005; Los Angeles Wold Airports, April 2013 (aerial photography); Ricondo & Associates, Inc., August 2013.
PREPARED BY: Ricondo & Associates, Inc., August 2013.

FIGURE 2

Runway 6L-24R Existing Conditions

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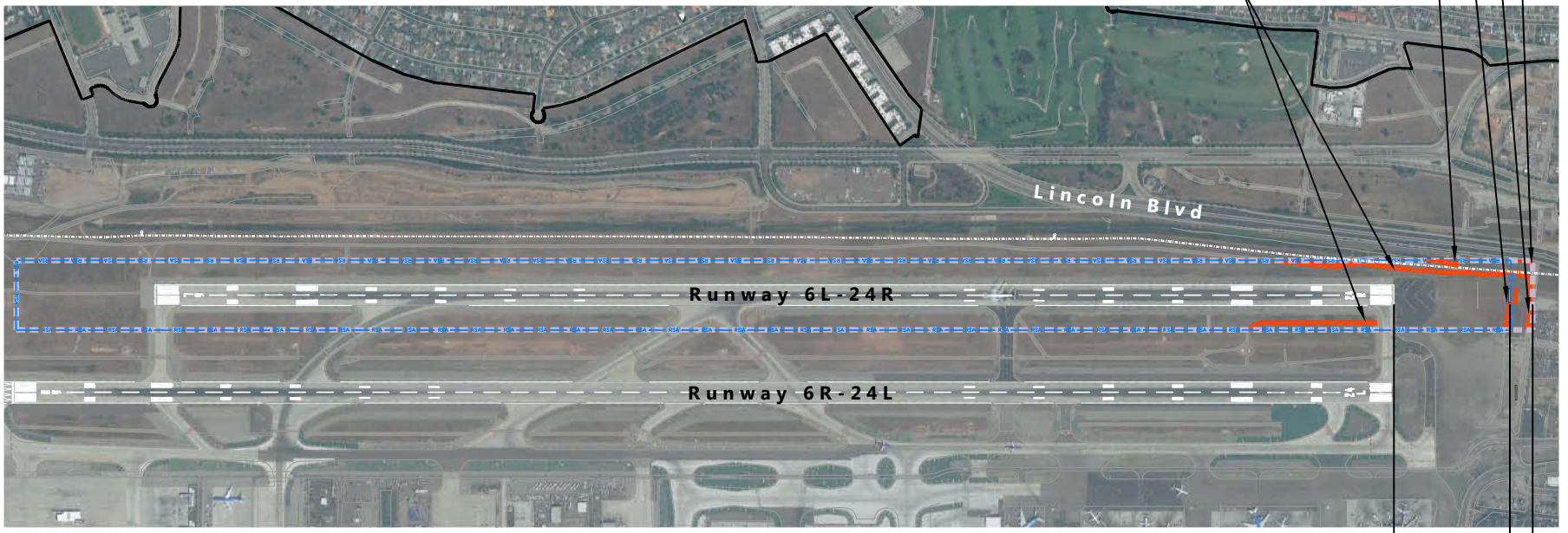

SOURCE: Federal Aviation Administration, *Advisory Circular 150/5300-13A, Airport Design,* September 28, 2012; Landrum & Brown, *Los Angeles International Airport, Airport Layout Plan,* 2005; Los Angeles Wold Airports, April 2013 (aerial photography); Ricondo & Associates, Inc., August 2013.
PREPARED BY: Ricondo & Associates, Inc., August 2013.

NORTH 0 1,200 ft.

FIGURE 3

Runway 6L-24R Areas of Non-Compliance

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The components of the proposed Project related to Runway 6L-24R RSA improvements are depicted on **Figure 4**. The primary components of the Runway 6L-24R improvements include:

- Implementation of declared distances on Runway 6L
- Two segments of a service road would be relocated or realigned outside the RSA
- Pavement rehabilitation of up to 7,000 feet of the eastern portion of Runway 6L-24R
- Cover approximately a 500-foot long segment of the Argo Ditch
- Relocate security gates
- Relocate portions of the Air Operations Area (AOA) fence
- Parking area closures

Implementation of these improvements would bring Runway 6L-24R into compliance with FAA RSA design standards. These improvements are proposed to be implemented by December 31, 2015.

1.5.2.1 Declared Distances

Declared distances are "the distances the airport operator declares available and suitable for satisfying an aircraft's takeoff run, take-off distance, accelerate-stop distance, and landing distance requirements."[6] The FAA defines four types of declared distances: the Take-Off Run Available (TORA), the Take-Off Distance Available (TODA), the Accelerate-Stop Distance Available (ASDA), and the Landing Distance Available (LDA).[7] Essentially, declared distances represent the maximum runway distances available to safely takeoff or reject a takeoff (TORA, TODA, and ASDA), or to land (LDA).

The Proposed Action includes the implementation of declared distances for Runway 6L, presented in **Table 3**. The Proposed Action would also provide the required minimum 600 feet of RSA prior to the Runway 24R landing threshold for landing operations on Runway 24R.

Implementation of declared distances on Runway 6L would shorten the ASDA and LDA for aircraft landing on Runway 6L by 359 feet. The implementation of declared distances on Runway 6L was chosen because it will allow LAWA to meet the RSA requirements for Runway 6L without necessitating a runway extension. Because arrival operations on Runway 6L occur less than 1 percent annually, this was determined to be an acceptable solution to bring the Runway 6L RSA into compliance.

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[6] U.S. Department of Transportation, Federal Aviation Administration, Advisory Circular 150/5300-13A, *Airport Design*, September 28, 2012. Paragraph 323.

[7] Take-off Run Available (TORA) is the runway length declared available and suitable for the ground run of an aircraft taking off; Take-off Distance Available (TODA) is the TORA plus any remaining runway or clearway beyond the far end of the TORA; the full length of TODA may need to be reduced because of obstacles in the departure area; Accelerate-Stop Distance Available (ASDA) is the runway plus stopway length declared available and suitable for the acceleration and deceleration of an aircraft aborting a takeoff; and Landing Distance Available (LDA) is the runway length declared available and suitable for landing an aircraft. U.S. Department of Transportation, Federal Aviation Administration, Advisory Circular 150/5300-13A, *Airport Design*, September 28, 2012.

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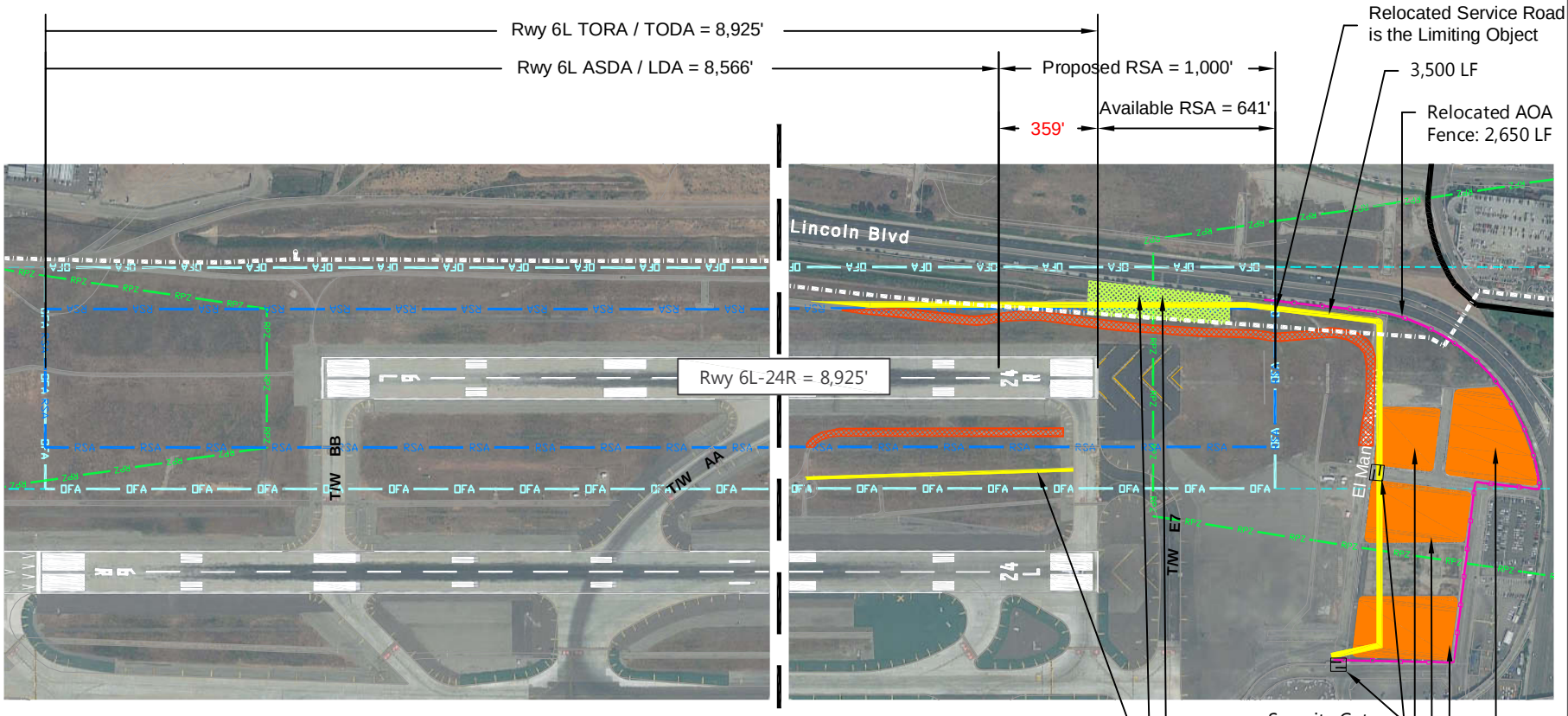

SOURCE: Federal Aviation Administration, *Advisory Circular 150/5300-13A, Airport Design,* September 28, 2012; Landrum & Brown, *Los Angeles International Airport, Airport Layout Plan,* 2005; Los Angeles Wold Airports, April 2013 (aerial photography); Ricondo & Associates, Inc., August 2013.
PREPARED BY: Ricondo & Associates, Inc., August 2013.

FIGURE 4

Runway 6L-24R
Proposed Project

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Table 3: Runway 6L-24R Declared Distances

DECLARED DISTANCES	RUNWAY 6L	RUNWAY 24R
Runway Length	8,925′	8,925′
Take-off Run Available (TORA)	8,925′	8,925′
Take-Off Distance Available (TODA)	8,925′	8,925′
Accelerate-Stop Distance Available (ASDA)	***8,566′***	8,925′
Landing Distance Available (LDA)	***8,566′***	8,925′

SOURCE: Ricondo & Associates, Inc., *Runway 6L-24R & 6R-24L Safety Area (RSA) Practicability Study*, Refinement #2, Figure 4-3, April 9, 2010.
PREPARED BY: Ricondo & Associates, Inc., March 2013.

1.5.2.2 Service Roads

Portions of service roads currently located within the Runway 6L-24R RSA would be relocated or realigned in order to meet RSA standards and to ensure that service vehicles operate outside of the RSA. These improvements would involve the relocation and reconstruction of service road pavement of two segments located along Runway 6L-24R.

- The first service road segment is located north of Runway 6L-24R and is approximately 3,500 linear feet in length. This service road segment would be relocated north, outside of the RSA, beginning north of the Runway 6L-24R RSA where the current service road intersects the RSA and would continue eastward towards El Manor Avenue, then directly south through portions of existing parking areas (see Section 1.5.2.7), before tying into an existing vehicle service road. A portion of this service road realignment would cross over the existing Los Angeles Department of Water and Power 24-inch water main. Appropriate measures would be incorporated in the roadway design to protect the water main during construction and roadway operation.
- The second service road segment is located south of Runway 6L-24R and is approximately 970 linear feet in length. This road segment would be relocated to the south, outside of the RSA, south-southwest of the Runway 24R threshold.

1.5.2.3 Pavement Rehabilitation

Pavement rehabilitation activities would be undertaken for Runway 6L-24R to replace areas of pavement that are in poor condition. Pavement reconstruction activities may include, but are not limited to, demolition and removal of existing pavement and base materials, placement of new sub-base and/or base materials, installation of new Portland Cement Concrete (PCC) pavement, and application of runway and taxiway markings on the new pavement segments. Up to 7,000 feet of the eastern portion of Runway 6L-24R would be demolished and reconstructed.

1.5.2.4 Argo Ditch

A portion of the Argo Ditch located north of the Runway 24R threshold would need to be covered in order to relocate a segment of the service road on top of it. LAWA would install a box culvert at the northeast corner

of Runway 6L-24R, extending the existing box culvert by approximately 500 feet to the west. The relocation of the service road would ensure that service vehicles stay clear of the RSA. The proposed portion of the Argo Ditch to be covered is approximately 513 linear feet in length.

1.5.2.5 Relocate Security Gates and an Air Operations Area (AOA) Fence

Two security gates along the northeastern portion of the north runway complex may need to be relocated or closed in order to realign sections of the service road and comply with RSA standards. Should these security gates be relocated, the future gate locations would be outside the RSA.

The AOA fence would need to be relocated along the northeastern portion of the north runway complex in order to accommodate the realigned service roads described above. A portion of the AOA fence approximately 2,650 linear feet long would be relocated along the outside of the relocated service road and parking areas east of Runway 6L-24R. The relocated fence would run from the northeastern Argo Ditch area along Lincoln Boulevard to the transition ramp along Sepulveda Boulevard. The relocated fence would then travel west around Alverstone Avenue and south to Davidson Drive, then west to reconnect with the existing AOA fence. The AOA fence realignment is depicted on Figure 4.

1.5.2.6 Parking Area Closures

The realignment of service roads outside the RSA along the eastern side of the north runway complex along with the relocated AOA fence would make it necessary to close four parking areas located east of the north runway complex. These parking areas are located inside the LAX property boundary, east of El Manor Avenue and are used for LAX construction vehicle staging and parking of LAWA vehicles. These parking areas are not open to the public. These parking areas total approximately 300,000 square feet in area and contain paved surface parking. The parking area closures are depicted on Figure 4.

1.6 Runway 6L-24R Safety Area and Associated Improvements EIR

Consistent with the California Environmental Quality Act (CEQA, Public Resources Code §21000 et seq.) and the CEQA Guidelines (California Code of Regulations title 14, §15000 et seq.), LAWA is preparing an EIR to evaluate the environmental impacts of the proposed Project. The LAX Runway 6L-24R Safety Area and Associated Improvements EIR will evaluate the environmental impacts of the proposed Project. This Initial Study Checklist has been prepared to focus the issues that will be studied in further detail in the EIR by identifying the resource areas that could be subject to significant impacts from the proposed Project and that would require incorporation of mitigation measures where feasible. This Initial Study also identifies resource areas where the environmental effects of the proposed Project would be less than significant or where no impacts are anticipated. These resource areas will not be further evaluated in the EIR. Based on a preliminary review of the Project site and in consideration of the proposed Project activities, LAWA has determined that potentially significant effects may occur in Air Quality, Biological Resources, Greenhouse Gas Emissions, Hazards and Hazardous Materials, Hydrology and Water Quality, Noise, Transportation/Traffic, and Mandatory Findings of Significance. As a result, these issues will be evaluated further in the Runway 6L-24R Safety Area and Associated Improvements EIR.

LAWA has determined that no significant impacts would occur to Aesthetics, Agriculture and Forestry Resources, Cultural Resources, Geology and Soils, Land Use and Planning, Mineral Resources, Population and Housing, Public Services, Recreation, and Utilities and Service Systems. Therefore, these topics will not be evaluated further in the Runway 6L-24R Safety Area and Associated Improvements EIR unless identified through public comments during the 30-day comment period associated with circulation of the Notice of Preparation (NOP) for this EIR.

1.7 Required Approvals/Consultations

1.7.1 FEDERAL

- U.S. Department of Transportation, FAA approval of a Notice of Construction or Alteration to ensure safe and efficient operations during the construction of the Project. LAWA and its selected contractor would submit FAA Form 7460-1 "Notice of Proposed Construction or Alteration."
- FAA approval of NEPA documentation assessing the proposed Project.

1.7.2 STATE AND REGIONAL ACTIONS

- South Coast Air Quality Management District review for proposed project conformity with the State Implementation Plan and any permits required under the Clean Air Act for stationary sources.
- The State Water Resources Control Board (SWRCB) and nine Regional Water Quality Control Boards (RWQCBs) administer regulations regarding water quality in the State. Permits or approvals required from the SWRCB and/or RWQCB may include but are not be limited to: (1) General Construction Storm Water Permit; (2) Standard Urban Stormwater Mitigation Plan; and (3) Submittal of a Recycled Water Report to the RWQCB for the use of recycled water as a dust control measure for construction.

1.7.3 LOCAL

- Certification of the Final EIR for the Runway 6L-24R Safety Area and Associated Improvements.
- LAX Plan Compliance Review in accordance with Section 7 of the LAX Specific Plan.
- Preparation of a Project-specific Storm Water Management Plan or Standard Urban Storm Water Mitigation Plan for approval by the Bureau of Sanitation, Watershed Protection Division.
- Los Angeles Fire Department approval.
- Grading permits, building permits, and other permits issued by the Department of Building and Safety for the project and any associated Department of Public Works permits for infrastructure improvements.
- Other federal, state, or local approvals, permits, or actions that may be deemed necessary for the project.

2. Explanation of Initial Study Checklist Determinations

The following analysis provides supporting documentation for the determinations presented in the Initial Study Checklist. Each response provided below evaluates how the Runway 6L-24R Safety Area and Associated Improvements (the proposed Project) as defined in the Project Description may affect existing environmental conditions at the Project site and in the surrounding area. The Environmental Impact Report (EIR) will further evaluate topics where the potential for a significant impact has been identified. The EIR will analyze the identified potentially significant impacts and, where appropriate, identify mitigation measures and explain how such measures would reduce significant impacts.

I. Aesthetics

Would the project:

a. Have a substantial adverse effect on a scenic vista?

b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings, within a state scenic highway?

***a-b. No Impact**. The Project site is located in the North Airfield Complex at LAX, an area that has been extensively disturbed and is developed with airport uses. The Pacific Ocean is the only scenic vista in the vicinity of the Project site and the primary vista-related sensitive uses are residences located to the north and south of the Airport property. As the improvements associated with the proposed Project are on the ground and those elements already exist on the Project site, there will be no impacts to viewsheds.*

The Project site is not located within a state scenic corridor and would not damage any scenic resources. Vista Del Mar, a City of Los Angeles-designated scenic highway, is located 0.40 miles west of the Project site; however, the Project site is not located within or visible from Vista Del Mar and views of the Project site from Vista Del Mar are blocked by the Los Angeles/El Segundo Dunes. The Project site also does not contain scenic resources, such as trees, rock outcroppings, historic buildings, or other locally recognized desirable aesthetic features.

Therefore, no impacts would occur to scenic vistas or to scenic resources within a city-designated highway and this topic will not be evaluated further in the EIR and no mitigation is required.

c. Substantially degrade the existing visual character or quality of the site and its surroundings?

***c. No Impact.** The improvements associated with the proposed Project will not change the visual character of the Project site and are consistent with the existing industrial character of LAX and the surrounding area. While the Project site has several small patches of vegetation, there are no*

landscaping or other features of aesthetic value on site to be affected. The construction would be designed and constructed to adhere with applicable LAX Street Frontage & Landscape Development Plan Update[8] requirements and the LAX Master Plan[9] commitments and mitigation measures designed to ensure aesthetic and visual compatibility with adjacent development and public streets. Compliance with applicable policies and LAX Master Plan commitments and mitigation measures would ensure that Project construction activities incorporate the necessary screening, buffering, landscaping, and other design measures to avoid significant adverse aesthetics impacts to neighborhoods to the north.

- *LAX Street Frontage & Landscape Development Plan Update Policy 1.4: Storage and industrial uses such as fueling, loading, and maintenance at cargo areas shall comply with the requirements of Airport Security, and should be screened from streets by decorative walls, berms, and/or appropriate landscaping, as feasible and practical.*

- *LAX Street Frontage & Landscape Development Plan Update Policy 1.5: Open areas not used for buildings, driveways, or parking lots should be planted, irrigated, and/or maintained on a regular basis.*

- *LAX Street Frontage & Landscape Development Plan Update Policy 1.7: Vegetation should be used to soften solid screening walls as feasible and practical, and shall comply with the requirements of Airport Security.*

- *LAX Street Frontage & Landscape Development Plan Update Policy 6.2: Perimeter landscape areas shall comply with the City of Los Angeles Landscape Ordinance as outlined by the LAX Specific Plan and all other applicable local codes and regulations, as feasible and practical.*

- *LAX Master Plan Mitigation Measure MM-DA-1. 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.*

[8] City of Los Angeles, Los Angeles World Airports (LAWA), *LAX Street Frontage & Landscape Development Plan Update*, March 2005.

[9] City of Los Angeles, Los Angeles World Airports (LAWA), *Final Environmental Impact Statement/Environmental Impact Report, Los Angeles International Airport Proposed Master Plan Improvements, SCH#1997061047*, April 2004.

Therefore, there would be no impact degrading the existing visual character or quality of the site or its surroundings, and this topic will not be evaluated further in the EIR and no mitigation is required.

d. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

d. No Impact. *The FAA maintains requirements for airfield and terminal area lighting aids and navigational systems for all U.S. airports. However, the proposed Project would not include installation of additional lighting aids; closure of parking areas east of Runway 24R may result in a reduction of lights in this area of the airport. Therefore, there would be no impact related to lighting and glare and no further analysis is required in the EIR.*

II. Agriculture and Forestry Resources

Would the project:

a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program in the California Resources Agency, to non-agricultural use?

b. Conflict with the existing zoning for agricultural use, or a Williamson Act Contract?

c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?

d. Result in the loss of forest land or conversion of forest land to non-forest use?

e. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?

a-e. No Impact. *The Project site is located within a fully-developed airport, is surrounded by airport-related uses, and has been disturbed and paved. There are no farmlands that are considered prime, unique or of statewide or local importance in the vicinity of the Project site. No agricultural resources or operations currently exist, or have existed in the recent past on the Project site or the vicinity of the Project site.*[10] *Furthermore, there are no Williamson Act contracts in effect on the Project site or surrounding areas. Additionally, no forest or timberland resources exist at the Project*

[10] City of Los Angeles, Los Angeles World Airports (LAWA), *Final Environmental Impact Report, Los Angeles International Airport Proposed Master Plan Improvements,* April 2004.

site or in the vicinity of the Project site. Consequently, the proposed Project would not conflict with existing zoning for, or cause rezoning of, forest land or timberland (including timberland zoned as Timberland Production) or result in the loss or conversion of forest land to non-forest use.

Therefore, no impacts to agricultural and forestry resources would occur, this topic will not be evaluated further in the EIR, and no mitigation is required.

III. Air Quality

Would the project:

a. Conflict with or obstruct implementation of the applicable air quality plan?

b. Violate any air quality standard or contribute substantially to an existing or projected air quality violation?

c. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?

d. Expose sensitive receptors to substantial pollutant concentrations?

e. Create objectionable odors affecting a substantial number of people?

a-e. Potentially Significant Impact. *The Project site is located within the South Coast Air Basin (Basin) which is under the jurisdiction of the South Coast Air Quality Management District (SCAQMD). At the federal and state levels, the Basin is designated as a nonattainment area for ozone (O_3), respirable particulate matter (PM_{10}), fine particulate matter ($PM_{2.5}$), and lead (Pb). The nearest existing receptors are residential uses located north of Westchester Parkway in the City of Los Angeles community of Westchester, 800 feet to the north. Air emissions associated with construction activities and operations consist of carbon monoxide (CO), oxides of nitrogen (NOx), particulate matter (PM_{10} and $PM_{2.5}$), sulfur dioxide (SOx), volatile organic compounds (VOC), and lead (Pb). These emissions related to construction of the proposed Project may exceed the SCAQMD CEQA thresholds, which could violate air quality standards or contribute to an existing air quality violation. These results may occur even after including the extensive air emissions control measures that LAWA currently employs and the measures mandated and recommended by SCAQMD. Furthermore, closure of Runway 6L-24R during pavement reconstruction could impact airport operations by increasing aircraft delay/taxi times, thereby potentially increasing operational air pollutant emissions.*

The construction equipment would be used entirely within the airport property and would not produce substantial offsite pollutant concentrations or odors given their low release heights. In addition, the nature of soil disturbance caused by tires and tracked equipment and of particle

dispersions from moving vehicles would not produce substantial off-site impact. However, depending on the location of the off-road equipment and the extent of calm wind periods, there remains the potential for occasional exceedance of air quality standards offsite. The exceedance would be short-term and likely not continuous, depending on the daily construction schedule and sequence. Additionally, pavement operations could result in the creation of odors offsite. The nearest sensitive receptors are located approximately 800 feet to the north of the Project site. Analyses performed by the California Air Resource Board (CARB) indicate that providing a separation of 1,000 feet from diesel sources and high traffic areas substantially reduces diesel particulate concentrations and public exposure.[11]

Therefore, because of potential significant impacts, this topic will be evaluated further in the EIR.

IV. Biological Resources

Would the project:

a. Have a substantial adverse effect, either directly or through habitat modification, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

a. Less Than Significant Impact with Mitigation Incorporated. *The proposed Project is located entirely on airport property, with surrounding areas largely developed, and the majority of undeveloped areas supporting ruderal and ornamental vegetation. The only exception is the area north of Runway 6L-24R, which supports an area of riparian vegetation (Sandbar Willow Thicket and California Bulrush Marsh) associated with the Argo Ditch.*[12]

A Biological Assessment was conducted for the Project site in June and July of 2013 which included site surveys of the proposed Project site. According to the assessment:[13]

> *The north Airfield Area is a highly developed area consisting of two paved runways, several paved taxiways and roads, dirt roads, the Argo Ditch, and several semi-natural unpaved areas. Paved areas are frequently used by aircraft and support vehicles. Unpaved areas are located between runways and taxiways with larger areas occurring to the west and north of the northernmost runway as well as in between the two runways. All unpaved areas within*

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11 California Air Resources Board, *Air Quality and Land Use Handbook: A Community Health Perspective*, 2005.

12 *City of Los Angeles, Los Angeles World Airports (LAWA), Draft Environmental Impact Report, Los Angeles International Airport (LAX) Specific Plan Amendment Study, Section 4.3, July 2012.*

13 *Sapphos Environmental, Inc., Biological Assessment: Los Angeles International Airport Runway 6L-24R Safety Area and Associated Improvements Project, August 2013.*

the north Airfield Area are annually or semiannually subject to wildlife hazards maintenance activities that include mowing, trimming, disking and other vegetation removal procedures.

There are 10 federally listed wildlife species that were identified during a search of the California Department of Fish and Wildlife's California Natural Diversity Database (CNDDB) for the proposed Project. None of these species, nor habitat for these species, is present within the Project site. The western burrowing owl (Athene cunicularia) is a California Species of Special Concern when nesting and at some wintering sites. This species inhabits shortgrass prairies, grasslands, lowland scrub, agricultural lands (particularly rangelands), coastal dunes, desert floors, and some artificial, open areas as a year-long resident. It occupies abandoned ground squirrel burrows as well as artificial structures such as culverts and underpasses.[14] Surveys conducted in 1998 for the LAX Master Plan EIR determined that this species was present as a winter resident within the Los Angeles/El Segundo Dunes and absent from the LAX airfield. Focused breeding season surveys conducted in June 2009 for the Bradley West Project within the western portion of LAX, south of World Way West and just east of Pershing Drive, did not detect any burrowing owls.[15] A single winter burrowing owl was reported along the Argo Ditch north of the midpoint of Runway 6L-24R in the fall of 2011 by LAX personnel and again on December 1, 2011 by biologists working for LAWA.[16] An additional observation of a single winter burrowing owl was reported west of the western end of the northern runways by LAX personnel (Peggy Nguyen and C. Lin Wang) on February 13, 2012.[17]

The LAX Specific Plan Amendment Study (SPAS) Draft EIR includes the following measure from Section 4.3.7, Mitigation Measures, which would apply to the proposed Project.

LAX SPAS Mitigation Measure MM-BIO (SPAS)-10. Conservation of Faunal Resources: Burrowing Owl. *Prior to any work activities (i.e., vegetation clearing, invasive species removal and/or spraying, and sediment removal), a survey for burrows by a qualified wildlife biologist will be conducted by walking through the suitable habitat within the site (generally the Argo Ditch and Los Angeles/El Segundo Dunes, as well as any other area deemed suitable by the qualified biologist) in accordance with California Department of Fish and Wildlife (CDFW)-accepted protocols. If a work site contains burrows that could be used by burrowing owls, four additional surveys will be conducted during the burrowing owl breeding season (April 15 through July 15). If an active burrow is observed during the nesting season, the burrow will be protected until nesting activity has ended.*

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14 *City of Los Angeles, Los Angeles World Airports (LAWA), Draft Environmental Impact Report, Los Angeles International Airport (LAX) Specific Plan Amendment Study, Section 4.3, July 2012.*

15 *BonTerra Consulting, Results of Focused Burrowing Owl Surveys for the Tom Bradley International Terminal Reconfiguration Project in the City of Los Angeles, Los Angeles County, California, October 6, 2009.*

16 *Pitlik, Todd, Wildlife Biologist, United States Department of Agriculture, Personal Communication, November 10, 2011 as referenced in City of Los Angeles, Los Angeles World Airports (LAWA), Draft Environmental Impact Report, Los Angeles International Airport (LAX) Specific Plan Amendment Study, Section 4.3, July 2012.*

17 *City of Los Angeles, Los Angeles World Airports (LAWA), Draft Environmental Impact Report, Los Angeles International Airport (LAX) Specific Plan Amendment Study, Section 4.3, July 2012.*

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 wildlife 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 wildlife 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. 150/5200-33B "Hazardous Wildlife Attractants on or Near Airports" and LAWA's "LAX Wildlife Hazard Management Plan."

If nesting individuals are observed, LAWA or its designee shall have a qualified wildlife biologist develop and implement a habitat replacement plan to compensate for the loss of habitat associated with the project. The habitat replacement plan shall replace lost habitat value with equal or greater habitat value, and shall follow the methodology outlined in the CDFW Staff Report on Burrowing Owl Mitigation. The habitat replacement will occur in the Los Angeles/El Segundo Dunes in a location approved by LAWA's USDA Wildlife Hazard Biologist that will be consistent with FAA Advisory Circular No. 150/5200-33B "Hazardous Wildlife Attractants on or Near Airports" and LAWA's "LAX Wildlife Hazard Management Plan", or at an off-site location to avoid potential conflicts with aircraft activities at LAX.

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 immediate area in and around the construction and construction staging areas on a monthly basis between September and January. Removal may include physically collapsing the burrows or installing one-way exit doors in burrow entrances. Such maintenance will continue annually until such time as construction areas are fully in use and/or developed and no longer contain suitable habitat for burrowing owls.

With implementation of the above mitigation measure, impacts to species identified as a candidate, sensitive, or special status species would be less than significant; thus, this topic will not be evaluated further in the EIR.

b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

c. Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

b-c. Potentially Significant Impact. *The proposed Project is located entirely on airport, with surrounding areas largely developed, and the majority of undeveloped areas supporting ruderal and ornamental vegetation. The only exception is the area north of Runway 6L-24R, which supports an*

area of riparian vegetation (Sandbar Willow Thicket and California Bulrush Marsh) associated with the Argo Ditch.[18]

The Argo Ditch is a drainage feature that carries storm flows through the airport property and is located approximately 450 to 500 feet north of Runway 6L-24R. The feature originates near the northeast corner of the airport, immediately south of Lincoln Boulevard and east of the eastern limits of Runway 6L-24R, where a concrete outlet structure discharges storm water and nuisance water into the feature. Flows travel from east to west for a distance of approximately 9,800 feet and leave the site at a concrete inlet located approximately 300 feet beyond the western terminus of Runway 6L-24R.

The Argo Ditch varies in depth from approximately 30 to 35 feet and the slopes support upland (UPL) ruderal vegetation dominated by wild oat (Avena fatua, UPL), ripgut (Bromus diandrus, UPL), fountain grass (Pennisetum setaceum, UPL), deerweed (Acmispon glaber, UPL), wild radish (Raphanus sativus, UPL), Russian thistle (Salsola tragus, UPL), yellowstar thistle (Centaurea solstitialis, UPL), giant horseweed (Erigeron canadensis, facultative, [FAC]), telegraph weed (Heterotheca grandiflora, UPL), white sweet-clover (Melilotus albus, facultative upland [FACU]), and Spanish clover (Lotus purshianus, UPL).[19]

Flows are confined to the bottom of the drainage channel, which varies in width from 12 to 43 feet. Wetlands occur within the majority of the eastern 5,900 feet of the drainage channel and are supported by a combination of storm discharge and nuisance flow. In addition to the storm drain outlet at the eastern origin of the channel, smaller storm drain discharge points occur at various points along the Argo Ditch, with the wettest areas concentrated at the discharge points. As such, the wetlands within the Argo Ditch exhibit a range of characteristics, with areas at the discharge points characterized by strong wetland indicators, which weaken with distance from areas of storm or nuisance discharge.

Vegetation associated with the Argo Ditch in the vicinity of the portion of channel proposed to be covered:[20]

> *Sandbar Willow Thicket: Approximately 0.21 acre of Sandbar Willow Thicket (no CNDDB Element Code; CDFW/CDDDB Alliance Code 61.209.01; Global/State Ranking G5 S4) occurs in a few small patches in the bottom of the Argo Ditch.*

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18 *City of Los Angeles, Los Angeles World Airports (LAWA), Draft Environmental Impact Report, Los Angeles International Airport (LAX) Specific Plan Amendment Study, Section 4.3, July 2012.*

19 *City of Los Angeles, Los Angeles World Airports (LAWA), Draft Environmental Impact Report, Los Angeles International Airport (LAX) Specific Plan Amendment Study, Section 4.3, July 2012.*

20 *City of Los Angeles, Los Angeles World Airports (LAWA), Draft Environmental Impact Report, Los Angeles International Airport (LAX) Specific Plan Amendment Study, Section 4.3, July 2012.*

Ruderal (Argo Ditch): Approximately 2.45 acres of the biological resources study area is classified as Ruderal (Argo Ditch) (no CNDDB Element Code; not well described by any CDFW/CDDDB Alliance Code; no Global/State Ranking). This includes portions of the Argo Ditch where riparian and wetland vegetation have not become established, and non-native upland species occur, including yellow-star thistle (Centaurea solstitialis), long-beaked filaree (Erodium botrys), ripgut (Bromus diandrus), wild oat (Avena fatua), and Italian ryegrass (Lolium multiflorum).

As construction activities will take place within the Argo Ditch, there may be potentially significant impacts to the biological resources within the Project area; thus, this topic will be studied further in the EIR.

d. Interfere substantially with the movement of any resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

d. Less Than Significant Impact with Mitigation Incorporated. *The proposed Project is located entirely on airport property, with surrounding areas largely developed, and the majority of undeveloped areas supporting ruderal and ornamental vegetation. The only exception is the area north of Runway 6L-24R, which supports an area of riparian vegetation (Sandbar Willow Thicket and California Bulrush Marsh) associated with the Argo Ditch.[21] Unpaved areas are located between runways and taxiways with larger areas occurring to the west and north of the northernmost runway as well as in between the two runways. All unpaved areas within the north Airfield Area are annually or semiannually subject to wildlife hazards maintenance activities that include mowing, trimming, disking and other vegetation removal procedures.*

Twenty-two wildlife species were observed during the 2013 surveys. There were two insect species, three reptile species and 17 bird species recorded at the project site.[22] Overall, the abundance of wildlife was considered low with flying wildlife, such as butterflies and birds, accounting for most wildlife observations. Terrestrial wildlife was limited to a handful of reptile species observations. No fish or mammal species were observed during the surveys. Degraded small mammal burrows were observed near the runways but none showed signs of recent activity. Limited habitat for fish or wildlife species is present within the Project site and less than significant impacts to the movement of any resident or migratory fish or wildlife species, established resident or migratory wildlife corridors, or to native wildlife nursery sites would occur. The LAX Specific Plan Amendment Study

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21 *City of Los Angeles, Los Angeles World Airports (LAWA), Draft Environmental Impact Report, Los Angeles International Airport (LAX) Specific Plan Amendment Study, Section 4.3, July 2012.*

22 Sapphos Environmental, Inc., *Biological Assessment: Los Angeles International Airport Runway 6L-24R Safety Area and Associated Improvements Project*, August 2013.

(SPAS) Draft EIR includes the following measure from Section 4.3.7, Mitigation Measures, which would apply to the proposed Project.

LAX SPAS Mitigation Measure MM-BIO (SPAS)-12. Conservation of Faunal Resources: Nesting Birds/Raptors. *For those areas of the project site that 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 clearing for the proposed project shall be conducted outside the nesting season if feasible. If this is not feasible, then a qualified wildlife biologist shall inspect the shrubs/trees prior to project activities to ensure that no nesting birds/raptors are present. If the biologist finds an active nest within the construction area and determines that the nest may be impacted, the wildlife biologist will delineate an appropriate buffer zone; the size of the buffer zone will depend on the species and the type of construction activity. 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 wildlife 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. Netting or other bird exclusion methods shall be used to discourage birds from nesting in construction equipment and facilities, if determined by the wildlife biologist to be necessary. These construction avoidance measures will be coordinated with LAWA's USDA Wildlife Hazard Biologist and will be consistent with FAA Advisory Circular No. 150/5200-33B "Hazardous Wildlife Attractants on or Near Airports" and LAWA's "LAX Wildlife Hazard Management Plan" to avoid increasing wildlife hazards to aircraft.*

With implementation of the above mitigation measure, impacts to resident or migratory fish or wildlife species or with established resident or migratory wildlife corridors would be less than significant; thus, this topic will not be evaluated further in the EIR.

e. Conflict with any local policies or ordinances protecting biological resources, such as tree preservation policy or ordinance?

f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

e-f. No Impact. *There is no adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan that includes any part of the proposed Project site or its immediate vicinity. The Los Angeles/El Segundo Dunes Specific Plan Area is located at the far western boundary of LAX in the land bordered by Pershing Drive to the east, Vista Del Mar Boulevard to the west, Imperial Highway to the south, and Waterview Street and Napoleon Street to the north. This area also includes the 200-acre El Segundo Blue Butterfly Habitat Restoration Area. This area is well removed from the Project site with more than 2,500 feet of separation; the Project would not affect these areas.*

V. Cultural Resources

Would the project:

a. Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?

a. Less Than Significant Impact. *The LAX Master Plan EIR included historical resources surveys. Previously identified historical resources at LAX include the following:*

- *Hangar One (listed on the National Register of Historic Places) on the southeastern portion of LAX near the northwest corner of Aviation Boulevard and Imperial Highway (approximately 1.0 miles from Project Site);*
- *Theme Building (eligible for the National Register of Historic Places) in the center of the LAX terminals (approximately 1,500 feet from Project Site);*
- *WWII Munitions Storage Bunker (eligible for the National Register of Historic Places) near the western boundary of LAX (approximately 3,400 feet from Project Site); and*
- *Intermediate Terminal Complex (eligible for the California Register of Historical Resources) east of the Central Terminal Area and south of Century Boulevard between Sepulveda Boulevard and Airport Boulevard (approximately 3,300 feet from Project Site).*

The proposed Project would not affect any of the historical resources identified above. Therefore, less than significant impacts related to historic resources would occur.

Cultural resource surveys were conducted in June and July 2013 for the proposed Project area. Record searches and an intensive pedestrian survey of the proposed Project area identified two historic period (greater than 50 years old) cultural resources, the Argo Ditch and El Manor Avenue within the area of potential effects (APE). These historic period cultural resources were determined to be ineligible for federal, state, or local designation.[23]

The proposed Project would impact the cultural resources identified above. However, since these resources were determined to be ineligible for federal, state, or local designation the proposed Project would have a less than significant impact on historical resources.

[23] *Sapphos Environmental, Inc., Runway 6L-24R Safety Area and Associated Improvements Project: Cultural Resources Technical Report, August 2013.*

b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?

b. Less Than Significant with Mitigation Incorporated. *The LAX Master Plan EIR identified 36 previously recorded archaeological sites within a radius of approximately 2 miles of LAX, including 8 sites located on LAX property.[24] None of these eight sites are located within the Project site or in its immediate vicinity. Any resources that may have existed on the Project site at one time are likely to have been displaced and, as a result, the potential for the Project to impact buried resources is low. However, excavation into native soils is necessary to construct the Project, which could potentially result in the destruction of archaeological resources. Because a significant impact to archaeological resources could occur, LAX Master Plan Mitigation Measure HA-4 through HA-10 will be required.[25,26]*

LAX Master Plan Mitigation Measure MM-HA-4. Discovery. *The FAA shall prepare an archaeological treatment plan (ATP), in consultation with the 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. 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: OHP Archaeological Resources Management.*

LAX Master Plan Mitigation Measure MM-HA-5. Archaeological Monitoring. *Any grading and excavation activities within LAX property 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. The archaeologist shall be retained by LAWA and 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 significant or unique archaeological/cultural find has been unearthed, LAWA 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. Upon discovery of an archaeological resource or*

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[24] City of Los Angeles, Los Angeles World Airports (LAWA), *Final Environmental Impact Report, Los Angeles International Airport Proposed Master Plan Improvements,* Section 4.9.1, April 2004.

[25] *This mitigation measure requires preparation of an Archaeological Treatment Plan (ATP) to ensure the long-term protection and proper treatment of archaeological discoveries of federal, state, and/or local significance found during LAX Master Plan implementation. Subsequent to the publication of the LAX Master Plan EIR, the ATP was prepared, thereby satisfying the requirements of MM-HA-4. The ATP provides additional information and guidance for understanding the conditions and implementation of Mitigation Measures MM-HA-4 through MM-HA-10 and, in effect, supersedes these mitigation measures.*

[26] City of Los Angeles, Los Angeles World Airports (LAWA), LAX Master Plan Alternative D Mitigation Monitoring and Reporting Program, September 2004.

Native American remains, LAWA shall retain a Native American monitor from a list of suitable candidates obtained from the Native American Heritage Commission.

LAX Master Plan Mitigation Measure MM-HA-6. Excavation and Recovery. *Any excavation and recovery of identified resources (features) shall be performed using standard archaeological techniques and the requirements stipulated in the Archaeological Treatment Plan (ATP). Any excavations, testing, and/or recovery of resources shall be conducted by a qualified archaeologist selected by LAWA.*

LAX Master Plan Mitigation Measure MM-HA-7. 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.*

LAX Master Plan Mitigation Measure MM-HA-8. 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. The report shall be submitted in draft form to the FAA, LAWA, and City of Los Angeles-Cultural Affairs Department. City representatives shall have 30 days to comment on the report. All comments and concerns shall be addressed in a final report issued within 30 days of receipt of city comments.*

LAX Master Plan Mitigation Measure MM-HA-9. 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 requirements.*

Mitigation Measure MM-HA-10. 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.*

Implementation of mitigation measures would ensure that potential impacts associated with archaeological resources would be reduced to a less than significant level. As such, no further analysis of potential impacts to archeological resources is required for the EIR.

c. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

c. Less Than Significant Impact with Mitigation Incorporated. *As indicated in the LAX Master Plan EIR, the LAX property lies in the northwestern portion of the Los Angeles Basin, a broad structural syncline with a basement of older igneous and metamorphic rocks overlain by thick younger marine and terrestrial deposits. The LAX Master Plan EIR identified the presence of five vertebrate fossil occurrences within the vicinity of the Project site and one within two miles from the center of the LAX property. These fossils were found at depths ranging from 13 to 70 feet.*[27]

As the proposed Project would require excavation to a depth of approximately three feet for some elements, and would be located in areas that have been previously disturbed, impacts to paleontological resources would probably not occur. However, according to the July 2013 Cultural Resources Technical Report, a review of the literature suggests there is a relatively high likelihood of discovering paleontological and archaeological resources within the APE. This conclusion suggests that unanticipated discoveries of paleontological and archaeological resources may occur from ground-disturbing activities associated with the implementation of the proposed Project. The disturbance or destruction of potentially significant undiscovered resources by construction-related activities would be considered a significant effect unless mitigated. It is recommended that procedures outlined in the Paleontological Management Treatment Plan[28] *completed pursuant to Mitigation Measures PA-1 of the LAX Master Plan Mitigation Monitoring and Reporting Program (MMRP) be followed to ensure the long-term protection and proper treatment of those unexpected paleontological and archaeological discoveries of federal, state, and/or local significance found within the APE.*

LAX Master Plan MM-PA-I. 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 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 selection of the paleontologist and the development of the monitoring and treatment plan shall be subject to approval by the Vertebrate Paleontology Section of the LACM to comply with paleontological requirements as appropriate.*

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[27] City of Los Angeles, Los Angeles World Airports (LAWA), *Final Environmental Impact Report, Los Angeles International Airport Proposed Master Plan Improvements*, April 2004.

[28] Los Angeles World Airports. December 2005. *Paleontological Management Treatment Plan*. Prepared by: Brian F. Smith and Associates, San Diego, CA.

With implementation of MM-PA-1, potential impacts to paleontological resources would be less than significant. As such, no further analysis of potential impacts to paleontological resources is required for the EIR.

d. Disturb any human remains, including those interred outside of formal cemeteries?

d. No Impact. *The Project site is in a highly developed area dedicated to aviation-related uses. Within LAX, any traditional burials would likely be associated with the Native American group known as the Gabrielino. Based on previous surveys conducted at LAX and the results of record searches completed in 1995, 1997, and 2000 for the LAX Master Plan EIR, no traditional burial sites have been identified within the LAX boundaries or in the vicinity of the Airport. Additionally, the July 2013 cultural resource surveys found no known cemeteries or burial sites within the proposed Project site. This report concluded that the proposed Project would not directly disturb human remains. The proposed Project would require excavation to a depth of approximately 3 feet for some elements and would be located in areas that have been previously disturbed. It is unlikely that human remains would be encountered. However, if human remains were encountered, all grading and excavation activities in the vicinity would cease immediately, and the appropriate LAWA authority would be notified. Compliance with the 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 is required. Therefore, no impacts associated with human remains would occur, and no further analysis of this issue is required for the EIR.*

VI. Geology and Soils

Would the project:

a. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:

i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.

a.i. Less Than Significant Impact. *Fault rupture is the displacement that occurs along the surface of a geologic fault during an earthquake. As indicated in the LAX Master Plan EIR, while the Project site is located within the seismically active Southern California region, it is not located within an Alquist-Priolo Special Study Zone.*[29] *Geotechnical literature indicates that the Charnock Fault, a potentially active fault, may be located near or run through the eastern portions of LAX,*

[29] *City of Los Angeles, Los Angeles World Airports (LAWA), Final Environmental Impact Report, Los Angeles International Airport Proposed Master Plan Improvements, Section 4.22, April 2004.*

approximately 2,000 feet east of the Project site.[30] However, as stated in the LAX Master Plan EIR, subsequent evaluation indicates that the Charnock Fault is considered to have low potential for surface rupture independently or in conjunction with movement on the Newport-Inglewood Fault Zone, which is located approximately three miles east of LAX.[31]

Therefore, impacts related to rupture of a known earthquake fault would be less than significant and further analysis is not required in the EIR.

ii. Strong seismic ground shaking?

a.ii. Less Than Significant Impact. *The Project site is located in the seismically active Southern California region; however, there is no evidence of faulting at the Project site, and the Project site is not located within an Alquist-Priolo Special Study Zone.[32] Nevertheless, all construction would be designed in accordance with the provisions of FAA Advisory Circulars 150/5300-13A, 5320-6E, and 5370-10E, regarding seismic construction materials and methods.*

All construction would comply with the UBC and LABC requirements; thus, potential impacts associated with strong seismic ground shaking would be less than significant, and no further analysis of potential impacts associated with seismic ground shaking is required in the EIR.

iii. Seismic-related ground failure, including liquefaction?

a.iii. No Impact. *Liquefaction is a seismic hazard that occurs when strong ground shaking causes saturated granular soil (such as sand) to liquefy and lose strength. The susceptibility of soil to liquefy tends to decrease as the density of the soil increases and the intensity of ground shaking decreases. As indicated in the LAX Master Plan EIR, the depth to groundwater at LAX is generally greater than 90 feet, which would indicate that the Project site has a very low susceptibility to liquefaction. However, perched groundwater[33] conditions have been noted in the upper 20 to 60 feet at some locations at LAX, and the density of sand deposits in the upper 30 feet is generally considered medium to low. Liquefaction could, therefore, occur in localized areas; however, the overall potential for liquefaction at LAX is considered low.[34]*

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30 *City of Los Angeles, Los Angeles World Airports (LAWA), Final Environmental Impact Report, Los Angeles International Airport Proposed Master Plan Improvements, Earth/Geology Technical Report, January 2001.*

31 *City of Los Angeles, Los Angeles World Airports (LAWA), Final Environmental Impact Report, Los Angeles International Airport Proposed Master Plan Improvements, Section 4.22, April 2004.*

32 *City of Los Angeles, Los Angeles World Airports (LAWA), Final Environmental Impact Report, Los Angeles International Airport Proposed Master Plan Improvements, Section 4.22, April 2004.*

33 *Perched groundwater is groundwater that is generally shallow and is isolated and not connected to an aquifer.*

34 *City of Los Angeles, Los Angeles World Airports (LAWA), Final Environmental Impact Report, Los Angeles International Airport Proposed Master Plan Improvements, Section 4.22, April 2004.*

Seismically induced ground shaking also can cause slope-related hazards through various processes including slope failure, lateral spreading[35], flow liquefaction, and ground lurching.[36] Because existing slopes in the LAX vicinity are relatively small in area and of low angle and height (less than 15 feet) the overall potential for such failures is considered to be low.[37]

The California Department of Conservation (CDC) is mandated by the Seismic Hazards Act of 1990[38] to identify and map the state's most prominent earthquake hazards in order to help avoid damage resulting from earthquakes. The CDC's Seismic Hazard Zone Mapping Program charts areas prone to liquefaction and earthquake-induced landslides throughout California's principal urban and major growth areas. According to the Seismic Hazard Map for the Inglewood Quadrangle, no potential liquefaction zones are located within the vicinity of LAX. Isolated zones of potential seismic slope instability are identified near the western edge of LAX, within the dune area to the west of the Project site.[39]

Finally, the proposed Project would comply with FAA Advisory Circulars 150/5300-13A, 5320-6E, and 5370-10E, regarding seismic construction materials and methods. Therefore, no impacts associated with seismic-related ground failure would occur, and no further analysis of this issue is required for the EIR.

iv. Landslides?

a.iv. No Impact. *The Project site and surrounding areas are relatively flat, primarily surrounded by existing airport and urban development. Furthermore, the City of Los Angeles Landslide Inventory and Hillside Areas map does not identify any areas in the vicinity of the Project site that contain unstable slopes prone to seismically produced landslides.[40] Implementation of the Project would not result in the exposure of people or structures to the risk of landslides during a seismic event and no further analysis of this issue is required for the EIR.*

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35 *Lateral Spreading is deformation of very gently sloping ground (or virtually flat ground adjacent to an open body of water) that occurs when cyclic shear stresses caused by an earthquake induce liquefaction. This reduces the shear strength of the soil, causing failure and "spreading" of the slope.*

36 *Ground lurching (and related lateral extension) is the horizontal movement of soil, sediments, or fill located on relatively steep embankments or scarps as a result of earthquake-induced ground shaking. Damage includes lateral movement of the slope in the direction of the slope face, ground cracks, slope bulging, and other deformations.*

37 *City of Los Angeles, Los Angeles World Airports (LAWA), Final Environmental Impact Report, Los Angeles International Airport Proposed Master Plan Improvements, Section 4.22, April 2004.*

38 *California Public Resources Code, §2690-2699.6 (Seismic Hazards Mapping Act of 1990).*

39 *City of Los Angeles, Los Angeles World Airports (LAWA), Final Environmental Impact Report, Los Angeles International Airport Proposed Master Plan Improvements, Section 4.22, April 2004.*

40 *City of Los Angeles Planning Department, Safety Element of the City of Los Angeles General Plan, Exhibit C, Landslide Inventory & Hillside Areas in the City of Los Angeles, June 1994.*

b. Would the project result in substantial soil erosion or the loss of topsoil?

b. Less Than Significant Impact. *The potential for soil erosion on the Project site is low due to its level topography. Construction of the proposed Project would include grading, excavation, and use of fill. Conformance with LABC Sections 91.7000 through 91.7016, which include construction requirements for grading, excavation, and use of fill, would reduce the potential for wind or waterborne erosion. In addition, the LABC requires an erosion control plan that is reviewed by the Department of Building and Safety prior to construction if grading exceeds 200 cubic yards and occurs during the rainy season (between November 1 and April 15). LAWA would be required to prepare an erosion control plan to reduce soil erosion.*

Therefore, impacts related to soil erosion would be less than significant and no further analysis of this issue is required for the EIR.

c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?

c. Less Than Significant Impact. *Settlement of foundation soils beneath engineered structures or fills typically results from the consolidation and/or compaction of the foundation soils in response to the increased load induced by the structure or fill. The presence of undocumented and typically weak artificial fill at LAX creates the potential for settlement. The Lakewood Formation also includes some silt and clay layers prone to settlement. However, foundation design features and construction methods can reduce the potential for excessive settlement at LAX.*[41] *As the proposed Project will be utilized by heavy aircraft, the FAA has specific requirements to ensure that the pavement supports the anticipated weights during operations which will be incorporated into the design of the proposed Project. Project design and construction would be required to adhere to engineering and design recommendations of a geological and/or soils report required by LAMC Section 91.7006.2.*

Therefore, impacts related to soil settlement would be less than significant and no further analysis of this issue is required for the EIR.

d. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?

d. Less Than Significant Impact. *Expansive soils are typically composed of certain types of silts and clays that have the capacity to shrink or swell in response to changes in soil moisture content.*

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41 *City of Los Angeles, Los Angeles World Airports (LAWA), Final Environmental Impact Report, Los Angeles International Airport Proposed Master Plan Improvements, April 2004.*

Shrinking or swelling of foundation soils can lead to damage to foundations and engineered structures including tilting and cracking. Fill materials located in some portions of LAX could be prone to expansion, and some portions of the Lakewood Formation found beneath the eastern portion of LAX, approximately 1,200 feet east of the Project site, may also be prone to expansion due to their high content of clay and silt.[42] As proposed Project construction would occur in accordance with the aforementioned FAA Advisory Circulars, which include construction requirements for grading, excavation, and foundation work, the potential for hazards to occur as a result of expansive soils would be minimized. All construction would occur in accordance with the LAMC Sections 91.7001 through 91.7016 and with the City of Los Angeles Department of Building and Safety requirements, which include construction requirements for grading, excavation, and foundation work, and the requirement to prepare a geological and/or soils report.

Therefore, impacts related to expansive soils would be less than significant and no further analysis of this issue is required for the EIR.

e. Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?

e. No Impact. *The Project site is located in an urbanized area where wastewater infrastructure is currently in place. The proposed Project would not use septic tanks or alternative wastewater disposal systems. Consequently, the ability of on-site soils to support septic tanks or alternative wastewater systems would not be relevant to the proposed Project.*

Therefore, no impacts related to septic tanks or alternative wastewater disposal systems would occur and no further analysis of this issue is required for the EIR.

VII. Greenhouse Gas Emissions

Would the project:

a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

b. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

a-b. Potentially Significant Impact. *Operationally, the proposed Project would not generate additional GHG emissions because it would not result in increased airport capacity. However,*

[42] *City of Los Angeles, Los Angeles World Airports (LAWA), Final Environmental Impact Report, Los Angeles International Airport Proposed Master Plan Improvements, Section 4.22, April 2004.*

construction of the Project may generate greenhouse gas emissions. As such, the EIR will evaluate the potential for the Project to have significant greenhouse gas emission impacts or to conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

VIII. Hazards and Hazardous Materials

Would the project:

a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

b. Create a significant hazard to the public or the environment through the reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment?

a-b. Less Than Significant Impact. *The proposed Project would not require changes in any routine transport, use, or disposal of hazardous materials associated with operations at the Airport. Construction of the proposed Project may involve the use of potentially hazardous materials, including vehicle fuels, oils, and transmission fluids. The quantities of these materials would not be significantly different than any other construction project of similar size. Furthermore, LAX has hazardous material spill protocols that would be implemented during construction and operations. During operations, the likelihood of exposure to hazardous materials from spills and/or releases would be similar to existing conditions. Compliance with the existing federal, state, and local regulations would reduce the potential for accidental release of hazardous materials. LAWA requires all contractors to comply with the following Master Plan mitigation measure to ensure compliance.*

Mitigation Measure MM-HM-2. Handling of Hazardous 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.

Therefore, impacts related to the routine transport, use, or disposal of hazardous materials or creation of a significant hazard to the public or environment through the reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment would be less than significant, and this topic will not be evaluated further in the EIR and no mitigation is required.

c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

c. Potentially Significant Impact. *Emerson Manor Elementary school in the City of Los Angeles community of Westchester is located approximately 1,200 feet (0.23 miles) from the Project site. Analyses performed by the CARB indicate that providing a separation of 1,000 feet from diesel sources and high traffic areas substantially reduces diesel particulate concentrations and public exposure.[43] However, as part of the air quality analysis, a human health risk assessment will be conducted to determine the effects of hazardous emissions on local residents, school children and workers.*

Therefore, as potentially significant impacts related to hazardous materials in the vicinity of a school could occur, this topic will be evaluated further in the EIR.

d. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

d. No Impact*. Government Code Section 65962.5 requires that the California Department of Toxic Substances Control (DTSC) compile and maintain a list of all hazardous substance release sites pursuant to Section 25356 of the Health and Safety Code. DTSC's list of sites that meet the criteria of HSC § 25356 has been compiled into a "Cortese" list. A review of this list has determined that the Project site is not located on a DTSC hazardous materials site.[44] Therefore, the proposed Project would have no impacts associated to hazardous materials sites, create a significant hazard to the public or the environment. As such, this issue does not require any further analysis in the EIR.*

e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?

e. Less Than Significant Impact. *The Project site is located within a public airport. Numerous safeguards are required by law to minimize the potential for and the effects from an accident if one were to occur. FAA's airport design standards establish, among other things, land use related guidelines to protect people and property on the ground, including establishment of safety zones that keep areas near runways free of objects that could interfere with aviation activities. City of Los Angeles Ordinance No. 132,319 regulates building height limits and land uses within the Hazard Area established by the Los Angeles Planning and Zoning Code to protect aircraft approaching and departing from LAX from obstacles. In addition to the many safeguards required by law, LAWA and*

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43 California Air Resources Board, *Air Quality and Land Use Handbook: A Community Health Perspective*, 2005.

44 *California Department of Toxic Substances Control, available at: www.envirostor.dtsc.ca.gov/public/. Accessed July 26, 2013.*

tenants of LAX maintain Emergency Response and Evacuation Plans that also serve to minimize the potential for and the effects of an accident.

The improvements associated with the Project would meet all applicable safety related design standards and would not result in a safety hazard for people residing or working in the Project area Therefore, this issue requires no further discussion in the EIR.

f. For a project within the vicinity of a private airstrip, would the project result in a safety hazard for the people residing or working in the project area?

f. No Impact. *The proposed Project is located approximately two miles northwest of Hawthorne Airport, the closest private airstrip. Although the proposed Project site is located near this private airstrip, as it is a larger airport, it is not in the flight path of airplanes using Hawthorne Airport. The proposed Project will not cause any long-term changes in departures and arrivals runway utilization, nor will it change the arrival or departure thresholds on Runway 24R. Therefore, people residing or working in the Project area within the vicinity of a private airstrip will not be exposed to safety hazards from the proposed Project. This topic will not be evaluated further in the EIR and no mitigation is required.*

g. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

g. Less Than Significant Impact with Mitigation Incorporated. *LAWA and tenants of LAX maintain Emergency Response Evacuation Plans to minimize the potential for and the effects of an accident, should one occur. Construction of the Project may result in temporary closures to local Airport circulation roads at LAX. However, this possible obstruction would be temporary and occur only at limited access points at any one time. Other areas of the Airport would be kept clear and unobstructed at all times during construction in accordance with FAA, State Fire Marshal, and Los Angeles Fire Code regulations. Local access would be adequately maintained during construction through detours and diversions and emergency access would be coordinated and ensured through the implementation of the following LAX Master Plan EIR commitments:*

LAX Master Plan Mitigation Measure MM-C-1. Establishment of Ground Transportation/ Construction Coordination Office. *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.*

LAX Master Plan Mitigation Measure MM-C-2. Construction Personnel Airport Orientation. *All construction personnel will be required to attend a pre-construction Airport project-specific orientation that includes where to park, where staging areas are located, construction policies, etc.*

LAX Master Plan Mitigation Measure MM-ST-9. Construction Deliveries. *Requires that construction deliveries needing lane closures receive prior approval from the Construction*

Coordination Office. The measure imposes that notification of deliveries be made with sufficient time to allow for any modifications of approved traffic detour plans.

LAX Master Plan Mitigation Measure MM-ST-12. Designated Truck Delivery Hours. *Defines the truck delivery hours for the project, which would avoid truck deliveries during peak traffic periods of 7:00 a.m. to 9:00 a.m. and 4:30 p.m. to 6:30 p.m.*

LAX Master Plan Mitigation Measure MM-ST-14. Construction Employee Shift Hours. *Defines the construction employee shift hours for the project, which should typically not coincide with peak traffic hours. To the extent possible and necessary, work periods would be extended to include weekends and multiple work shifts.*

LAX Master Plan Mitigation Measure MM-ST-16. Designated Haul Routes. *Every effort will be made to ensure that haul routes are located away from sensitive noise receptors.*

LAX Master Plan Mitigation Measure MM-ST-17. Maintenance of Haul Routes. *Haul routes will be maintained in compliance with the City of Los Angeles or other appropriate jurisdictional requirements for maintenance.*

LAX Master Plan Mitigation Measure MM-ST-18. Construction Traffic Management Plan. *A complete construction traffic plan will be developed for the project to designate detour and/or haul routes, variable message and other sign locations, communication methods with Airport passengers, construction deliveries, construction employee shift hours and parking locations, and other relevant information.*

LAX Master Plan Mitigation Measure MM-ST-19. Closure Restrictions of Existing Roadways. *Other than for short periods during nighttime construction, existing roadways will remain open until they are no longer needed for regular or construction traffic, unless temporary detour route is available.*

LAX Master Plan Mitigation Measure MM-ST-20. Stockpile Locations. *Stockpile locations will be where they can be accessed by construction vehicles with minimal or no disruption to adjacent streets.*

LAX Master Plan Mitigation Measure MM-ST-21. *Construction Employee Parking Locations: Construction employee parking locations will be placed where they can be accessed by employees with minimal or no disruption to adjacent streets.*

LAX Master Plan Mitigation Measure MM-ST-22. 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).*

With implementation of these commitments to the design of the proposed Project, impacts related

to emergency access and response plans would be less than significant, and this topic will not be evaluated further in the EIR and no mitigation is required.

h. Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?

h. No Impact. *The proposed Project is located in a developed, paved, urbanized area. There are no wildlands located within the Project site. In addition, the Project site is not within the City of Los Angeles Wildfire Hazard Area, as delineated in the Safety Element of the General Plan.*[45] *Consequently, the proposed Project would not expose people or structures to significant loss, injury, or death due to wildland fires.*

Therefore, no impacts related to wildland fires would occur, and no further analysis of this topic is required in the EIR.

IX. Hydrology and Water Quality

Would the project:

a. Violate any water quality standards or waste discharge requirements?

b. Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (i.e., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned land uses for which permits have been granted)?

a-b. Less Than Significant Impact. *The construction of the proposed Project would rehabilitate pavement and realign service roads, but would not change the topography or place structures that would significantly change the established drainage patterns. The proposed Project includes placement of a box culvert in the Argo Ditch, which would extend the existing box by approximately 500 feet. However, this would not significantly affect groundwater supplies or groundwater recharge in this area of the airport. In addition, the existing drainage system at LAX is sized to accommodate runoff from all impervious surfaces in the vicinity of the Project site. As such, the Project would not materially alter existing drainage patterns or surface water runoff rates or quantities.*

[45] City of Los Angeles Planning Department, Safety Element of the City of Los Angeles General Plan, Exhibit D, Selected Wildfire Hazard Areas In the City of Los Angeles, November 1996.

The agency with jurisdiction over water quality at LAX is the Los Angeles Regional Water Quality Control Board (LARWQCB). The Clean Water Act prohibits the discharge of pollutants to waters of the U.S. from any point source unless the discharge is in compliance with a National Pollutant Discharge Elimination System (NPDES) permit. In accordance with the Clean Water Act, LAX is within the area covered by NPDES Permit No. CAS004001 issued by the LARWQCB, and construction of the Project would be in compliance with the LAX NPDES permit.

Construction of the Project could result in the potential for short-term impacts to surface water (i.e., stormwater) quality, due to grading and other temporary surface disturbance. The Storm Water Pollution Prevention Plan (SWPPP) for the Project would address construction-related surface water quality impacts and delineate water quality control measures to address those impacts. Control measures such as best management practices are specified in LAWA's existing Construction SWPPP for LAX. These include, but are not limited to, the following: soil stabilization (erosion control) techniques; sediment control methods; contractor training programs; material transfer practices; waste management practices; roadway cleaning/tracking control practices; vehicle and equipment practices; and fueling practices.

As indicated in the LAX Master Plan EIR, LAX is located within the West Coast Groundwater Basin. Groundwater beneath LAX is not used for municipal or agricultural purposes. Construction and operation of the Project would not require the use of groundwater and, thus, would not deplete groundwater supplies. In addition, since the Project site is mostly developed, no notable adverse change in the amount of permeable areas would occur.

As the Project would not violate water quality standards, waste discharge requirements, or significantly affect groundwater these issues do not require any further analysis in the EIR.

c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?

d. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site?

c-d. Potentially Significant Impact. *As part of the proposed project, a portion of the Argo Ditch would be covered with a box culvert, which would result in an alteration of the stream course. The box culvert would be constructed immediately west of the existing box culvert through which the Argo Ditch flows around the east end of Runway 6L-24R. This box culvert would be extended approximately 500 feet west. However, the existing drainage system at LAX is sized to accommodate runoff from all impervious surfaces in the vicinity of the Project site. As such, the Project would not materially alter existing drainage patterns or surface water runoff rates or quantities.*

Implementation of the Standard Urban Storm Water Mitigation Plan (SUSMP) would occur. To limit any increase in stormwater runoff, LAWA plans to demolish and remove existing pavement for the vehicle service roads that would be realigned. Although the Project would not change the quantity or pattern of stormwater runoff from the Project site to any notable degree, LAWA would be required to incorporate source control and treatment control measures in the form of best management practices to improve surface water quality discharge compared to existing conditions. SUSMP requirements include, but are not limited to, the following: minimizing stormwater pollutants of concernand providing proof of ongoing BMP maintenance.

Although LAWA does not anticipate that the proposed Project would result in substantial erosion or siltation or a substantial increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site, because the proposed Project includes alteration to the Argo Ditch, and construction and design features of the Project are still being defined, potential effects on erosion, siltation, and flooding both on- and off-site will be further evaluated in the EIR.

e. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?

f. Otherwise substantially degrade water quality?

e-f. Less Than Significant Impact. *The construction of the proposed Project would rehabilitate pavement and realign service roads, but would not change the topography or place structures that would change the established drainage patterns. The proposed Project includes placement of a box culvert in the Argo Ditch, which would extend the existing box by approximately 500 feet. However, this would not significantly affect stormwater drainage systems, provide additional sources of polluted runoff, or substantially degrade water quality. In addition, the existing drainage system at LAX is sized to accommodate runoff from all impervious surfaces in the vicinity of the Project site. As such, the Project would not materially alter existing drainage patterns or surface water runoff rates or quantities. Responses to Section IX, items a and b above, identify the measures LAWA would undertake to protect water quality during construction and after construction.*

As the Project would not significantly increase storm water runoff or degrade water quality these issues do not require any further analysis in the EIR.

g. Place housing within a 100-year flood hazard area as mapped on federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?

h. Place within a 100-year flood hazard area structures which would impede or redirect flood flows?

g-h. No Impact. *The Project site is located within the boundaries of the LAX Master Plan study area, and as indicated in the LAX Master Plan EIR, no 100-year floodplain areas are located within the LAX Master Plan boundaries.*[46] *Further, the Project does not involve the construction of housing. Therefore, no further analysis of this issue is required in the EIR.*

i. Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?

i. No Impact. *As delineated on the City of Los Angeles Inundation and Tsunami Hazard Areas map,*[47] *the Project site is not within a boundary of an inundation area from a flood control basin. Further, the Project site is not located within the downstream influence of any levee or dam. Construction of the proposed Project would include installation of a box culvert approximately 500 feet in length. However, this structure would not expose people or structures to a significant risk of loss, injury or death. Therefore, no further analysis of this issue is required for the EIR.*

j. Inundation by seiche, tsunami, or mudflow?

j. No Impact. *The Project site is located approximately 2,000 feet east of the Pacific Ocean and is not delineated as a potential inundation or tsunami affected area on the City of Los Angeles Inundation and Tsunami Hazard Areas map.*[48] *Seiches and mudflows are not a risk as the Project site is located on, and is surrounded by, relatively level terrain and urban development. Therefore, no further analysis of this issue is required in the EIR.*

X. Land Use and Planning

Would the project:

a. Physically divide an established community?

a. No Impact. *The proposed Project would be developed entirely within the existing Airport property. Land uses surrounding the Project site include airport uses. No land use acquisition or new facilities are proposed in the surrounding communities that would disrupt or divide the physical arrangement of an established community. Therefore, no further analysis of this issue is required in the EIR.*

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46 *City of Los Angeles, Los Angeles World Airports (LAWA), Final Environmental Impact Report, Los Angeles International Airport Proposed Master Plan Improvements, Section 4.13, April 2004.*

47 *City of Los Angeles Planning Department, Safety Element of the City of Los Angeles General Plan, Exhibit G, Inundation & Tsunami Hazard Areas in the City of Los Angeles, November 1996.*

48 *City of Los Angeles Planning Department, Safety Element of the City of Los Angeles General Plan, Exhibit G, Inundation & Tsunami Hazard Areas in the City of Los Angeles, November 1996.*

b. Conflict with any applicable land use plan, policy or regulation of an agency with jurisdiction over the project (including, but not limited to, the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?

b. No Impact. *Land use designations and development regulations applicable to LAX, including the Project site, are set forth in the LAX Plan and the LAX Specific Plan. The Project site is in an area designated in the LAX Plan as "Airport Airside." Within the LAX Specific Plan, the Project site is in an area designated within the Airport Airside subareas, zoned "LAX – A Zone, Airport Airside Sub-Area." The proposed Project would be compatible with existing on-site uses. No change in zoning and/or LAX Master Plan or Specific Plan land use designation is anticipated due to the proposed Project. Furthermore, the proposed Project would not increase overall capacity at LAX, and would not conflict with established goals of the LAX Master Plan or Specific Plan.*

As no significant impacts related to Land Use and Planning would occur, this topic will not be evaluated further in the EIR and no mitigation is required.

c. Conflict with any applicable habitat conservation plan or natural community conservation plan?

c. No impact. *The Los Angeles/El Segundo Dunes, managed by LAWA, supports the largest of the four remaining occupied habitats for the El Segundo Blue Butterfly, which the City has designated as a Habitat Restoration Area pursuant to City Ordinance 167940 for the long-term conservation of the El Segundo Blue Butterfly. There is no adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan that includes any part of the proposed Project site. The Los Angeles/El Segundo Dunes Specific Plan Area is located at the far western boundary of LAX in the land bordered by Pershing Drive to the east, Vista Del Mar Boulevard to the west, Imperial Highway to the south, and Waterview Street and Napoleon Street to the north. This area also includes the 200-acre El Segundo Blue Butterfly Habitat Restoration Area. This area is well removed from the Project site with more than 2,500 feet of separation; the Project would not affect these areas. Therefore, no further analysis of this issue is required in the EIR.*

XI. Mineral Resources

Would the project:

a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

b. Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?

a-b. No Impact. *The State Mining and Geology Board classifies mineral resource zones throughout the State. As indicated in the LAX Master Plan EIR, the Project site is contained within an MRZ-3 zone, which represents areas with mineral deposits whose significance cannot be evaluated from available data.*[49] *The Project site is within the boundaries of LAX and surrounded by airport-related uses. There are no actively mined mineral or timber resources on the Project site, nor is the site available for mineral resource extraction given the existing airport uses.*

As no impacts to the availability of mineral resources would occur, no further analysis of this issue is required in the EIR.

XII. Noise

Would the project result in:

a. Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

b. Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?

a-b. Potentially Significant Impact. *The Project site is located within a highly developed, urbanized area consisting of airport, commercial, transportation, and residential land uses. Ambient noise levels in the immediate vicinity of the Project site are characterized by frequent aircraft arrival and departure operations. The nearest off-site existing noise sensitive residential land uses are located in the City of Los Angeles community of Westchester, approximately 800 feet north of Runway 6L-24R. This area is currently exposed to noise levels in excess of federal and state standards of 65 dBA Day/Night Level (DNL) and Community Noise Equivalent Level (CNEL).*

Construction of the proposed Project would result in noise generated by on-site equipment and activities, such as pavement demolition, excavation, grading, and paving. Impacts associated with exposure of persons to or generation of noise levels in excess of applicable construction standards will be evaluated in the EIR and construction noise mitigation measures will be identified, if necessary.

Furthermore, the proposed construction sequencing for the Runway 6L-24R pavement rehabilitation may require an extended closure of the Runway. As this Runway is the primary arrival runway on the North Airfield, the proposed closure will require shifting aircraft traffic from this runway to other runways at LAX for the duration of construction. The shift in aircraft flight patterns during this

[49] *City of Los Angeles, Los Angeles World Airports (LAWA), Final Environmental Impact Report, Los Angeles International Airport Proposed Master Plan Improvements, Section 4.17, April 2004.*

period has the potential to result in significant airport noise exposure changes, causing noise levels to exceed airport noise standards in some noise-sensitive areas. Aircraft noise exposure effects during the closure of Runway 6L-24R will be evaluated further in the Project EIR.

c. A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?

c. Less Than Significant Impact. *The proposed Project will not cause any long-term changes in departures and arrivals runway utilization, nor will it change the arrival or departure thresholds on Runway 24R. The proposed Project would include implementation of declared distances on Runway 6L, which would shorten the available distance for aircraft landing on Runway 6L by 359 feet. This would have no significant impact on noise associated with operations on this runway because arrivals on Runway 6L occur less than 1 percent of the total arrivals on an annual basis and the shortening of landing distance available would result in aircraft exiting the runway sooner (before reaching the end of the runway).*

Because no significant impact to noise would result once the Project is implemented, this issue requires no further analysis in the EIR.

d. A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?

e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

d-e. Potentially Significant Impact.

Due to construction activities and potential temporary changes in flight operations, the proposed Project may cause substantial temporary or periodic increase in ambient noise levels in the Project vicinity above levels that exist without the proposed Project, which would result in potential significant impacts. Construction of the proposed Project would result in noise generated by on-site equipment and activities, such as pavement demolition, excavation, grading, and paving. Impacts associated with exposure of persons to or generation of noise levels in excess of applicable construction standards will be evaluated in the EIR and construction noise mitigation measures will be identified, if necessary.

Furthermore, the proposed construction sequencing for the Runway 6L-24R pavement rehabilitation may require an extended closure of the Runway. As this Runway is the primary arrival runway on the North Airfield, the proposed closure will require shifting aircraft traffic from this runway to other runways at LAX for the duration of construction. The shift in aircraft flight patterns during this period has the potential to result in significant airport noise exposure changes, causing noise levels

to exceed airport noise standards in some noise-sensitive areas. Aircraft noise exposure effects during the closure of Runway 6L-24R will be evaluated further in the Project EIR.

f. For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?

f. No Impact. *The proposed Project is located approximately two miles northwest of Hawthorne Airport, the closest private airstrip. Although the proposed Project site is located near this private airstrip, as it is a larger airport, it is not in the flight path of airplanes using Hawthorne Airport. The proposed Project will not cause any long-term changes in departures and arrivals runway utilization, nor will it change the arrival or departure thresholds on Runway 24R. Therefore, people residing or working in the Project area within the vicinity of a private airstrip will not be exposed to excessive noise levels. This topic will not be evaluated further in the EIR and no mitigation is required.*

XIII. Population and Housing

Would the project:

a. Induce substantial population growth in an area either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

b. Displace substantial numbers of existing housing necessitating the construction of replacement housing elsewhere?

c. Displace substantial numbers of people necessitating the construction of replacement housing elsewhere?

a-c. No Impact*. The proposed Project does not include residential or business development and would not induce population growth that would require additional housing. The infrastructure improvements that are proposed would not be utilized by the general public and are not considered to be employment-generating. Furthermore, the proposed Project will not displace existing housing or residential populations, nor would it result in any increase in flights or operations at LAX. Therefore, no impacts related to population or housing growth and displacement would occur. As such, this topic will not be evaluated further in the EIR and no mitigation is required.*

XIV. Public Services

Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:

a. Fire protection?

a. Less Than Significant with Mitigation Incorporated. *The City of Los Angeles Fire Department (LAFD) provides fire protection services throughout LAX, including the Project site. Four fire stations are located at LAX (Fire Station Nos. 80, 51, 5, and 95). Fire Station No. 80, located at 7250 World Way West, is approximately 2,300 feet south of the Project site; Fire Station No. 51, located at 10435 South Sepulveda Boulevard, is approximately 2,800 feet southeast of the Project site; Fire Station No. 5, located at 8900 Emerson Avenue, is approximately 1,000 feet north of the Project site; and Fire Station No. 95, located at 10010 International Road, is about 1 mile southeast of the Project site. Access to the Project site during construction would be kept clear and unobstructed at all times in accordance with FAA, State Fire Marshal, and Los Angeles Fire Code regulations.*

Implementation of the proposed Project is not expected to increase the capacity of the Airport operations, traffic volumes (except temporarily during construction), or the number of passengers. Consequently, the proposed Project would not require additional support from Airport or local fire departments that would require new or expanded fire facilities.

The proposed Project would comply with all applicable LAWA, City, state, and federal fire codes and ordinances, including but not limited to the LAX Master Plan commitment identified below, which was formulated to ensure that proper fire protection features, emergency access, fire flow, etc., are incorporated into development at LAX.

LAX Master Plan Commitment FP-1. *LAFD Design Recommendations: During the design phase prior to initiating construction the project, LAWA will work with LAFD to prepare plans that contain the appropriate design features applicable to that component, such as those recommended by LAFD, and listed below:*

- *Emergency Access. During Plot Plan development and the construction phase, LAWA will coordinate with LAFD to ensure that access points for off-airport LAFD personnel and apparatus are maintained and strategically located to support timely access. In addition, at least two different ingress/egress roads for each area, which will accommodate major fire apparatus and will provide for major evacuation during emergency situations, will be provided.*

- *Fire Flow Requirements. Proposed Master Plan development will include improvements, as needed, to ensure that adequate fire flow is provided to all new facilities. The fire flow requirements for individual Master Plan improvements will be determined in conjunction with LAFD and will meet, or exceed, fire flow requirements in effect at the time.*

- *Fire Hydrants. Adequate off-site public and on-site private fire hydrants may be required, based on determination by the LAFD upon review of proposed plot plans.*

- *Street Dimensions. New development will conform to the standard street dimensions shown on the applicable City of Los Angeles Department of Public Works Standard Plan.*

- *Road Turns. Standard cut-corners will be used on all proposed road turns.*

- *Private Roadway Access. Private roadways that will be used for general access and fire lanes shall have at least 20 feet of vertical access. Private roadways will be built to City of Los Angeles standards to the satisfaction of the City Engineer and the LAFD.*

- *Dead-End Streets. Where fire lanes or access roads are provided, dead-end streets will terminate in a cul-de-sac or other approved turning area. No fire lane shall be greater than 700 feet in length unless secondary access is provided.*

- *Fire Lanes. All new fire lanes will be at least 20 feet wide. Where a fire lane must accommodate a LAFD aerial ladder apparatus or where a fire hydrant is installed, the fire lane will be at least 28 feet wide.*

- *Building Setbacks. New buildings will be constructed no greater than 150 feet from the edge of the roadways of improved streets, access roads, or designated fire lanes.*

- *Building Heights. New buildings exceeding 28 feet in height may be required to provide additional LAFD access.*

- *Construction/Demolition Access. During demolition and construction activities, emergency access will remain unobstructed.*

- *Aircraft Fire Protection Systems. Effective fire protection systems will be provided to protect the areas beneath the wings and fuselage portions of large aircraft. This may be accomplished by incorporating foam-water deluge sprinkler systems with foam-producing and oscillating nozzle (per NFPA 409, aircraft hangars for design criteria).*

With implementation of the above mitigation measures, any impact to fire protection services would be less than significant. Therefore, no further analysis of fire protection is required in the EIR.

b. Police protection?

b. No Impact. *The Los Angeles World Airports Police Division (LAWAPD), the City of Los Angeles Police Department LAX Detail (LAPD LAX Detail), and the Los Angeles Police Department (LAPD) provide police protection services to LAX, including the Project site. The LAWAPD is located just east of the CTA and the LAPD LAX Detail station is also located on the east side of the airport. Demand for on-airport police protection services is typically determined by increases in aircraft activity and employees. Implementation of the proposed Project is not expected to increase the capacity of the Airport operations, traffic volumes (except temporarily during construction), or the number of*

passengers. Consequently, the proposed Project would not require additional support from Airport or local police departments that would require new or expanded police facilities. Therefore, no further analysis of police protection is required in the EIR.

c. Schools?

d. Parks?

e. Other public facilities?

c-e. No Impact. *As discussed in XIII, the proposed Project does not include a residential element nor will it increase employment or operations at the Airport during operations. Consequently, there is no population growth that would increase demands for schools, parks, or other public facilities. Therefore, no impacts related to schools, parks, and other public facilities would occur.*

XV. Recreation

a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

b. Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

a-b. No Impact. *The proposed Project does not include a housing component that would increase the resident population around the LAX area nor will it increase operations or the number of employees. Consequently, no increased demand for recreational facilities beyond the existing demand and no physical deterioration of recreational areas would occur. As discussed in Section XIV, the proposed Project would not increase the use of existing parks or recreational facilities and does not include the construction or expansion of recreational facilities. No impacts related to Recreation would occur.*

XVI. Transportation/Traffic

Would the project:

a. Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?

b. Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?

c. Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?

a-c. Potentially Significant Impact. *Construction of the proposed Project would generate traffic associated with workers traveling to and from the construction employee parking area and staging areas, and the associated shuttle trips between any utilized auxiliary parking areas and the construction site, truck haul/delivery trips, and miscellaneous construction-related travel. These vehicle trips could result in increased traffic volumes on the local roadway system during the construction period and affect both personal vehicles and public transit travel times and safety. And, although the proposed Project is designed to improve aviation safety, during construction Runway 6L-24R would be closed which would create a temporary change in air traffic patterns. Therefore, impacts related to circulation plans and programs, and impacts related to changes in air traffic patterns would be potentially significant, and these topics will be evaluated further in the EIR.*

d. Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

e. Result in inadequate emergency access?

f. Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?

d-f. No Impact. *The proposed Project would not require operational modifications to the existing on-airport circulation system, the existing transportation system adjacent to LAX, or the regional access system. The proposed Project is an airport safety improvement project, and implementation of the proposed Project would enhance public safety and potentially decrease hazards to design or incompatible uses. Additionally, the proposed Project would not increase traffic on the surrounding street network during operations or modify the long-term circulation and emergency access systems to the Airport. Consequently, the proposed Project would not conflict with approved or adopted policies regarding other modes of transit. Therefore, the Project would not increase hazards to a design feature, result in inadequate emergency access, or conflict with adopted plans and these topics will not be evaluated further in the EIR.*

XVII. Utilities and Service Systems

Would the project:

a. Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?

b. Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

c. Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

d. Have sufficient water supplies available to serve the project from existing entitlements and resource, or are new or expanded entitlements needed?

e. Result in a determination by the wastewater treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

a-e. Less Than Significant Impact. *The proposed Project does not include the addition of new uses or components that would result in an increase in operations, population or employment that would increase wastewater generation or increase demand for water. During construction, the increase in wastewater generation will be minimal, as would be the demand for water. Consequently, the proposed Project would not result in the need for a new water supply or water or wastewater treatment facilities.*

The proposed Project would be implemented for safety purposes and would not increase Airport capacity or employee population. Construction activities would require water usage and reclaimed water would be used for dust suppression whenever feasible, which would reduce the quantity of potable water required. The proposed Project would include the extension of the existing Argo Ditch box culvert at the northeast corner of Runway 6L-24R by approximately 500 feet. However, construction of this box culvert would have minor impacts and LAWA would institute BMPs during construction to protect water quality, as detailed in Section IX.

The use of reclaimed water, additional water conservation, and solid waste measures are incorporated into the following LAX Master Plan commitments, which LAWA would also follow for the proposed Project:

- *LAX Master Plan Commitment W-1. Maximized Use of Reclaimed Water: To the extent feasible, LAWA will maximize the use of reclaimed water, as an offset for potable water use, in Master Plan-related facilities and landscaping.*

- *LAX Master Plan Commitment W-2. Enhanced Existing Water Conservation Program: This is a program to minimize the potential for increased water use due to implementation of the Master Plan.*

- *LAX Master Plan Commitment SW-1. Implement an Enhanced Recycling Program: LAWA will enhance their existing recycling program, based on successful programs at other airports and*

similar facilities. Features of the enhanced recycling program will include: expansion of the existing terminal recycling program to all terminals, including new terminals; development of a recycling program at LAX Northside/Westchester Southside; lease provisions requiring that tenants meet specified diversion goals; and preference for recycled materials during procurement where, practical and appropriate. Note: Subsequent to the approval of the LAX Master Plan, LAWA adopted the "LAWA Sustainable Airport Planning, Design and Construction Guidelines" for implementation on all airport projects. These Guidelines provide goals and performance standards for recycling of materials during both construction and operation of airport facilities in accordance with the provisions of Master Plan Commitment SW-1. LAWA has also implemented an enhanced recycling program at LAX as outlined in the "LAX Recycling Plan" which provides updated guidelines for recycling operations at LAX.

- *LAX Master Plan Commitment SW-2. 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.*

- *LAX Master Plan Commitment SW-3. 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.*

Therefore, impacts related to water, wastewater and storm water would be less than significant and these issues require no further analysis in the EIR.

f. Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?

g. Comply with federal, state, and local statutes and regulations related to solid waste?

f-g. Less Than Significant Impact. *There are eight major landfills and several smaller landfills currently accepting municipal solid waste in Los Angeles County. As indicated in the SPAS Draft EIR, the total remaining permitted inert waste capacity in Los Angeles County was estimated to be*

approximately 60.2 million tons in 2010. Based on the average countywide disposal rate in 2010, this capacity would not be exhausted for approximately 41 years.[50] *Construction and demolition activities for the proposed Project would generate a substantial amount of solid waste; however, the proposed Project would adhere to LAWA's recycling program and mitigation measures, which are intended to comply with Assembly Bill 939. Removed pavement from the Project site would be used as filler below any new paving, and any materials would be reused to the extent possible. There is expected to be no negative impact from the Project on the disposal capacity of inert solid waste (e.g., concrete and asphalt from construction and demolition activities). The Project will comply with federal, state, and local statutes and regulations related to solid waste that were included in the LAX Master Plan EIR, as well as any statutes or regulations adopted after the compilation of the LAX Master Plan EIR. In December 2010, the Los Angeles City Council adopted Ordinance No. 181519 (signed by the Mayor in January 2011) to assist in meeting the diversion goals of AB 939. Ordinance No. 181519 amended sections of the City's municipal code to require that construction and demolition waste generated within the City of Los Angeles be taken to a City-certified construction demolition waste processing facility.*[51] *Additionally, the proposed Project would not result in any increase to the number of flights, operations, passengers, or employees at LAX.*

Therefore, impacts related to solid waste would be less than significant and these issues require no further analysis in the EIR.

XVIII. Mandatory Findings of Significance

a. Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?

a. Potentially Significant Impact. *The proposed Project has the potential to degrade the quality of the environment with the potential to have an effect on air quality, biological resources, greenhouse gas emissions, hazards and hazardous materials, hydrology and water quality, noise, and transportation/traffic. Therefore, these topics will be evaluated further in the EIR.*

b. Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects).

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50 *City of Los Angeles, Los Angeles World Airports (LAWA), Final Environmental Impact Report, Los Angeles International Airport Proposed Master Plan Improvements, Section 4.19, April 2004.*

51 *City of Los Angeles, Los Angeles World Airports (LAWA), Draft Environmental Impact Report, Los Angeles International Airport (LAX) Specific Plan Amendment Study, Section 4.13.2, July 2012.*

b. Potentially Significant Impact. *Implementation of the proposed Project may result in cumulative impacts when considered with other past, present, and probable future projects at the Airport and in the surrounding area for the topics discussed above. Therefore, this topic will be evaluated further in the EIR.*

c. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

c. Potentially Significant Impact. *Implementation of the proposed Project may result in adverse environmental effects which could potentially result in substantial adverse effects on humans for the topics discussed above. Therefore, this topic will be evaluated further in the EIR.*

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