# United Airlines Los Angeles International Airport (LAX) Terminal 7 Improvement Project

#### **Initial Study – Proposed Negative Declaration**

Lead Agency:

City of Los Angeles Los Angeles World Airports One World Way, Room 218 Los Angeles, CA 90045

Prepared by:

Smith
111 Academy Way, Suite 150
Irvine, California 92617

#### **CITY OF LOS ANGELES**

OFFICE OF THE CITY CLERK ROOM 615, CITY HALL LOS ANGELES, CALIFORNIA 90012

#### CALIFORNIA ENVIRONMENTAL QUALITY ACT

#### INITIAL STUDY AND CHECKLIST

(Article IV City CEQA Guidelines)

LEAD CITY AGENCY		COUNCIL D		DATE
Los Angeles World Airports (LAWA)		Council Distri	ct 11	March 28, 2013
RESPONSIBLE AGENCIES				
U.S. Department of Transportation Fede	ral Aviation Administration	on (FAA).		
PROJECT TITLE/NO.			CASE NO.	
United Airlines Los Angeles Internation	al Airport (LAX) Termina	17	To be assign	ned
Improvement Project				
PREVIOUS ACTIONS CASE NO.		DOES have	ve significan	t changes from previous
Los Angeles International Airport Maste		actions.		
Case No. CF-00-1774-S4 and CPC 2003	3-4647	_		
GPA/ZC/CA/MPR				ificant changes from
LAX Master Plan EIR/EIS (SCH#19970	061047)	previous actio	ons.	
PROJECT DESCRIPTION:				
The main purpose of the proposed proje	ect is to modernize Termi	nal 7 to meet ti	he evolving	federal security requirements,
which will enhance passenger service by	consolidating several exi	sting dispersed	Security Sci	reening Check Points (SSCPs)
into a centralized SSCP. In conjunction				
terminal functions and facilities located				
terminal, which, in turn, will involve				
"enabling project elements") at Termina			hern portion	of the Terminal 7 concourse.
Please see Attachment A for a more deta	ailed description of the pro	posed project.		
ENVIRONMENTAL SETTING:				
The immediate environmental setting is				
activity within and adjacent to the site to				
developed, urbanized area consisting of	airport, commercial, trans	portation (i.e., i	nterstate hig	hways) and residential uses.
PROJECT LOCATION		CT 1		
The project site is within LAX, which is				
County. The project site includes Ter		Airlines (UAI	_) maintena	nce and cargo operations for
construction staging, both located within PLANNING DISTRICT	THE SOULT SIDE OF LAX.		STATUS:	
Los Angeles International Airport Specia	fic Dlan			LIMINARY
Los Angeles international Airport Speci	iic riaii			POSED
				PTEDDecember 14, 2004
EXISTING ZONING	MAX. DENSITY ZONI	NG		112DDecember 14, 2004
LAX - A Zone: Airport Airside Sub-	MIM. DENOTT ZON	110	M DOES	CONFORM TO PLAN
Area				
PLANNED LAND USE & ZONE	MAX. DENSITY PLAN	J		
Airport-related airside uses		`	□ DOES	NOT CONFORM TO
1			PLAN	
SURROUNDING LAND USES	PROJECT DENSITY			
North - Airport Landside (Central			□ NO D	ISTRICT PLAN
Terminal Area); East – Concourse 8				
South - Airport Airfield (South				
Airfield); West – Terminal 6				

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 fequired.
Jisa Six lett Director of Special Projects
SIGNATURE

#### **EVALUATION OF ENVIRONMENTAL IMPACTS:**

- 1) A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants based on a project-specific screening analysis).
- 2) All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
- 3) Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less that significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.
- 4) "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of a mitigation measure has reduced an effect from "Potentially Significant Impact" to "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from Section XVII, "Earlier Analysis," cross referenced).

- 5) Earlier analysis must be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR, or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:
  - 1) Earlier Analysis Used. Identify and state where they are available for review.
  - 2) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
  - 3) Mitigation Measures. For effects that are "Less Than Significant With Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.
- 6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.
- 7) Supporting Information Sources: A sources list should be attached, and other sources used or individuals contacted should be cited in the discussion.
- 8) This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whichever format is selected.
- 9) The explanation of each issue should identify:
  - 1) The significance criteria or threshold, if any, used to evaluate each question; and
  - 2) The mitigation measure identified, if any, to reduce the impact to less than significance.

#### **ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:**

	low will be potentially affected by this pricated by the checklist on the following pa	oject, involving at least one impact that is a ages.
☐ Aesthetics	☐ Hazards & Hazardous Materials	☐ Public Services
Agricultural Resources	☐ Hydrology/Water Quality	☐ Recreation
☐ Air Quality	☐ Land Use/Planning	☐ Transportation/Traffic
☐ Biological Resources	☐ Mineral Resources	☐ Utilities/Service Systems
Cultural Resources	☐ Noise	☐ Mandatory Findings of Significance
☐ Geology/Soils	☐ Population/Housing	
☐ Greenhouse Gas Emissions		

NITIAL STUDY CHECKLIST (To be completed by the Lead	City Agency)
<b>⇔</b> BACKGROUND	
PROPONENT NAME	PHONE NUMBER*
Los Angeles World Airports - Lisa Trifiletti	(424) 646-5186
PROPONENT ADDRESS	
One World Way, Room 218, Los Angeles, CA 90045	
AGENCY REQUIRING CHECKLIST	DATE SUBMITTED
Los Angeles World Airports	March 28, 2013
PROPOSAL NAME (If Applicable)*	
United Airlines LAX Terminal 7 Improvement Project	



(Explanations of all potentially and less than significant impacts are required to be attached on separate sheets)

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
I. AESTHETICS. Would the project:				
a. Have a substantial adverse effect on a scenic vista?			$\boxtimes$	
b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings, or other locally recognized desirable aesthetic natural feature within a city-designated scenic highway?				
c. Substantially degrade the existing visual character or quality of the site and its surroundings?			$\boxtimes$	
d. Create a new source of substantial light or glare which will adversely affect day or nighttime views in the area?				
II. AGRICULTURAL AND FOREST RESOURCES. In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. 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 of 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?				

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>III. AIR QUALITY.</b> The significance criteria established by the South Coast Air Quality Management District (SCAQMD) may be relied upon to make the following determinations. Would the project:				
a. Conflict with or obstruct implementation of the applicable South Coast Air Quality Management District plans?			$\boxtimes$	
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 air basin is non-attainment ( $O_3$ , $NO_2$ , $PM_{10}$ , $PM_{2.5}$ , and lead) under an applicable federal or state ambient air quality standard?				
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 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 Game or U.S. Fish and Wildlife Service?				
b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in the City or regional plans, policies, or regulations or by the California Department of Fish and Game 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 native 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 tree preservation policy or ordinance (e.g., oak trees or California walnut woodlands)?				
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?				

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
V. CULTURAL RESOURCES: Would the project:				
a. Cause a substantial adverse change in significance of a historical resource as defined in State CEQA §15064.5?				
b. Cause a substantial adverse change in significance of an archaeological resource pursuant to State CEQA §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?			$\boxtimes$	
iii. Seismic-related ground failure, including liquefaction?			$\boxtimes$	
iv. Landslides?				$\boxtimes$
b. Result in substantial soil erosion or the loss of topsoil?				$\boxtimes$
c. Be located on a geologic unit or soil that is unstable, or that will 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 Los Angeles Building Code (2002), creating substantial risks to life or property?				
e. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?				
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?				

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the 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, will 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, will 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, will the project result in a safety hazard for the people residing or working in the area?				
g. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				
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?				
IX. HYDROLOGY AND WATER QUALITY. Would the project:				
a. Violate any water quality standards or waste discharge requirements?			$\boxtimes$	
b. Substantially deplete groundwater supplies or interfere with groundwater recharge such that there will be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells will drop to a level which will 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 will 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 which will result in flooding on- or off-site?				
e. Create or contribute runoff water which will exceed the capacity of existing or planned stormwater drainage systems or				

	Potentially Significant Impact	Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
provide substantial additional sources of polluted runoff?				
f. Otherwise substantially degrade water quality?			$\boxtimes$	
g. Place housing within a 100-year flood plain 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 plain structures which will 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?				$\boxtimes$
b. Conflict with 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, 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 will 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 in level in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?				
b. Exposure of people 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?			$\boxtimes$	
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, will the project expose people residing or working in the project area to excessive noise levels?				

Potentially

		Significant Unless		
	Potentially Significant Impact	Mitigation Incorporated	Less Than Significant Impact	No Impact
f. For a project within the vicinity of a private airstrip, will the project expose people residing or working in the project area to excessive noise levels?				
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, 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?			$\bowtie$	
b. Police protection?	$\Box$	$\Box$		$\square$
c. Schools?	$\Box$	一	一	$\boxtimes$
d. Parks?	$\Box$	$\Box$		$\boxtimes$
e. Other governmental services (including roads)?				
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 will 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?				
XVI. TRANSPORTATION/CIRCULATION. 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,				

	Potentially	Potentially Significant Unless Mitigation	Less Than	
modestation and his value moths, and mose transit?	Significant Impact	Incorporated	Significant Impact	No Impact
<ul><li>pedestrian and bicycle paths, and mass transit?</li><li>b. Conflict with an applicable congestion management program,</li></ul>			$\boxtimes$	
demand measures, or other standards established by the county congestion management agency for designated roads or highways?		Ш		
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 to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?				
e. Result in inadequate emergency access?			$\boxtimes$	
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. Would the project:				
a. Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?				$\boxtimes$
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 stormwater 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?				
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?			$\boxtimes$	
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 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				

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
examples of the major periods of California history or prehistory?				
b. Does the project have impacts which are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of an individual 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 cause substantial adverse effects on human beings, either directly or indirectly?				
DISCUSSION OF THE ENVIRONMENTAL EVA (See Attachment B)	LUATION (A	tach additional s	heets if necessary)	

## ATTACHMENT A PROJECT DESCRIPTION

#### 1.0 PURPOSE OF INITIAL STUDY

The general purpose of this Initial Study is to determine if the proposed project may have a significant effect on the environment and to serve as an informational document for the public and the decision-makers.

The Los Angeles World Airports (LAWA) has completed the following Initial Study for the proposed United Airlines Los Angeles International Airport (LAX) Terminal 7 Improvement Project in accordance with the California Environmental Quality Act or CEQA (Section 21000 et seq., California Public Resources Code), implementing State CEQA Guidelines (Section 15000 et seq. Title 14, California Code of Regulations), and L.A. CEQA Thresholds Guide (2006). The Initial Study for the proposed project was prepared in accordance with the requirements set forth in Section 15063 of the State CEQA Guidelines. As determined in this Initial Study and as further described in Attachment B, Explanation of Checklist Determinations, there is no substantial evidence that the proposed project may have a significant effect on the environment. Therefore, in accordance with Section 15070 of the State CEQA Guidelines, a Negative Declaration is hereby proposed.

This Draft Initial Study/Negative Declaration (IS/ND) will be circulated for review and comment by the public and other interested parties, agencies, and organizations for 20 days in accordance with Section 15073 of the State CEQA Guidelines. All comments or questions about the Draft IS/ND should be addressed to the following individual:

Ms. Lisa Trifiletti Los Angeles World Airports One World Way West, 2nd Floor Los Angeles, CA 90045 (424) 646-5186

Upon completion of the public comment period, a Final IS/ND will be prepared that provides written responses to comments received on the Draft IS/ND. These comments and their responses will be included in the Final IS/ND for consideration by LAWA.

#### 2.0 INTRODUCTION

United Airlines (UAL) proposes the "United Airlines Los Angeles International Airport (LAX) Terminal 7 Improvements Project" ("proposed project"). The main purpose of the proposed project is to modernize Terminal 7 to meet evolving federal security requirements, which will enhance passenger service by consolidating several existing dispersed Security Screening Check Points (SSCPs) into a centralized SSCP. In conjunction with development of the consolidated and centralized SSCP, several existing terminal functions and facilities located at the proposed SSCP location within Terminal 7 will be displaced and relocated elsewhere in the terminal (collectively called "enabling project elements") almost entirely within Terminal 7 (including two new floors at the

northern portion of the Terminal 7 concourse) with a limited area within the interior entrance from Terminal 7 to Concourse 8.1

#### 3.0 PROJECT LOCATION AND SURROUNDING USES

#### a. Regional Setting

As shown in Figure 1, Regional Location Map, the project site is located within the City of Los Angeles, at LAX on LAWA property. The project site is located within the LAX Plan area of the City of Los Angeles, which is in the County of Los Angeles. LAX is the primary airport for the greater Los Angeles area, encompassing approximately 3,650 acres, and is situated at the western edge of the City of Los Angeles. In 2012, LAX was the world's sixth busiest passenger airport, moving approximately 63.6 million annual passengers (LAWA, 2013).

In general, to the north of LAX is the community of Westchester, to the south is the City of El Segundo, to the east is the City of Inglewood, and to the west is the Pacific Ocean. Regional access to LAX is provided by Interstate 105, which runs east-west and is located adjacent to (south of) LAX, and the San Diego Freeway (Interstate 405), which runs north-south and is located east of LAX. The main arterial streets serving LAX include Sepulveda Boulevard, Century Boulevard, Imperial Highway and Lincoln Boulevard. 96<sup>th</sup> Street is also an access roadway into the Central Terminal Area (CTA).

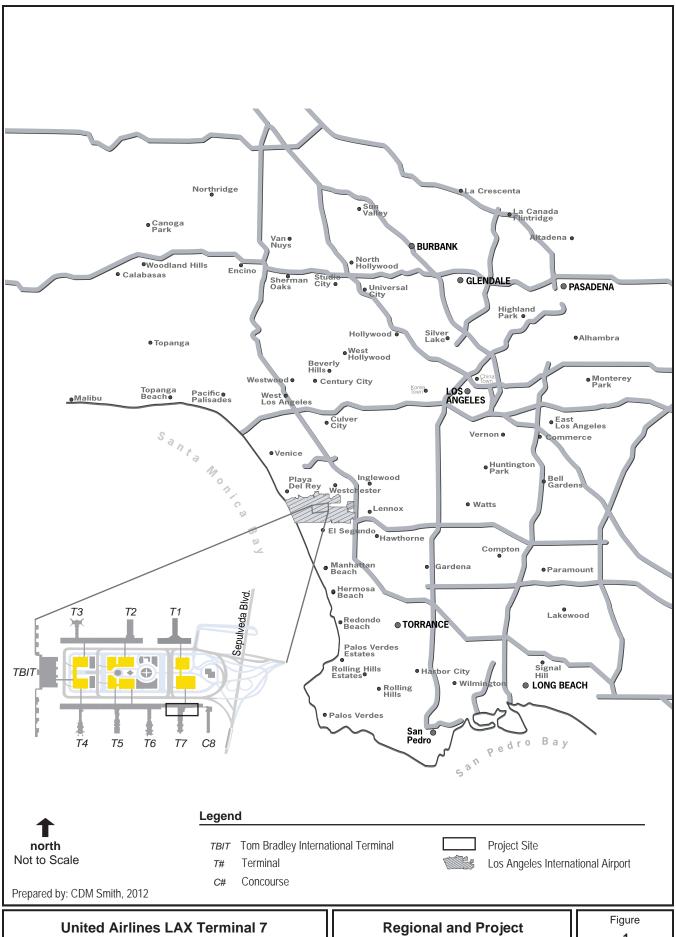
#### b. Local Setting and Land Uses

LAX has nine passenger terminals arranged in a U-shape with a two-level layout separating departures and arrivals. The two-level airport roadway network is accessed from the following three off-airport roadways: Century Boulevard; Sepulveda Boulevard; and 96<sup>th</sup> Street Bridge/Sky Way. Each of these roadways provides vehicular access to both the departures (upper) level or the arrivals (lower) level curbsides and roadways. Airport access from the departures level to the arrivals level is provided via a recirculation ramp located at the eastern end of the CTA and a ramp at the western end of Center Way, connecting to West Way. Access from the arrivals level to the departures level is provided via the ramp at the western end of Center Way, connecting to West Way (upper level).

UAL's passenger operations at LAX involve four gates in the "connector" portion of Terminal 6, and the entirety of Terminal 7 and Concourse 8 (the "project site"). The northern (landside) area associated with Terminals 6 and 7 and Concourse 8 are located along the southeastern portion of the CTA's U-shaped roadway (World Way). The southern (airside) area associated with the project site is bounded by a common airside access system comprised of taxilanes and the Taxiway C to the south.

The City of Los Angeles General Plan Land Use Element that governs uses on LAX designates the airport property as primarily industrial.

<sup>&</sup>lt;sup>1</sup> Although sometimes referred to as "Terminal 8," Concourse 8 does not function as a terminal because it does not have its own passenger processing functions such as ticketing, baggage claim nor a passenger security checkpoint functions, but relies on those passenger processing functions located in Terminal 7.



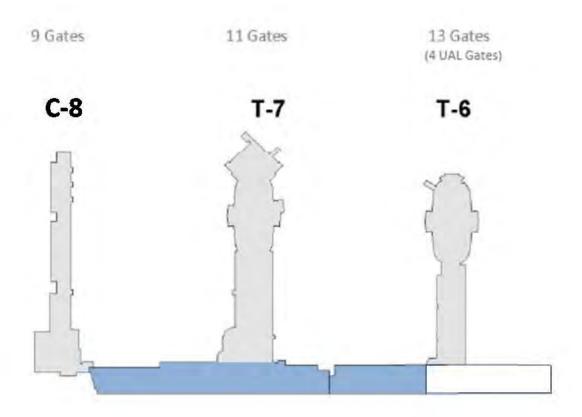
**Improvement Project** 

**Location Map** 

1

#### 4.0 EXISTING FACILITIES

In general, a terminal consists of a multi-level "Ticketing Building" (which is the area closest to World Way, and consists of functions such as ticketing/passenger check-in, security, checked bag screening, domestic baggage claim, U. S. Customs functions, and operations support) and a "Concourse" (which is the portion of the terminal closest to the airfield, and consists of components such as holdrooms, clubs/lounges, concessions, Federal Inspection Services, baggage make-up, and operations support). Relative to Terminals 6 and 7 (T-6 and T-7) and Concourse 8 (C-8) at LAX, such facility areas are illustrated below, with the Ticketing Building area shown in blue and the Concourse area shown in gray.



UAL occupies 1,300 lineal feet (LF) of curb frontage along World Way (i.e., the southern [lower] edge of the Ticketing Building area shown in blue above) out of approximately 5,800 LF available in the CTA. UAL passenger operations utilize 24 gates located within portions of Terminal 6 (four of the terminal's 13 gates), all of Terminal 7 (11 gates), and all of Concourse 8 (nine gates), which gives UAL the most expansive passenger terminal complex utilized by a single airline at LAX.

The original Terminals 6 and 7 were modified around 1970 to accommodate wide-bodied aircraft. Terminal 7 and Concourse 8 were redeveloped in 1982, prior to the 1984 Olympics. Terminal 6 redevelopment was completed in 1987.

Although UAL's passenger operations involve portions of Terminal 6, and the entire Terminal 7 and Concourse 8, the majority of the proposed project will occur at Terminal 7 (which is the terminal that services Concourse 8). Terminal 7 consists of a double-loaded (double-sided) pier concourse with 11 nominal gates supported by a single-level ticketing area and a split-level baggage claim facility. Terminal 7 is arranged on three levels with a mezzanine in the satellite.<sup>2</sup> The first/bottom level is the arrivals level, the second level is ticketing/departure level (which is two floors high), and the third (and mezzanine) level is associated with the concourse. Holdrooms (i.e., passenger waiting areas) and concessions are arranged along the interior of the concourse. Although not an enclosed floor, the mechanical rooms are on the roof. Following is a description of existing facilities within Terminal 7 that will be affected by the proposed project:

#### **Security Screening Check Points**

The existing passenger SSCP at UAL's passenger operations are within Terminal 7 and consist of four separate facilities:

- 2 SSCP lanes at the east end of the ticketing lobby
- 2 SSCP lanes at the west end of the ticketing lobby, facing west
- 5 SSCP lanes at the west end of the ticketing lobby, facing east
- 2 SSCP lanes at the Parking Structure 7 sky bridge
- 11 lanes total

These four security checkpoints need to be modernized (to meet the evolving federal security requirements), consolidated, and centralized. In addition, the existing four security checkpoints are not providing the best level of passenger service because most passengers are not aware of the security options that are currently available. In addition, it is difficult for a passenger to select the most optimum queue to use even if he/she is aware of these choices because the four queues are located a substantial distance from each other. Such a decision is even more difficult and confusing because not all queues are open all the time. By consolidating and centralizing the proposed SSCP, the existing problems associated with these existing four security checkpoints is eliminated. However, as the evolving federal security requirements have become more complex and time consuming, there is a need for a larger area to accommodate the evolving security equipment, as well as provide more processing lanes to compensate for the additional time through the SSCP. The current SSCP area does not provide enough space to accommodate the evolving federal security requirements and an adequate processing area.

#### <u>Ticketing Lobby</u>

UAL operates two discrete ticketing lobbies at LAX, separated by approximately 300-feet of security checkpoint. The majority of staffed ticket counters and self-service kiosks, of which there are 60, are located toward the east end of Terminal 7, which serves economy passengers for domestic flights. This ticketing lobby is situated in a two story high space. The existing floor, ceiling, and storefront are

The "satellite" area is the oval-shaped portion of the concourse that was part of the original construction, which, similar to other terminals at LAX, had aircraft gates located around the perimeter of the concourse building and utilized underground corridors between the main terminal area and the satellite concourse. With subsequent improvements to the CTA, aboveground concourses and aircraft gate facilities (also referred to as "connectors") were constructed in the area between each satellite concourse and the main terminal area, as currently exists today.

showing signs of age. Airline ticket offices are located directly behind these ticket counters.

There is a separate ticketing lobby at the east end of Terminal 6 for United Premium and International passengers. There are 40 ticketing counters and self-service kiosks at this facility. There are limited airline ticket offices directly behind these ticket counters. These facilities will not be modified as part of the proposed project.

#### **Secure Corridors**

One of the features of the UAL's gates in Terminal 6, Terminal 7 and Concourse 8 is that a secure corridor links these terminals "up-stream" of the security checkpoint. This arrangement allows passengers on connecting UAL flights to avoid passing through the security screening checkpoint as they walk from gate to gate within the UAL terminal complex. There are a small number of passengers who deplane at the four UAL gates in Terminal 6 that have to use this path to access the baggage claim escalators in Terminal 7. These corridors are in need of cosmetic, mechanical, and electrical refurbishment because they have not been significantly refreshed since they were originally constructed in the mid 1980's.

#### Mechanical System

There are two existing mechanical rooms on the roof of Terminal 7 (total of 7,100 square feet - s.f.). The mechanical systems are in need of upgrade.

#### Support Services

There are several concessions services on the Concourse Level and airline customer service offices that support each level of the terminal and are located in the space that will be impacted by the proposed project.

There are also three separate existing United Club lounges that will be impacted by the proposed project, including a 13,025 s.f. lounge area in the Concourse Level of Terminal 7, a 6,000 s.f. lounge area in the Concourse Level of Terminal 6, and a 4,000 s.f. First Class/International lounge area in the mezzanine of Terminal 7. The two United Club lounges in Terminal 7 will be displaced as a result of the consolidated and centralized SSCP, and the United Club lounge in Terminal 6 will be displaced as a result of the LAWA Terminal Concession Manager retail program. Hence the new 29,000 s.f. United Club at the new Level 4 of Terminal 7 is an enabling project for the consolidated and centralized SSCP.

#### 5.0 STATEMENT OF PROJECT OBJECTIVES

The main purpose of the proposed project is the modernization of UAL's operations at LAX to meet the evolving federal security requirements. Along with the enabling projects, the proposed modernization will improve the quality of service provided to UAL passengers. The specific objectives of the project are to:

- Provide a consolidated and centralized SSCP that provide a modern, state-of-the-art facility to meet evolving federal security requirements;
- Improve passenger processing through the SSCP; and
- Modernize UAL's passenger operations and amenities.

#### 6.0 BACKGROUND AND DESCRIPTION OF THE PROPOSED PROJECT

#### **Background**

Following the events of September 11, 2001, Congress enacted the Aviation and Transportation Security Act on November 19, 2001. LAWA, in cooperation with the Transportation Security Administration (TSA) and tenant airlines, has since met a series of mandated deadlines for implementing new federal security requirements. As security needs have increased over time, the amount and sophistication of screening equipment has grown to include more sophisticated (and larger) x-ray equipment. In addition, as the passenger screening process becomes more complex and time consuming, the need for more processing lanes has increased; hence the need for an area to physically accommodate the evolving federal (i.e., TSA) security requirements.

Other than minor improvements, UAL's passenger operations has not been materially changed in the last 30 years, and thus, does not provide comparable standards, amenities, and aesthetics realized at other international and national airports around the world.

#### **Project Description**

The main purpose of this project is to modernize the terminal facility to meet evolving federal security requirements and to consolidate and centralize the SSCP.

The consolidation and centralization of the SSCP will also allow for the enhancement of UAL passenger level of service and satisfaction and includes the following enabling projects elements:

- Relocation and Consolidation of the United Club lounges
- Relocation and Consolidation of the Mechanical Systems
- Modification of Ticketing Area
- Relocation of Support Services

The relocation and consolidation of the club lounges and the mechanical systems are proposed on two new floors above the consolidated and centralized SSCP. The other enabling projects will occur throughout the existing Terminal 7 footprint. The proposed project consists of the following areas:

Facility	Existing Building Area T-7 and C-8 (s.f.)	New Building Area to be Added (s.f.)	Existing Building Area to be Demolished (s.f.)	Total Building Area After Implementation of Project (s.f.)
Basement (Level B)	12,454	0		
Arrivals (Level 1)	197,974	0		
Apron Level Area (Level 2)	235,364	7,844		
Concourse Level SSCP Consolidation (Level 3)	231,545	10,064		
Mechanical/Office (Mezzanine Level)	23,654	0	(7,381)	
United Club (Level 4)	0	35,121		
Mechanical/Office (Level 5)	0	32,594*		
Total Building Area	700,991	85,623	(7,381)	779,233**

<sup>\*</sup> Alteration of the structure for use related to mechanical is considered unusable floor area associated with the structural alteration of the building (and not considered part of the project for the purposes of compliance with the LAX Specific Plan). The mechanical area is approximately 22,469 s.f. of the Mechanical/Office Level 5.

The net increase in floor area that is reflected in the table above is due to the following: consolidation and centralization of the SSCP, which cannot be accommodated within the existing building footprint due to the space requirements associated with the evolving federal security requirements (described in detail below); the proposed United Club lounge level (new Level 4), which is a consolidation of the three existing UAL lounges; and, the displacement of the mechanical room to the new Level 5 requires additional space and equipment to support the improvements.

#### Security Screening Check Points

The four existing passenger security checkpoints at Terminal 7 (which also serve Concourse 8) are not providing an acceptable level of passenger service, and the security queues must be consolidated to remedy this inconvenient situation and improve the level of passenger service. The consolidation of the passenger check points will simplify the passenger check-in process by making it a simple progression of experiences – hence more intuitive and less dependent on way-finding signage or intervention by airline service agents. In addition, the dimensions of security check points have grown over the years, and even more so with the recent introduction of the advanced image technology (AIT) full body scanner. The current SSCP does not provide enough space to provide for the evolving federal security requirements.

The design of the SSCP at the two subject locations took into account the size requirements of passenger security checkpoints in light of the dimensional constraints of the existing building. With the dimensions of security check points having increased over the years (the length of the TSA standard checkpoint lane is now in the vicinity of 80 feet, including the search room at the end), and with the recent introduction of the AIT full body scanner, the original/existing depth of the ticketing

<sup>\*\*</sup> For purposes of compliance with the LAX Specific Plan, the usable floor area (new building added minus the mechanical area) with implementation of the proposed project is 756,764 s.f.

building is 63-feet, which is not adequate to modernize and consolidate the SSCP using the current check point configuration and within the existing building footprint. The existing ticketing building depth cannot be modified due to airside and landside constraints. As such, the orientation of the check point lanes explored for Terminal 7 was an east-west configuration, given that the check point depth requirements can be absorbed by the length of the UAL ticketing buildings. Although the east-west configuration could accommodate the desired length of a check point, the existing 63-foot depth of the subject area limits the number of side-by-side lanes that can be provided. As such, the currently proposed project includes a small check point on the ticketing level near Concourse 8 with five (5) SSCP lanes in an east-west orientation (see Figure 2) and creation of a consolidated and centralized SSCP with 12 lanes on the Concourse Level in a north-south orientation (see Figure 3).

The proposed consolidation and centralization of the SSCP will result in two locations for passengers to go through security. A small five-lane check point will be located at the eastern end of Terminal 7 for passengers going to Concourse 8, and the primary SSCP of 12 lanes to be consolidated at the north end of the Terminal 7 concourse. This configuration will simplify passenger check-in, as well as add an additional six lanes to lower processing time.

#### Ticketing Lobby

As shown in Figures 2 and 3, most of the existing Airline Ticket Offices (ATOs) located to the rear of the east ticketing counters will be displaced by a new (5-lane) SSCP (intended to exclusively serve Concourse 8 passengers). These offices will be replaced by new 8,000 s.f. ATO space currently occupied by the manual explosive detection system (EDS) equipment room to the south of the Terminal 7 ticket counters. No increase in enclosed and conditioned building area will result from this ATO relocation. Actually, a reduction of approximately 2,000 s.f. of enclosed and conditioned floor space will result because the EDS equipment room will be reduced in size.

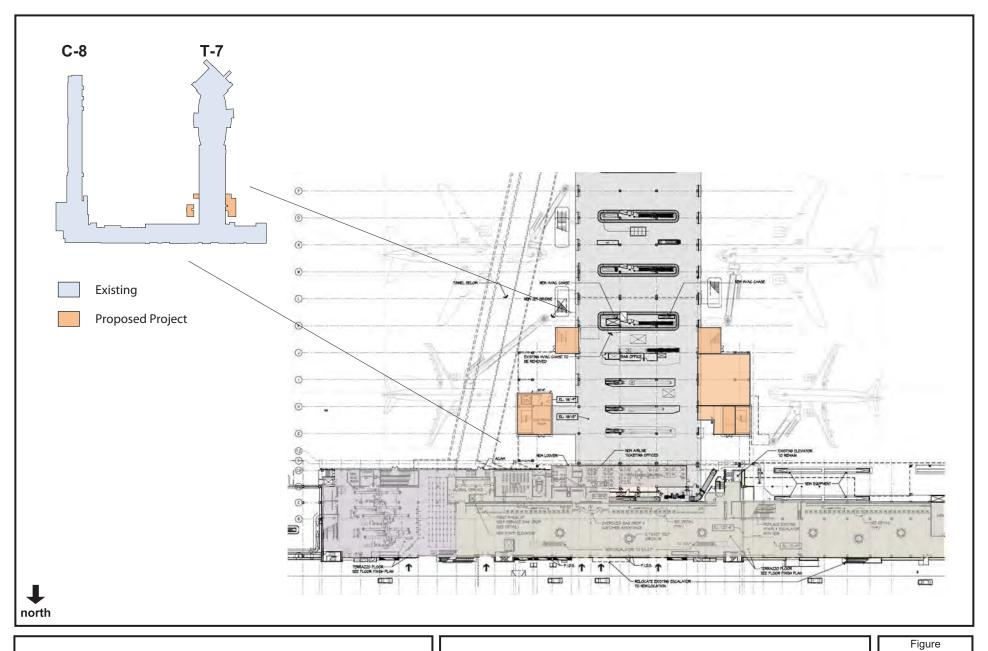
The proposed project also includes improvements to the Ticketing Lobby in the form of modifications to ticketing counters and additional E Ticket self check-in stations (see Figure 2).

#### **Secure Corridors**

The consolidation and centralization of the SSCP will result in the realignment of the floor slopes in these corridors. In addition, these corridors are in need of cosmetic, mechanical, and electrical refurbishment because they have not been significantly refreshed since they were originally constructed in the mid 1980's.

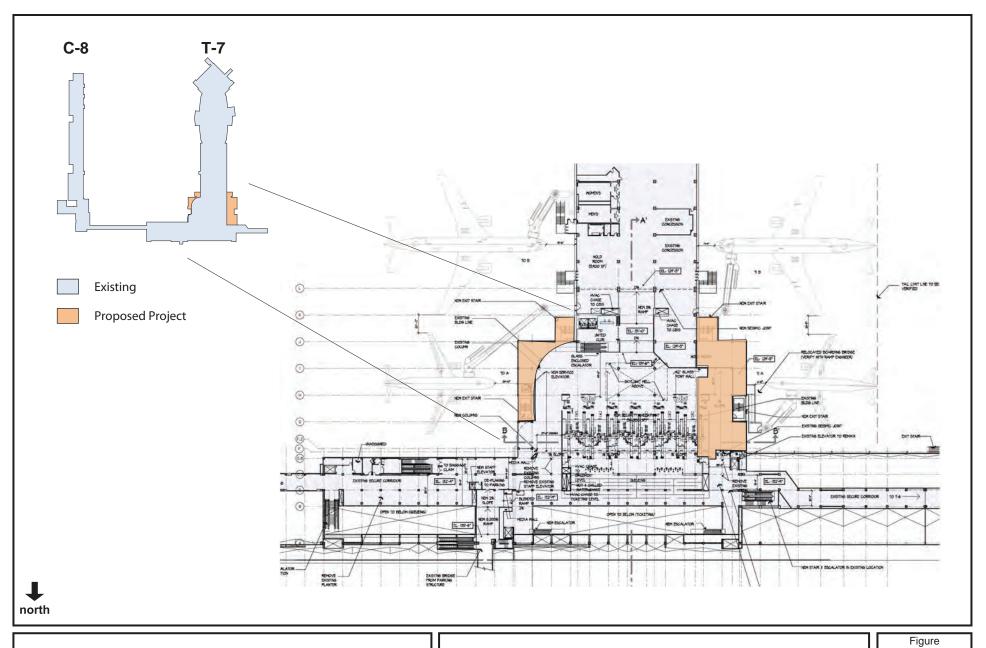
#### Mechanical Systems

The consolidation and centralization of the SSCP at the Concourse Level will displace the 8,000 s.f. mechanical room at a mezzanine level above the concourse. This facility will be replaced and relocated to the new Level 5 to be added to the existing three-story building (see Figure 4). The relocated mechanical room will be approximately 22,469 s.f., which is greater than the 8,000 s.f. facility that it will replace because its equipment will have to support the new 29,000 s.f. United Club at Level 4, and a larger volume of space at the Concourse Level due to its greater ceiling height.



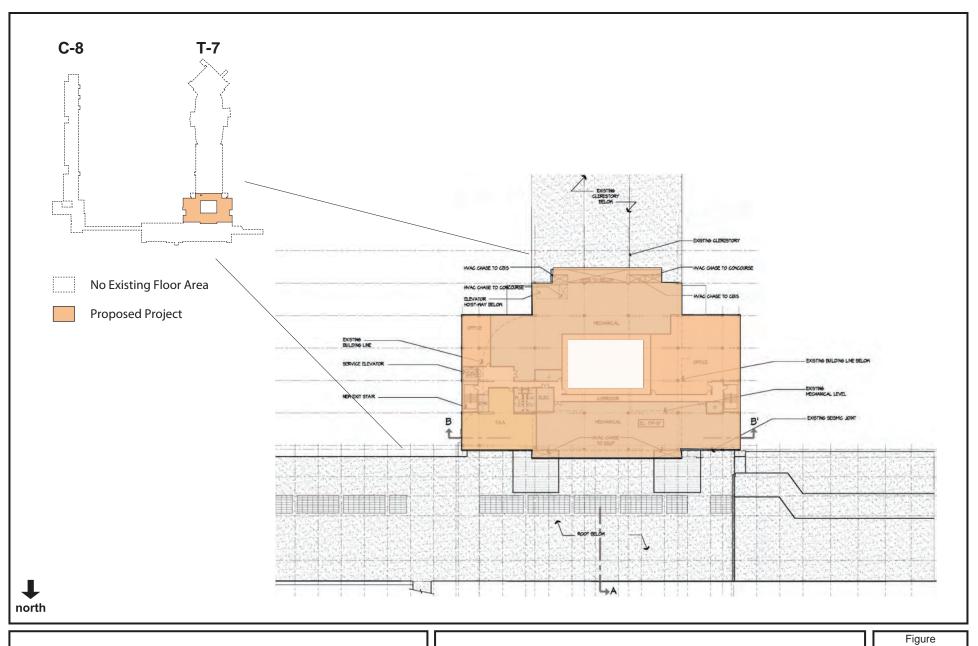
Terminal 7 - Ticketing Level (Level 2)

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Terminal 7 - Concourse Level (Level 3)

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Terminal 7 - Mechanical Level (Level 5)

4

#### **Enabling Projects**

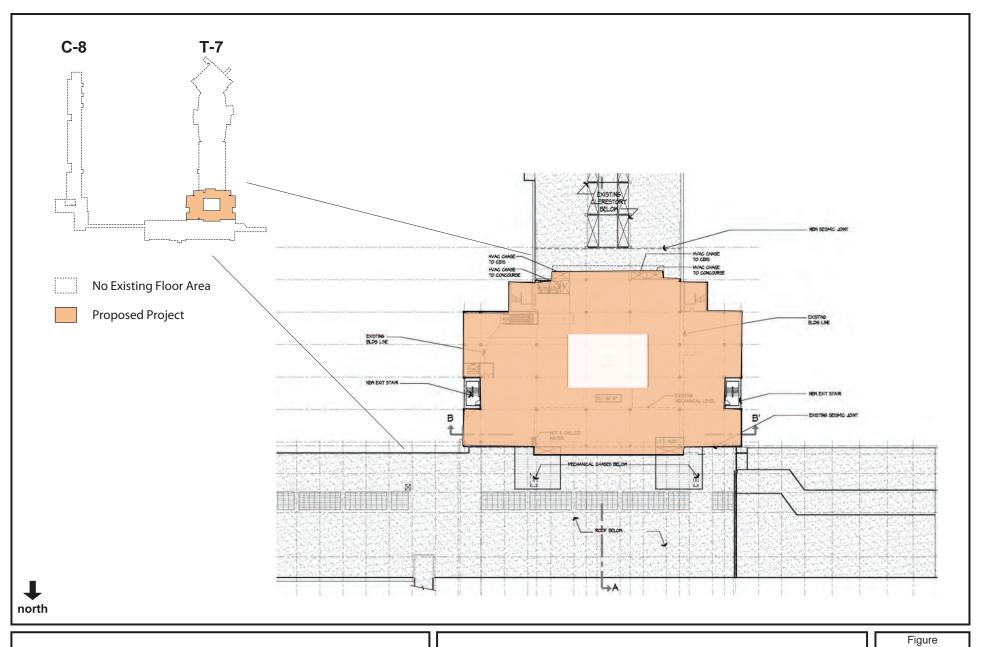
Besides the ATOs on the Ticketing Level, there are several existing facilities that will be displaced by the consolidated and centralized SSCP at the Concourse Level. Such as:

- The 13,000 s.f. United Club at the Concourse Level, which will be relocated to a new Level 4 to be added to the existing three-story building (see Figure 5). The new Level 4 will also require a new reception lobby with access elevators, escalators and stairways which total approximately 3,000 s.f. of floor area.
- The two retail concessions at the Concourse Level, which total approximately 2,500 s.f. will be displaced. One of these facilities will be relocated to the existing UAL customer services offices at Gate 74. The second facility will be relocated to the existing UAL customer service office at Gate 75.
- Relocation of the retail concessions will require relocation of the two customer service offices to the Satellite Mezzanine, where they will take the place of the existing United First Class and International Lounge.
- Relocation of the two customer service offices will require relocation of the First Class and International Lounge to the new Level 4 United Club space above the consolidated and centralized SSCP facility (see Figure 5).
- Various elevators, stairs and support spaces will be relocated throughout the Arrivals Level, Ticketing Level, and Concourse Level, as necessary.

#### **Structural Improvements**

As noted above, the proposed project includes two additional floor levels above the northern portion of the Terminal 7 concourse. The existing concourse building was constructed circa 1984 – and was designed under the structural provisions of a building code different from the current code. The existing building's structure is not designed to support the additional gravity and lateral loads from the proposed additional two floors above the concourse; therefore, the proposed project includes structural strengthening to handle the additional loads. The additional gravity loads will be handled by reinforcing the existing columns in the basement of the terminal building.

The additional lateral load will involve adding a braced frame to the exterior of the Terminal 7 concourse building, which will extend the existing north end of the Terminal 7 building near the concourse by approximately 56 feet on the west side and 20 feet on the east side of the existing building. This "seismic bracing" will provide seismic strengthening as well as provide Terminal 7 with additional circulation space. The portion of the concourse with new levels will be seismically isolated from the remainder of the concourse; therefore, the existing frames will be distributed evenly throughout the building so there will be no adverse structural impact to the existing building south of the new seismic joint as a result of adding new floor levels north of the new seismic joint.



Terminal 7 - Lounge Level (Level 4)

5

The new concourse levels will consist of a high ceiling and clear glass that will provide light and airy space, as well as visual interest. On the exterior, the glass and aluminum panels will provide an aesthetically pleasing building that is easy to maintain and, per LAWA requirements, maximize use of non-reflective materials and minimize use of undifferentiated expanses of glass. In addition to the renovations/improvements being constructed to meet the current building and safety requirements, current LAWA criteria for sustainable design (CALGreen Tier II) will be followed. CALGreen is a requirement of the current building code and is equivalent to LEED Silver.

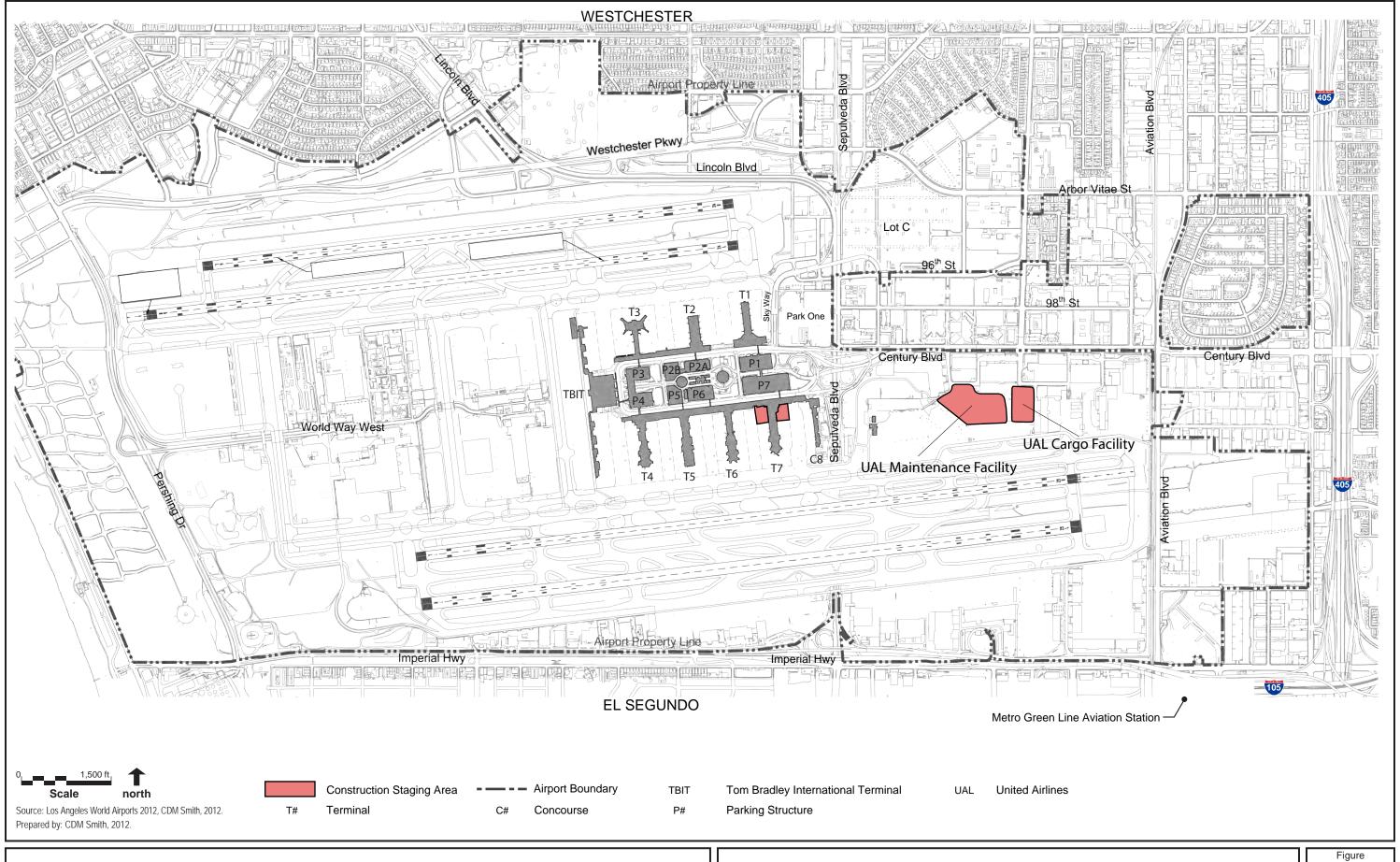
#### Construction

Development of the proposed improvements will occur on portions of LAX that are currently paved or developed with buildings. The proposed project includes the widening of the northern portion of the Terminal 7 building and addition of two floors (also at the northern portion of the concourse) to accommodate the consolidated and centralized SSCP, United Club lounge and mechanical systems. In addition, many of the proposed improvements are modified interior spaces. Construction activities associated with the proposed project include demolition, site preparation, foundation work, and building construction. SSCP foundation and structural construction is the first to begin. Once the building construction (i.e., structural framing, two new levels, and building shell) has been completed, the new United Club (Lounge) Level will be built above the existing roof. The existing roof will be subsequently abandoned. Then the new Mechanical Systems Level will be constructed. The existing mechanical level and low roof will be demolished after the new mechanical room is operational. Once those two levels have been completed and the new uses occupy those spaces (and the lounges and mechanical spaces have vacated their original areas) then demolition within the concourse and construction of the new SSPC can begin. Other interior demolition and improvements will be phased as appropriate over the entire construction duration. Construction is anticipated to occur over an approximate 18- to 20-month time frame and generally over continuous multiple phases, commencing in 2013 and occurring through 2015.

The primary consideration in planning for the construction activities is to maintain safe and uninterrupted operation of the airport, including runway operations and passenger access to terminals. The majority of the construction activities will occur during daytime hours behind construction barriers in phases with only sections of the terminal shut down at one time. Second and third shifts will be used for those work activities that cannot be accomplished on the daytime shift due to coordination and interference issues (i.e., airport operations, safety, delivery of materials and equipment). During construction, Gates 70A and 71A will not be in use at certain intervals. UAL does not anticipate any changes to the number of flights during construction; however, it is anticipated that gates at Terminal 6 and Concourse 8 will be more frequently used. Therefore, conflicts with terminal activities will be avoided through monitoring of flight schedules and close coordination with Terminal Operations on a day-to-day basis.

The main construction staging area will be located on the east end of the airport at UAL's maintenance and cargo operations (see Figure 6). Smaller staging areas will be provided immediately adjacent to Terminal 7 in the vicinity of Gates 70A and 71A on the airside of the terminal (also shown on Figure 6). The staging areas will include construction vehicles and stockpiled materials. Excavation associated with the strengthening of building supports (i.e., installation of piles, placement of collars around existing foundation, and associated concrete slab work) will generate approximately 2,500

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cubic yards of materials that will need to be exported from the site. Additionally, modifications to the existing buildings, including interior renovations, will generate debris that will be exported to other sites off-airport. The export of soil or demolition debris off site will require LAWA to submit a Haul Route Form and Haul Route Map to the City of Los Angeles, Department of Building and Safety in order for the Department of Building and Safety to develop a Haul Route Plan. In addition, pursuant to standard City of Los Angeles, Department of Transportation (LADOT) practices, a Work Traffic Control Plan, showing the location of construction areas and identifying construction traffic, will be submitted by LAWA to LADOT. These measures, as reviewed and approved by LADOT, will avoid significant conflicts between project-related construction traffic and traffic in local (off-airport) roadways.

A Construction Coordination Plan will also be prepared for the proposed project that includes, but will not be limited to, the following:

- Phasing of activities to ensure that no more than one gate will be closed at one time;
- Phasing of some activities overnight when passenger activity is low;
- Separating passengers from construction activities with solid construction walls;
- Prohibiting construction activity that will be disruptive to aircraft movement.
- Insuring that no foreign object debris will be deposited on the aircraft apron.

These and other provisions detailed in the Construction Coordination Plan will ensure that the terminal is fully operational at all times and that conflicts with terminal and airfield activities during construction are avoided.

#### 7.0 NECESSARY APPROVALS

Approvals required for the proposed project include, but may not be limited to, the following:

- Project approval by LAWA;
- Board of Airport Commissioner acquiring the terminal improvements;
- U.S. Department of Transportation Federal Aviation Administration (FAA) Form 7460 submittal for notice of proposed construction or alternation to the FAA and approved in consideration of Part 77 requirements;
- Grading, foundation, building permits, and a Haul Route Plan by the City of Los Angeles Department of Building and Safety;
- Approval of a Work Traffic Control Plan by the City of Los Angeles Department of Transportation;
- Cultural Affairs Commission design approval and public art requirements; and
- Any additional actions as may be determined necessary.

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### ATTACHMENT B EXPLANATION OF CHECKLIST DETERMINATION

#### **I. AESTHETICS.** *Would the project:*

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

Less Than Significant Impact. The project site is located within the western portion of the Los Angeles Basin, and broad scenic vistas of the Santa Monica Mountains in the distance are available at LAX from the El Segundo residential neighborhood located approximately 0.8 mile to the south. Most of the north-facing residences at lower elevations within the neighborhood have their northerly views blocked or obstructed by a landscaped and treed berm located along the south side of Imperial Highway. However, north-facing residences at higher elevations within the neighborhood where intervening residences are not present enjoy views of the Santa Monica Mountains on clear days. The airport, and in particular Terminal 7, does not enter into or contribute to scenic vistas from northfacing residences at higher elevations. Construction of the project is expected to involve cranes and the operation of the proposed project will increase the height of the northern portion of the Terminal 7 concourse by two floors. The existing concourse is approximately 42 feet in height above the apron. The new concourse will be 84 feet in height above the apron with the top of the new elevator on the eastern side of the concourse being 94 feet in height above the apron. With the exception of the approximate 15 foot wide area on the eastern side of the concourse that will house the new elevator, the new addition will be 42 feet higher than then the existing height of the concourse. However, the highest point of the satellite portion of the Terminal 7 concourse (the southern end) is approximately 54 feet in height; therefore, the majority of the new addition will be approximately 30 feet higher than the highest point on Terminal 7. The cranes and the additional two floors will be visible from some of these north-facing, upper elevation residences to the south of the project site. However, the long-term terminal improvements will not alter existing long-range views of the Santa Monica Mountains due to the distance of the proposed improvements and the substantially higher vantage points to the south (the project site is well below their line-of-sight), and the small portion of the total field of view which will be occupied by the two additional floors, the implementation of the proposed project will not have a substantial adverse effect on views of the Santa Monica Mountains (i.e., a scenic vista). Therefore, the impact is less than significant and no mitigation is required.

# b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings, or other locally recognized desirable aesthetic natural feature within a city-designated scenic highway?

Less Than Significant Impact. The project site is not located adjacent to or within the viewshed of a designated scenic highway. The nearest officially designated state scenic highway is approximately 22 miles northwest of the proposed project (State Highway 2, from approximately three miles north of Interstate 210 in La Cañada to the San Bernardino County Line). The nearest eligible state scenic highway (not officially designated by the state, but a City designated scenic highway) is State Highway 1, which has a starting point at Lincoln and Venice Boulevards (approximately 4.6 miles from project site) and proceeds northwesterly to Point Mugu. Vista del Mar, the nearest Citydesignated scenic highway not eligible as a state scenic highway, is located 2.3 miles west of Terminal

7, and the project site is not visible to/from Vista del Mar. There are no direct views to or from the scenic highways associated with the project site. Therefore, construction and operation of the proposed project will not damage scenic resources. In addition, the project site does not contain any trees, rock outcroppings or other locally recognized desirable aesthetic natural feature within a city scenic highway. The potential for implementation of the proposed project to substantially damage historic resources is detailed below under Response No. V.a. The impact is less than significant and no mitigation is required.

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

Less Than Significant Impact. The project site is a highly disturbed area within a busy international airport. The visual character of the project site is currently being used as a terminal with ticketing, passenger processing, baggage processing and claims area, gates, and aircraft apron areas. The majority of structures surrounding the project site, as well as the project site, are of a utilitarian style of architecture. However, several structures with notable architecture (i.e., the Theme Building and former (1961) airport traffic control tower) are located within the project area. Views of the existing airfield, while of public interest, and more distant views of the Central Terminal Area (CTA), are not scenic or of high quality visual character. The proposed project will increase the northern portion of the Terminal 7 concourse by two floors, which could potentially result in a change in visual character by elevating Terminal 7 above the other terminals. However, terminal improvements will not alter existing long-range views of the Santa Monica Mountains due to the distance of the proposed improvements and the substantially higher vantage points to the south. In addition, Terminal 7 is not within the line of site of or adjacent to the Theme Building or former (1961) airport traffic control tower and improvements will not affect views of these notable structures. Being that the increase in the height will occur at the northern portion of the Terminal 7 concourse (an increase in about 42 feet in height for the majority of the expansion over the existing concourse but only an increase of approximately 30 feet in height over the highest point on Terminal 7 - the southern end), the improvements will also not degrade or impede air traffic controller views of the airfield from the operating Air Traffic Control Tower. The proposed project is the modernization and redevelopment of an outdated facility. The project will greatly enhance the aesthetic character of the development area, which is similar to the improvements associated with the Bradley West project. Therefore, the impact is less than significant and no mitigation is required.

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

Less Than Significant Impact. The project site is located within a heavily lighted urban area. There are many existing sources of light at the project site, including building lighting, roadway lighting (within the CTA), and airport operations lighting, which includes lights from aircraft and airside equipment, apron/terminal lighting, as well as airfield lights (runway and taxiway lighting). The current plan is to use glass for the exterior of the expanded and modernized northern portion of the Terminal 7 concourse. Should that be approved, the lighting associated with the improvements will be more visible than existing Terminal 7 lighting and add to the existing sources of light in the project area. However, the additional lighting within the structure and lighting on the exterior of the building will be directed downward/inward to minimize spillover. In addition, the airport is a heavily light environment and any additional glow from the project site will not be viewed as substantial.

Finally, the proposed project will comply with applicable U.S. Department of Transportation Federal Aviation Administration (FAA) standards and in conformance with relevant LAWA light and glare guidelines. Should the improvements increase the amount of glass, it is expected that an increase in metal surfaces (i.e., metal, seismic bracing) will also occur. In compliance with LAWA approved LAX Master Plan Commitments LI-2 and LI-3, below, the building material chosen for the proposed project will not incorporate substantial amounts of reflective materials, which will ensure that no light sources or building materials will be introduced which interfere with daytime or nighttime views in the area. The applicable LAX Master Plan Commitments are as follows:

*LAX Master Plan Commitment LI-2. Use of Non-Glare Generating Building Materials.* Prior to approval of final plans, LAWA will ensure that proposed LAX facilities will be constructed to maximize use of non-reflective materials and minimize use of undifferentiated expanses of glass.

LAX Master Plan Commitment LI-3. Lighting Controls. Prior to final approval of plans for new lighting, LAWA will conduct reviews of lighting type and placement to ensure that lighting will not interfere with aeronautical lights or otherwise impair Airport Traffic Control Tower or pilot operations. Plan reviews will also ensure, where feasible, that lighting is shielded and focused to avoid glare or unnecessary light spill-over. In addition, LAWA or its designee will undertake consultation in selection of appropriate lighting type and placement, where feasible, to ensure that new lights or changes in lighting will not have an adverse effect on the natural behavior of sensitive flora and fauna within the Habitat Restoration Area.

Therefore, implementation of the proposed project will not create a new source of substantial light or glare which will adversely affect day or nighttime views in the area. The impact is less than significant and no mitigation is required.

- II. AGRICULTURAL AND FOREST RESOURCES. In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California agricultural land evaluation and site assessment model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. 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 of 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 developed airport and is surrounded by airport uses and urbanized areas. There are no agricultural resources or operations within the vicinity of the project site, including prime or unique farmlands or farmlands of statewide of local importance. Further, there are no Williamson Act contracts in effect within the LAX vicinity. The proposed project will be consistent with the current airport-related and urban uses and will not convert farmland to non-agricultural use nor will it result in any conflicts with existing zoning for agricultural use or a Williamson Act contract. Therefore, no impacts to agricultural resources will occur with implementation of the proposed project and no mitigation is required.

There are no forest land or timberland resources or operations within the vicinity of the project site, including timberland zoned Timberland Production. The proposed project will be consistent with the current airport-related and urban uses and will not convert forest land or timberland to non-forest. Therefore, no impacts to forest land or timberland resources will occur with implementation of the proposed project and no mitigation is required.

III. AIR QUALITY. The significance criteria established by the South Coast Air Quality Management District (SCAQMD) may be relied upon to make the following determinations. Would the project:

# a. Conflict with or obstruct implementation of the applicable South Coast Air Quality Management District plans?

Less Than Significant Impact. The proposed project is located in the South Coast Air Basin (SCAB), which is under the jurisdiction of the SCAQMD. The SCAQMD is the regional agency responsible for air quality regulations within the SCAB including enforcing the California Ambient Air Quality Standards (CAAQS) and implementing strategies to improve air quality and to mitigate effects from new growth. The SCAQMD, in association with the California Air Resources Board (CARB) and the Southern California Association of Governments, is responsible for preparing the Air Quality Management Plan (AQMP) that details how the region intends to attain or maintain the state and federal ambient air quality standards.

The Final 2007 AQMP<sup>4</sup> describes the SCAQMD's plan to attain the federal fine particulate matter less than or equal to 2.5 microns (µm) in diameter (PM<sub>2.5</sub>) and 8-hour ozone (O<sub>3</sub>) standards. Although the SCAQMD cannot directly regulate mobile source emissions, the Final 2007 AQMP requires the use of cleaner (as compared to "baseline") in-use off-road equipment. In 2007, CARB adopted a regulation to reduce diesel particulate matter and nitrogen oxides (NOx) emissions from inuse (existing) off-road heavy-duty diesel vehicles. Any construction equipment necessary to construct the terminal and concourse improvements will operate in compliance with state law and will be consistent with the objectives of the Final 2007 AQMP. Furthermore, the terminals and concourse will be constructed to meet the requirements of the 2010 California Green Building Standards Code ("CALGreen") and energy consumption will be at least 15 percent more efficient than Title 24. The project will meet the goals for the AQMP for energy efficiency and conservation and will therefore not conflict with the Final 2007 AQMP.

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<sup>&</sup>lt;sup>3</sup> City of Los Angeles, LAWA, <u>Final Environmental Impact Report, Los Angeles International Airport Proposed Master Plan Improvements</u>, Section 4.16, April 2004.

South Coast Air Quality Management District, Final 2007 Air Quality Management Plan, June 2007.

The City of Los Angeles adopted an Air Quality Element that is part of the General Plan. Objective 1.3 of the Air Quality Element is to reduce particulate matter emissions from unpaved areas, parking lots, and construction sites. All activities will be compliant with the SCAQMD's Rule 403 for fugitive dust control, thereby resulting in particulate matter emission reductions. Objective 5.1 of the Air Quality Element is to reduce energy consumption and shift to non-polluting sources of energy in its buildings and operations. The terminal and concourse improvements will be constructed in accordance with CALGreen standards, thereby meeting the requirements of the General Plan. The proposed project will be consistent with the Air Quality Element of the General Plan.

As discussed above, implementation of the proposed project will not obstruct or conflict with the applicable SCAQMD plan and thus, the impact is less than significant and no mitigation is required.

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

Less Than Significant Impact. The California Clean Air Act, signed into law in 1988, established the CAAQS; all areas of the state are required to achieve and maintain the CAAQS by the earliest practicable date. Regions of the state that have not met one or more of the CAAQS are known as nonattainment areas, while regions that meet the CAAQS are known as attainment areas.

The proposed project will be located in the Los Angeles County sub-area of the SCAB. Los Angeles County is designated as a state nonattainment area for  $O_3$ ,  $PM_{2.5}$ , inhalable particulate matter less than or equal to  $10 \, \mu m$  in diameter ( $PM_{10}$ ), nitrogen dioxide ( $NO_2$ ), and lead; and an attainment or unclassified area for carbon monoxide ( $NO_2$ ), sulfates, hydrogen sulfide, and visibility reducing particles.

The SCAQMD publishes thresholds of significance for these pollutants.<sup>7</sup> If the proposed project results in substantial emissions that will exceed the significance criteria, then a significant impact will occur. Table III-1 summarizes the mass daily thresholds for construction and operation.

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City of Los Angeles, Department of City Planning, <u>Air Quality Element: An Element of the General Plan of the City of Los Angeles</u>, November 1992.

<sup>&</sup>lt;sup>6</sup> California Air Resources Board, <u>Area Designations Maps / State and National Homepage</u>, Available: http://www.arb.ca.gov/desig/adm/adm.htm, October 19, 2012.

<sup>&</sup>lt;sup>7</sup> South Coast Air Quality Management District, <u>SCAQMD Air Quality Significance Thresholds</u>, March 2011.

Table III-1. SCAQMD Mass Daily Pollutant Emission Thresholds				
NO <sub>x</sub>	100 lbs/day	55 lbs/day		
VOC	75 lbs/day	55 lbs/day		
PM <sub>10</sub>	150 lbs/day	150 lbs/day		
PM <sub>2.5</sub>	55 lbs/day	55 lbs/day		
$SO_x$	150 lbs/day	150 lbs/day		
СО	550 lbs/day	550 lbs/day		
Lead	3 lbs/day	3 lbs/day		

Source: SCAQMD 2011

Key:

CO = carbon monoxide lbs/day = pounds per day NO<sub>x</sub> = nitrogen oxides

 $PM_{10}$  = inhalable particulate matter

 $PM_{2.5} = fine \ particulate \ matter$ 

 $SO_x = sulfur oxides$ 

VOC = volatile organic compounds

The California Emissions Estimator Model (CalEEMod), Version 2011.1.1, was used to estimate criteria and precursor pollutant emissions (volatile organic compounds [VOCs], NOx, CO, SO<sub>2</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub>).<sup>8</sup> The analysis does not estimate lead emissions because no major sources of lead will occur at the site. CalEEMod is a statewide land use emissions computer model that estimates construction and operational emissions from a variety of land use projects. CalEEMod also contains mitigation measures to reduce criteria pollutant emissions, if necessary.

CalEEMod used default data for equipment size (i.e., horsepower) and daily hours of operation. Construction emissions also include vendor and haul trips, construction worker commuting trips, and fugitive dust from demolition activities and paved road dust. Construction emissions were estimated for site preparation, demolition, building construction, and architectural coatings. Operational emissions will also occur from natural gas combustion for space heating and for the reapplication of architectural coatings for ongoing building maintenance. The proposed project is the modernization of UAL's operations at LAX to meet the evolving federal security requirements and will not increase existing employment, passenger capacity, or aircraft use at LAX because the project does not involve an increase in operations. Refer Appendix A of this IS/ND for the detailed model results. Table III-2 summarizes maximum daily emissions that will occur from construction activities.

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<sup>&</sup>lt;sup>8</sup> South Coast Air Quality Management District, <u>California Emissions Estimator Model Homepage</u>, developed by ENVIRON International Corporation, Available: http://www.caleemod.com/, October 22, 2012.

Table III-2. Construction Emissions Summary – Criteria Pollutants						
						Year
VOC	NOx	CO	SO <sub>2</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>	
2013	6	48	29	<1	19	3
2014	4	24	19	<1	2	2
2015	48	25	21	<1	2	2
Maximum	48	48	29	<1	19	3
SCAQMD Construction Threshold	75	100	550	150	150	55
Significant Impact?	No	No	No	No	No	No

Key:

CO = carbon monoxide

NOx = nitrogen oxides

 $PM_{10} = inhalable particulate matter$ 

 $PM_{2.5}$  = fine particulate matter

 $SO_2 = sulfur dioxide$ 

VOC = volatile organic compounds

As shown in Table III-2, emissions for all criteria pollutants will be less than the SCAQMD's significance thresholds for construction emissions. Additionally, operational emissions for all criteria pollutants will be less than one pound per day, well under the significance criteria shown in Table III-1. Construction and operational emissions will not violate an air quality standard or contribute substantially to an existing or projected air quality standard. Therefore, the impact is less than significant and no mitigation is required.

c. Result in a cumulatively considerable net increase of any criteria pollutant for which the air basin is non-attainment  $(O_3, NO_2, PM_{10}, PM_{2.5}, and lead)$  under an applicable federal or state ambient air quality?

Less Than Significant Impact. Cumulative impacts occur when the impact of one project when added to other past, present, or reasonably foreseeable probable future project could cause a significant impact. In other words, although an individual project will be less than significant, the combined impacts from other projects could cause a significant impact. According to the SCAQMD<sup>9</sup>, projects that do not exceed the significance thresholds are generally not considered to be cumulatively significant. As shown in Table III-2, the construction emissions of the nonattainment pollutants  $(PM_{10}, PM_{2.5}, \text{ and } O_3 \text{ precursors [NOx and VOC])}$ , will be less than the SCAQMD significance thresholds. Therefore, the cumulative impact from the proposed project construction is less than significant and no mitigation is required.

Emissions of the nonattainment pollutants ( $PM_{10}$ ,  $PM_{2.5}$ , and  $O_3$  precursors [NOx and VOC]) from project operation are negligible and will be less than the SCAQMD significance thresholds. Therefore, the cumulative impact from the proposed project operation is less than significant and no mitigation is required.

South Coast Air Quality Management District, White Paper on Potential Control Strategies to Address Cumulative Impacts from Air Pollution, August 2003.

#### d. Expose sensitive receptors to substantial pollutant concentrations?

Less Than Significant Impact. As described in Response No. III.b. above, daily construction emissions will be below significance thresholds. Diesel particulate matter is listed as a toxic air contaminant in California and will be subject to human health risk standards of 10 in 1 million for the maximum individual cancer risk and 1.0 (project increment) for the chronic and acute hazard indices. The closest sensitive receptors (i.e., hospitals, K-12 schools, residences, and day care centers) are the residential areas within the City of El Segundo to the south and the community of Westchester to the north, located over 3,000 feet (approximately 0.6 mile) from the project site. Based on the limited duration of the installation activities, any impact on sensitive receptors will be minimal. Therefore, implementation of the proposed project will not expose sensitive receptors to substantial pollutant concentrations. The impact is less than significant and no mitigation is required.

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

Less Than Significant Impact. The use of diesel equipment during construction may generate near-field odors that are considered to be a nuisance. Diesel equipment emits a distinctive odor that may be considered offensive to certain individuals. Due to the short installation period and distance to sensitive receptor, odors from diesel exhaust will not affect a substantial number of people. Operation of the proposed project will not create objectionable odors. Therefore, implementation of the proposed project will not create objectionable odors affecting a substantial number of people. The impact is less than significant and no mitigation is required.

#### 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 Game or U.S. Fish and Wildlife Service?
- b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in the City or regional plans, policies, or regulations or by the California Department of Fish and Game 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 native 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 tree preservation policy or ordinance (e.g., oak trees or California walnut woodlands)?
- 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?

a-f. No Impact. The main purpose of the proposed project is to modernize Terminal 7 to meet the evolving federal security requirements, which will enhance passenger service by consolidating several existing dispersed SSCPs into a centralized SSCP. In conjunction with development of the consolidated and centralized SSCP, several existing terminal functions and facilities located at the proposed SSCP location will be displaced and relocated elsewhere in the terminal, which, in turn, will involve other related remodeling and modernization improvements (i.e., "enabling project elements") mostly within Terminal 7, and a small area of Concourse 8 adjacent to Terminal 7. The majority of the construction activities that will impact the exterior of the building will occur at Terminal 7 at Gates 70A and 71A. The main construction staging area will be located on the east end of the airport at UAL's maintenance and cargo operations (see Figure 6). Both Terminal 7 and the staging areas are highly developed and devoid of biological resources. No impacts to sensitive or special status species or habitats are expected to occur. There is no riparian habitat or other sensitive natural community at the project site or near the vicinity of the proposed project. Therefore, there will be no potential impacts to any riparian or other sensitive natural community. There is no adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan that includes the project site or immediate vicinity. The Dunes Specific Plan Are (i.e., Los Angeles/El Segundo Dunes), a designated Los Angeles County Significant Ecological Area, is located at the far western portion of the boundaries of LAX, which is approximately 2 miles from project construction (i.e., Terminal 7). The Dunes area is well removed from the project site and will not be impacted by the proposed project. Therefore, no impacts to biological resources will occur with implementation of the proposed project and no mitigation is required.

#### V. CULTURAL RESOURCES. Would the project:

### a. Cause a substantial adverse change in significance of a historical resource as defined in State CEQA §15064.5?

Less Than Significant Impact. LAX began as Mines Field in 1928, when the City of Los Angeles leased 640 acres of the Bennett Rancho. The first permanent building at the airfield was constructed in 1929 by the Curtiss-Wright Flying School. Known as Hangar One, the building was designed by Los Angeles architects Gable and Wyant in a distinctive Spanish Colonial Revival style. Additional construction followed, until there were five hangars, a 2,000-foot paved runway, and administrative offices for the then Department of Aviation. Plans for a new modern airport were derailed by World War II. Wartime production activity at the aircraft manufacturing plants on and around the airport intensified dramatically. In 1942, the federal government assumed control of the airport and the Army Air Corps stationed planes and men at the field. After the war, a master plan envisioning two stages of development, an initial stage to immediately accommodate commercial operations and a long-range expansion of the field, was implemented. The Intermediate Facilities, consisting of four passenger terminals, new administrative buildings, and hangars for individual airlines, were opened on the north side of the airfield in 1946.

A boom in commercial air travel followed, accompanied by marked increases in air freight traffic. A new master plan for the Los Angeles International Airport, so named in 1949, began to be developed. In 1956, a new master plan for a "jet-age" airport was developed by an architectural joint venture of several prominent Los Angeles architects. Their innovative scheme incorporated a U-shaped access road flanked by six ticketing buildings that, in turn, were connected via subterranean passageways to remote satellite buildings containing the actual boarding gates. Passenger amenities

were located in the individual satellites. The center of the "U" contained parking, an administrative building surmounted by a state-of-the-art control tower at the extreme east end of the site, an eyecatching Theme Building restaurant in the center of the site, and support facilities including a cooling tower, utility plant, and a service building located west of the Theme Building. Inspired by the aesthetics of the Jet Age, the Theme Building quickly became an internationally recognized symbol and centerpiece of the new airport, distinguished by its parabolic arches from which a flying saucer-shaped restaurant was suspended.

Continuing growth of both commercial and freight traffic at the airport has resulted in numerous improvements over the last few decades. These have included the development of two cargo centers, Cargo City (late 1960s) and the Imperial Cargo Complex (1980s); the Bradley International Terminal (1984); and a new Airport Traffic Control Tower (1996). The earlier control tower, while considered state-of-the-art in 1961, was considerably altered in 1996 when the FAA relocated to the new airport traffic control tower.

Previously-identified historical resources at LAX include the following: 10

- 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;
- Theme Building (eligible for the National Register of Historic Places) in the center of the LAX terminals;
- WWII Munitions Storage Bunker (eligible for the National Register of Historic Places) near the western boundary of LAX; and
- Intermediate Terminal Complex (eligible for the California Register of Historical Resources) on the south side of Century Boulevard between Sepulveda Boulevard and Airport Boulevard.

The original Terminals 6 and 7 were modified around 1970 to accommodate wide-bodied aircraft. Terminal 7 and Concourse 8 were redeveloped in 1982, prior to the 1984 Olympics. Terminal 6 redevelopment was completed in 1987. In 2011, as part of the preparation of the Draft EIR for the LAX Specific Plan Amendment Study Project, additional baseline data for cultural resources were collected. The data found no other structures within LAX than those noted above that were determined to be potentially historic.

The nearest identified historical resource at LAX to the proposed Terminal 7 improvements is the Theme Building and Setting. The Theme Building is situated at the center of the CTA and northwest of Terminal 7 and Concourse 8. It has been determined eligible for listing in the National Register under Criteria Consideration G and Criterion C for its unique architecture, which has become symbolic not only of the airport but of the City of Los Angeles as a whole. In California, a property that has been determined eligible for listing in the National Register is automatically listed in the California Register. Constructed in 1961-1962, the Theme Building was the centerpiece of the large expansion of LAX which converted it into a "jet-age airport." The arresting design of parabolic arches with a flying saucer-shaped restaurant suspended between them was conceived by joint venture architects William L. Pereira, Charles Luckman, Welton Becket, and Paul R. Williams. The Theme Building was also designated Los Angeles Historic Cultural Monument #570 in 1992. The 2011

City of Los Angeles, LAWA, <u>Final Environmental Impact Report, Los Angeles International Airport Proposed Master Plan Improvements</u>, Section 4.9.1, April 2004.

historical resources survey results determined that in addition to the Theme Building being historic, it's "setting" is also eligible for listing. The "setting" includes the original exterior and interior fabric of the Theme Building as well as its immediate surrounds and the related airport setting and views, and collectively described as the "Theme Building and Setting."

Although substantially altered with numerous additions and upgrades necessitated by the large expansion in service since the 1960s, the general character of the airport setting from the 1960s and 1970s remains residually recognizable, including the basic airport site plan and the airport's Jet Age/International Style architectural character and materials (rectangular volumes, horizontality, metal and concrete, smooth surfaces, large expanses of glass, ribbon windows); the centrally located Theme Building, which remains visually and physically predominant within the U-shaped concourse and circulation complex; the horizontal forms and rectangular massing of the concourse buildings and their generally consistent scale and height and relationships of spaces, masses and voids; and the general relationship of the exterior terminals and associated airfields located to the north and south of the concourse area. The visual predominance of the Theme Building as an architectural centerpiece of the airport is presently defined both by views from the Theme Building as well as the views of the Theme Building. The Theme Building's setting presently includes the axial road alignment and unobstructed view corridor in both directions between the Theme Building and the former (1961) airport traffic control tower, from the Theme Building restaurant and public roof-top viewing platform to the former (1961) airport traffic control tower, and from the control booth of the former (1961) airport traffic control tower to the Theme Building. Mid- and long-range outward looking views from the Theme Building's 80-foot level restaurant and 360-degree views from the roof-top viewing platform include mid-range views of the concourses and terminals, long-range views of the airfields, and distant views to the surrounding neighborhoods, mountains, and Pacific Ocean, which can still be experienced as largely originally intended. Direct views of the Theme Building's north and south elevations from the U-shaped vehicular and pedestrian circulation paths within the CTA, and direct views of the Theme Building from the edges of the horizontal concourse levels, including views through the continuous horizontal strip windows directly facing the Theme Building from the south terminals, are also available.

Contributing features of the original Theme Building structure (extant original exterior and interior features) include, but are not necessarily limited to, the base, elevator core, extant original features of the restaurant space (excluding later alterations), public viewing platform, structural arches and footings, surrounding concrete wall/grille around base, pedestrian entrance, associated original hardscape features such as pedestrian patios and planters/planting beds, and surrounding pedestrian and vehicular circulation.

Contributing features of the Theme Building Setting include:

- The Central Service Facility Buildings (two similar one-story utility/office buildings with concrete arched roofs, remaining segment of original axial road alignment, associated concrete sidewalks and hardscape);
- The Primary Axial View between the Theme Building and the former (1961) airport traffic control tower, including the axial road alignment and unobstructed view corridor between the former (1961) airport traffic control tower and the Theme Building, from the Theme Building restaurant and public roof-top viewing platform, from the former (1961) airport traffic control

- tower, and from vehicular and pedestrian circulation paths within the immediate vicinity of the view corridor;
- Although not eligible individually due to substantial later alterations, the former (1961) airport traffic control tower remains recognizable; it retains its architectural form and distinctive control booth;
- Although substantially altered with numerous additions and upgrades necessitated by the large expansion in service since the 1960s, the general character of the airport setting from the 1960s and 1970s remains residually recognizable, including the site plan, horizontal forms and rectangular massing of the concourse buildings, their generally consistent scale and height, the figure-ground relationships of masses and voids, the relationships of spaces and use, general architectural character and materials (Jet Age/International Style, rectangular volumes, horizontality, metal and concrete, smooth surfaces, large expanses of glass, ribbon windows) the centrally located Theme Building which remains predominant within the U-shaped concourse and circulation complex, and the exterior terminals and associated airfields located to the north and south of the concourse area;
- Mid- and long-range outward looking views from the Theme Building's 80-foot level restaurant and 360-degree views from the roof-top viewing platform including mid-range views of the concourses and terminals, long-range views of the airfields, and distant views to the surrounding neighborhoods, mountains, and Pacific Ocean, which can still be experienced as originally conceived;
- Direct views of the Theme Building from the U-shaped vehicular and pedestrian circulation paths within the CTA; and
- Direct views of the Theme Building from the edges of the horizontal concourse levels, including views through the continuous horizontal strip windows directly facing the Theme Building from the south terminals.

The project site is located at the most southeast point of the U-shaped vehicular and pedestrian circulation paths within the CTA. The exterior improvements associated with the proposed project will increase the northern portion of the Terminal 7 concourse by two floors. The location or views from the terminal will not change. Views of LAX from the residential area to the south will change but the increased height of the concourse will not block views of the Theme Building or it's Setting due to the substantially higher vantage points to the south (the project site is well below their line-ofsight) and the northwesterly location of the Theme Building relative to Terminal 7 (which is not in a direct line of site to the Theme Building and Setting). With the increase in height of the Terminal 7 concourse (portion nearest the Theme Building) by approximately 42 feet, views of the Theme Building and Setting from the Imperial Freeway will be changed, but the view of the Theme Building and Setting that includes Terminal 7 is already limited and fleeting to drivers on Imperial Highway. In addition, the Cultural Affairs Commission is required to provide design review for all building projects located on land owned by the City of Los Angeles. All buildings at LAX fall within the Cultural Affairs Commissions design review. Therefore, once LAWA approves the conceptual plans for the proposed project, the design package will be submitted to the Cultural Affairs Commission for their review and design approval. The Cultural Affairs Commissions review and design approval will support the preservation of significant historic/architectural resources through careful review of design and development adjacent to such resources to ensure modifications are carried out consistent with the Secretary of the Interior's Standards for the Treatment of Historic Properties. Because of the height

limitations, design, and distance of the proposed terminal improvements and the incorporation of the Cultural Affairs Commissions review and design approval, substantial adverse change in significance of the Theme Building and Setting will not occur.

The main construction staging area for the proposed project will be located at UAL's maintenance and cargo operations. This area is within the designated Intermediate Terminal Complex located east of the concourse and terminal facilities and south of Century Boulevard. This complex was determined ineligible for listing in the National Register by the FAA due to alterations and loss of some structures. Intended to be temporary in nature, the Intermediate Terminal Complex originally included the two office buildings and double-arched hangar that are still extant, plus five additional buildings that were used as passenger terminals and hangars. Demolition of the passenger terminals and alterations to the double-arched hangar prevents the complex from meeting National Register requirements for integrity. However, previous surveys found that, as a representative milepost in the evolution of LAX, the complex may be historically significant under Los Angeles Historic Cultural Monument criteria and, thus, appeared eligible for local designation. It also appeared to meet Criterion 1 under the California Register (i.e., is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage). Currently, UAL operates maintenance and cargo operations from the area designated as the Intermediate Terminal Construction staging activities include equipment and materials storage, construction worker parking, and construction office space. The construction staging activities are consistent with the current activities that occur within this area and the construction activities will not impact or alter the Intermediate Terminal Complex buildings or their setting. In addition, the construction staging area in this area will be temporary (last the approximate 18- to 20-month time frame). Operation of the proposed project will not affect the Intermediate Terminal Complex area. Therefore, a substantial adverse change in significance of the Intermediate Terminal Complex will not occur.

The impact is less than significant and no mitigation is required.

## b. Cause a substantial adverse change in significance of an archaeological resource pursuant to State CEQA §15064.5?

*No Impact*. The project site is a highly disturbed area that has long been, and is currently being, used for airport and airport-related uses. Any resources that may have existed on the site at one time are likely to have been displaced or damaged and, as a result, the overall sensitivity of the site with respect to buried resources is low. Additionally, excavation into soils is expected to be limited to structural piles, which will further limit the potential for archaeological resources to be encountered with implementation of the proposed project. Therefore, no impacts to archaeological resources will occur with implementation of the proposed project and no mitigation is required

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

Less Than Significant Impact. 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. <sup>11</sup> The older deposits that underlie the LAX area are assigned to the Palos Verdes Sand formation, which

City of Los Angeles, LAWA, <u>Final Environmental Impact Report, Los Angeles International Airport Proposed Master Plan Improvements</u>, Section 4.9.1, April 2004.

is one of the better known Pleistocene age deposits in southern California. The results of the records search conducted as part of the LAX Master Plan EIR indicate that the Palos Verdes Sand formation is a formation with a high potential for yielding unique paleontological deposits. The Palos Verdes Sand formation covers half of the LAX area, beginning at Sepulveda Boulevard and extending easterly beyond the airport. The records search conducted for the LAX Master Plan EIR identified the presence of two vertebrate fossil occurrences within the study area, three more in the immediate vicinity of the study area, and one beyond the study area within two miles from the center of LAX proper. These fossils were found at depths ranging from 13 to 70 feet. The deposits within which these resources occur were found to underlie the entire LAX area and surrounding vicinity. Therefore, excavation and grading activities greater than 13 feet have the potential to expose and damage potentially important fossils. Support piles/columns installed for the new structural support and seismic joint may go as deep as 50 to 70 feet. Although construction activities associated with the proposed project could be deep, the area associated with each support pile will be limited to the area immediately at and adjacent to each column; therefore, no significant direct or indirect impact on a unique paleontological resource or site or unique geologic feature is anticipated. The impact is less than significant and no mitigation is required.

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

*No Impact.* The proposed project includes excavation activities during construction associated with the two additional floor levels above the northern portion of the Terminal 7 concourse. These activities are limited to the area surrounding vicinity of Gates 70A and 71A. The project site is developed with an airport and airport-related uses, and is located within a highly urbanized area. Based on previous surveys conducted at LAX and the results of the record searches completed in 1995, 1997, 2000, and 2011, and 2011, no traditional burial sites have been identified within the LAX boundaries or in the vicinity. Therefore, no impacts to human remains will occur with implementation of the proposed project and no mitigation is required.

#### **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.

Less Than Significant Impact. Fault rupture is the surface displacement that occurs along the surface of a fault during an earthquake. The project site is located within the seismically active southern California region, but it is not located within an Alquist-Priolo Special Study Zone.<sup>14</sup> Geotechnical literature indicates that the Charnock Fault, a potentially active fault, may be located

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<sup>&</sup>lt;sup>12</sup> City of Los Angeles, LAWA, <u>Final Environmental Impact Report, Los Angeles International Airport Proposed Master Plan Improvements</u>, Section 4.22, April 2004.

PCR, <u>Cultural Resources Documentation</u>, Appendix E-1 of the LAX Specific Plan Amendment Study Project Draft EIR, July 2012.

<sup>&</sup>lt;sup>14</sup> City of Los Angeles, LAWA, <u>Final Environmental Impact Report, Los Angeles International Airport Proposed Master Plan Improvements</u>, Section 4.22, April 2004.

near or through the eastern portion of the project site. However, 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 the project site.<sup>15</sup> The proposed project will involve the construction and operation of two additional floor levels above the northern portion of the Terminal 7 concourse. Because the existing concourse building was constructed and designed under the structural provisions of a building code different from the current code, and therefore, the existing building's structure is not designed to support the additional gravity and lateral loads from the two additional floors above the concourse, the proposed project includes structural strengthening to handle the additional loads. The additional gravity loads will be handled by reinforcing the existing columns in the basement of the terminal building. The additional lateral load will involve adding a braced frame to the exterior of the Terminal 7 concourse building, which will extend the existing north end of the Terminal 7 building near the concourse by approximately 56 feet on the west side and 20 feet on the east side of the existing building. This "seismic bracing" will provide seismic strengthening as well as provide Terminal 7 with additional circulation space. The portion of the concourse with the new levels will be seismically isolated from the remainder of the concourse; therefore, the existing frames will be distributed evenly throughout the building so there will be no adverse structural impact to the existing building south of the new seismic joint as a result of adding new floor levels north of the new seismic joint.

The design and construction of the proposed project will comply with current Los Angeles Building Code (LABC) and Uniform Building Code (UBC) requirements. In addition, the main purpose of the proposed project is the modernization of UAL's operations at LAX to meet the evolving federal security requirements. Along with the enabling projects, the proposed modernization will improve the quality of service provided to UAL passengers, and is not intended to increase passenger or aircraft use of the terminal. Therefore, implementation of the proposed project is not anticipated to adversely affect foundations or result in other structural or engineering modifications that could increase exposure of people or structures to risk associated with rupture of a known earthquake fault. The impact is less than significant and no mitigation is required.

#### ii. Strong seismic ground shaking?

Less Than Significant Impact. The project site is located in the seismically active southern California region; however, there is no evidence of faulting on the site, and it is not located within an Alquist-Priolo Special Study Zone. The proposed project will involve the construction and operation of two additional floor levels above the northern portion of the Terminal 7 concourse. Because the existing concourse building was constructed and designed under the structural provisions of a building code different from the current code, and the existing building's structure is not designed to support the additional gravity and lateral loads from the two additional floors above the concourse, the proposed project includes structural strengthening to handle the additional loads. The design and construction of the proposed project will comply with current LABC and UBC requirements. In addition, the main purpose of the proposed project is the modernization of UAL's operations at LAX to meet the evolving federal security requirements. Along with the enabling projects, the proposed modernization will improve the quality of service provided to UAL passengers, and not intended to

<sup>&</sup>lt;sup>15</sup> City of Los Angeles, LAWA, <u>Final Environmental Impact Report, Los Angeles International Airport Proposed Master</u> Plan Improvements, Section 4.22, April 2004.

City of Los Angeles, LAWA, <u>Final Environmental Impact Report, Los Angeles International Airport Proposed Master Plan Improvements</u>, Section 4.22, April 2004.

increase passenger or aircraft use of the terminal. Therefore, implementation of the proposed project is not anticipated to adversely affect foundations or result in other structural or engineering modifications that could increase exposure of people or structures to risk associated with strong seismic ground shaking. The impact is less than significant and no mitigation is required.

#### iii. Seismic-related ground failure, including liquefaction?

Less Than Significant 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. Liquefaction potential is greatest where the groundwater levels are shallow and where submerged loose, fine sands occur within a depth of about 50 feet or less. Previous investigations at the project site did not encounter groundwater as deep as the 80-foot depth explored, and based on available information, the project site is not within a designated "Liquefaction Hazard Zone" and, therefore, potential for liquefaction at the site is very remote.<sup>17</sup> Although the proposed project includes two additional floors at the Terminal 7 concourse, the design and construction of the proposed project will comply with current LABC and UBC requirements. In addition, the main purpose of the proposed project is the modernization of UAL's operations at LAX to meet the evolving federal security requirements. Along with the enabling projects, the proposed modernization will improve the quality of service provided to UAL passengers, and not intended to increase passenger or aircraft use of the terminal. Therefore, implementation of the proposed project is not anticipated to adversely affect modify any existing structures or create or experience impacts associated with seismic-related ground failure and liquefaction. The impact is less than significant and no mitigation is required.

#### iv. Landslides?

*No Impact*. The project site and vicinity are relatively flat and are 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 which may be prone to seismically-produced landslides.<sup>18</sup> Implementation of the proposed project will not result in the exposure of people or structures to the risk of landslides during a seismic event. Therefore, no impacts related to landslides will occur with implementation of the proposed project and no mitigation is required.

#### b. Result in substantial soil erosion or the loss of topsoil?

*No Impact*. The project site is developed with buildings and covered with impervious surfaces and the proposed project will involve very limited excavation or grading. Therefore, the potential for soil erosion to occur on the project site is extremely low. Therefore, no impacts related to soil erosion will occur with implementation of the proposed project and no mitigation is required.

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MACTEC Engineering and Consulting, Inc., <u>Report of Geotechnical Investigation</u>, <u>Proposed EDS Baggage Screening System</u>, <u>Terminal 7</u>, <u>LAX</u>, <u>Los Angeles</u>, <u>California</u>, August 13, 2004.

City of Los Angeles Planning Department, <u>Safety Element of the City of Los Angeles General Plan</u>, Exhibit C, Landslide Inventory & Hillside Areas In the City of Los Angeles, June 1994.

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

Less Than Significant Impact. Settlement of foundation soils beneath existing 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 the project site creates the potential for settlement. Based on previous investigations at the project site, the majority of the existing fill soils that Terminal 7 was built on are well above 90 percent relative compaction. Therefore, implementation of the proposed project is not anticipated to adversely affect a geologic unit or soil that is unstable, or that will become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse. The impact is less than significant and no mitigation is required.

d. Be located on expansive soil, as defined in Table 18-1-B of the Los Angeles Building Code (2002), creating substantial risks to life or property?

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. Shrinking or swelling of foundation soils can lead to damage to foundations and engineered structures including tilting and cracking. The proposed project will involve the construction and operation of two additional floors at the Terminal 7 concourse, which will require additional support columns and a new seismic joint. The design and construction of the proposed project will comply with current LABC and UBC requirements and will not substantially affect the foundation or result in other structural or engineering modifications that could increase exposure of people or structures to risk associated with expansive soils. The impact is less than significant and no mitigation is required.

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

No Impact. The project site is located in an urbanized area where wastewater infrastructure is currently in place. The proposed project will not use septic tanks or alternative wastewater disposal systems. Therefore, no impact related to the ability of on-site soils to support septic tanks or alternative wastewater systems will occur with implementation of the proposed project and no mitigation is required.

#### 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?

Less Than Significant Impact. The proposed project could generate greenhouse gas (GHG) emissions from vehicle exhaust associated with construction-related activities including off-road

City of Los Angeles, LAWA, <u>Final Environmental Impact Report, Los Angeles International Airport Proposed Master Plan Improvements</u>, Section 4.22, April 2004.

MACTEC Engineering and Consulting, Inc., Report of Geotechnical Investigation, Proposed EDS Baggage Screening System, Terminal 7, LAX, Los Angeles, California, August 13, 2004.

construction equipment, construction worker commuting, and haul/vendor truck trips. Operational emissions will also occur from purchased electricity and space heating. Because there will be no increase in passengers or employees, operational emissions from vehicle trips to/from the airport, indoor or outdoor water usage, or solid waste disposal were assumed to remain equal to existing conditions.

GHG emissions for the proposed project were estimated using the California Emissions Estimator Model (CalEEMod), Version 2011.1.1.<sup>21</sup> Section 5.201 of the 2010 California Green Building Standards Code ("CALGreen") states that the "California Energy Commission believes…a green building should achieve at least a 15 percent reduction in energy usage when compared to the State's mandatory energy efficiency standards." As a result, it was assumed that the new terminals and concourse will be 15 percent more energy efficient than Title 24. Energy consumption in the Mechanical Room and Apron Level Drip Line Area will be minimal and emissions were not estimated from these areas. The SCAQMD recommends that construction emissions be amortized over the project lifetime and then be added to operational emissions so that GHG emission reduction measures also capture construction. <sup>22</sup> Table VII-1 summarizes emissions from the proposed improvements.

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South Coast Air Quality Management District, <u>California Emissions Estimator Model Homepage</u>, developed by ENVIRON International Corporation, Available: http://www.caleemod.com/, October 22, 2012.

South Coast Air Quality Management District, <u>Draft Guidance Document – Interim CEQA Greenhouse Gas (GHG) Significance Threshold</u>, October 2008.

	Table	e VII-1.		
Greenhouse Gas Emissions Summary from Proposed Project				
Source	Emissions (metric tons per year)			
	$CO_2$	CH <sub>4</sub>	N <sub>2</sub> O	CO <sub>2</sub> e
Electricity	342	<1	<1	343
Natural Gas	3	<1	<1	3
<b>Total Operations</b>	346	<1	<1	347
Construction	648	2	<1	649
Amortized Construction <sup>1</sup>	22	<1	<1	22
Total <sup>2</sup>	367	<1	<1	368

Notes:

Key:

 $CH_4$  = methane

 $CO_2e$  = carbon dioxide equivalent

 $CO_2$  = carbon dioxide  $N_2O$  = nitrous oxide

Electricity and natural gas usage from the existing terminals and concourse were estimated using the U.S. Energy Information Administration's 2003 Commercial Buildings Energy Consumption Survey.<sup>23</sup> The Public Use Microdata were filtered to only include buildings from the Pacific census division that were built between 1980 and 1989; an enclosed mall was used as a proxy for the terminals and concourse. The average energy intensity from the remaining buildings was then averaged for use in the calculations. Electricity emission factors from CalEEMod were then used to calculate GHG emissions from purchased electricity. Emission factors from the California Climate Action Registry<sup>24</sup> were used to estimate natural gas combustion emissions. Table VII-2 summarizes the difference in emissions between the proposed project and existing conditions.

Amortized construction emissions are defined as total construction emissions divided by the project lifetime. The project lifetime is assumed to be 30 years unless project-specific data is known.

<sup>&</sup>lt;sup>2</sup> Total emissions are defined as annual operational emissions plus amortized construction emissions.

U.S. Energy Information Administration, <u>Commercial Buildings Energy Consumption Survey (CBECS) Homepage</u>, Available: http://www.eia.gov/consumption/commercial/, October 22, 2012.

<sup>&</sup>lt;sup>24</sup> California Climate Action Registry, General Reporting Protocol, Version 3.1, January 2009.

Table VII-2. GHG Emissions Increase (Project Increment)				
Source	Emissions (metric tons per year)			
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	CO <sub>2</sub> e
Proposed Project	367	<1	<1	368
Existing Conditions	382	<1	1	383
<b>Emissions Difference*</b>	-14	<1	-1	-14

Key:

 $CH_4$  = methane

 $CO_2$  = carbon dioxide

 $CO_2e$  = carbon dioxide equivalent

 $N_2O$  = nitrous oxide

As shown in Table VII-2, although the total building square footage will increase from the improvements to the terminals and concourse, the energy efficiency in the new area will increase as compared to the existing building. As a result, annual GHG emissions in the improved terminals and concourse will be less than the existing building. The impact is less than significant impact no mitigation is required.

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

Less Than Significant Impact. As discussed in Response No. VII.a. above, GHG emissions that will occur from construction and operation of the improved terminals and concourse will be less than the estimated GHG emissions from the existing building. As a result, GHG emissions from the proposed project will not conflict with Assembly Bill 32, the purpose of which is to reduce statewide GHG emissions to 1990 levels by 2020. Therefore, the impact is less than significant and no mitigation is required.

#### 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 reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

a-b. Less Than Significant Impact. All hazardous materials storage, handling, and disposal is required to comply with existing federal, state, and local regulations designed to reduce the potential for accidental releases of a hazardous material and minimize the impact of an accident should one occur. The proposed project involves modernization (remodeling) of an existing terminal. A minimal increase in the use, handling, or storage of potentially hazardous materials could occur during construction. Although construction includes a limited amount of excavation activities associated with the portion of the Terminal 7 concourse that will be expanded due to the additional of two floors that

<sup>\*</sup> Difference in values is due to rounding

could potentially disturb contaminated soils should it exist in the area of Gates 70A and 71A, the area being disturb is very limited. In addition, previous investigations did not find groundwater beneath Terminal 7 as deep as 80 feet and the proposed structural piles/columns are expected to be 50 to 70 feet deep; therefore, no groundwater contamination is expected to be encountered during construction. Operation of the proposed project will not increase passenger or aircraft use of the facility. Therefore, implementation of the proposed project is not anticipated to create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials nor create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. The impact is less than significant 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?

*No Impact.* As discussed in Response No. VIII.a-b above, a minimal increase in the handling of hazardous materials could occur during construction and no increase is expected during operation of the proposed project. However, there are no schools located or proposed within one-quarter mile of the project site. Therefore, no impact related to the emitting of hazardous emissions or the handling of hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school will occur with implementation of the proposed project and no mitigation is required.

# 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, will it create a significant hazard to the public or the environment?

No Impact. An Environmental Data Resources (EDR) regulatory database review was performed for all of LAX in August 2011. LAX was listed in several databases searched by EDR as a facility with underground storage tanks (USTs) and a facility with emissions of carbon monoxide, organic hydrocarbon gases, nitrogen oxides, sulfur oxides, and particulate matter. The proposed project will involve a minor amount of excavation within a limited area (Gates 70A and 71A at Terminal 7) and is not expected to disturb any of the listed hazardous sites listed in the EDR Report. In addition, the project site is not included on a list of hazardous materials sites complied pursuant to Government Code Section 65962.5. Therefore, no impact related to a listed hazardous material site that could result in a significant hazard to the public or environment will occur with implementation of the proposed project and no mitigation is required.

# 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, will the project result in a safety hazard for people residing or working in the project area?

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

Environmental Data Resources Inc. (EDR). EDR Data Map Area Study, Los Angeles, California. August 2011.

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

The proposed project involves the construction and operation of two additional floor levels above the northern portion of the Terminal 7 concourse. During construction, a staging area will be delineated and remove temporarily Gates 70A and 71A from being operated at Terminal 7 and the staging area at UAL's maintenance and cargo operations will also be delineated so that construction activities will not interfere with aviation activities. All construction activities will comply with applicable aviation related safeguards, and thus not create a safety hazard.

Although there will be a temporary and minimal increase in construction jobs, none of the proposed improvements will increase the existing long-term employment or passenger capacity at LAX.

Therefore, although within an airport, implementation of the proposed project is not anticipated to result in a significant impact with regard to safety for people working in the project area. The impact is less than significant and no mitigation is required.

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

*No Impact*. The project site is not located within the vicinity of a private airstrip but rather within a public airport. See Response No. VIII.e. above. Therefore, no impact related to a safety hazard for people residing or working within the vicinity of a private airstrip will result from the implementation of the proposed project and no mitigation is required.

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

Less Than Significant Impact. LAWA and tenants of LAX maintain Emergency Response Evacuation Plans to minimize the potential for and the effects of an accident, should one occur. The construction staging areas will comply with LAWA and FAA guidelines and procedures that are in place to limit the impacts of construction at the airport, including the potential to affect emergency response. Construction of the proposed project is not anticipated to result any closures to local airport circulation roads or lanes within the project site. However, the construction at Terminal7 will limit access to the terminal from Gates 70A and 71A. Emergency access routes in the vicinity of the project will be kept clear and unobstructed at all times in accordance with FAA, State Fire Marshal, and Los Angeles Fire Code regulations. Since the operation of the proposed project will occur at the same location as the existing Terminal 7, no impact is anticipated related to the existing emergency response plan or emergency evacuation plans. Therefore, the proposed project will not significantly impair implementation or physically interfere with an adopted emergency response plan or emergency evacuation plan. The impact is less than significant 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?

*No Impact*. The project site and vicinity are predominantly paved and/or developed. There are no fire hazard areas containing flammable brush, grass, or trees on the project site. Furthermore, the project site is not within a City of Los Angeles Wildfire Hazard Area, as delineated in the Safety Element of the General Plan.<sup>26</sup> Therefore, implementation of the proposed project will not result in the exposure of people or structures to hazards associated with wildland fires and no mitigation is required.

#### IX. HYDROLOGY AND WATER QUALITY. Would the project:

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

Less Than Significant Impact. The agency with jurisdiction over water quality within the project area is the Los Angeles Regional Water Quality Control Board (LARWQCB). The Clean Water Act (CWA) prohibits the discharge of pollutants to waters of the United States from any point source unless the discharge is in compliance with a National Pollutant Discharge Elimination System (NPDES) permit. In accordance with the CWA, the project site is within the region covered by NPDES Permit No. CAS004001 issued by the LARWQCB. Construction will include SWPPP and BMPs to limit impacts to water that could cause a violation associated with water quality standards or water discharge requirements. Operation of the proposed project will not change the amount of impervious surfaces at the project site or otherwise alter existing drainage patterns or surface water runoff quantities on the project site. Therefore, implementation of the proposed project will not violate any water quality standards or waste discharge requirements. The impact is less than significant and no mitigation is required.

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

*No Impact.* The project site is located within the West Coast Groundwater Basin.<sup>27</sup> Groundwater beneath the project site is not used for municipal or agricultural purposes.<sup>28</sup> Construction and operation of the proposed project will not involve dewatering and, thus, will not deplete groundwater supplies. Therefore, implementation of the proposed project will not deplete groundwater supplies or interfere with groundwater recharge, and, as such, no impacts will occur and no mitigation is required.

<sup>&</sup>lt;sup>26</sup> City of Los Angeles Planning Department, <u>Safety Element of the City of Los Angeles General Plan, Exhibit D, Selected Wildfire Hazard Areas In the City of Los Angeles, April 1996.</u>

<sup>&</sup>lt;sup>27</sup> City of Los Angeles, LAWA, <u>Final Environmental Impact Report, Los Angeles International Airport Proposed Master Plan Improvements</u>, Section 4.7, April 2004.

<sup>&</sup>lt;sup>28</sup> City of Los Angeles, LAWA, <u>Final Environmental Impact Report, Los Angeles International Airport Proposed Master Plan Improvements</u>, Section 4.7, April 2004.

- 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 will 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 which will result in flooding on- or off-site?
- e. Create or contribute runoff water which will exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?
- f. Otherwise substantially degrade water quality?

c-f. Less Than Significant Impact. The proposed project involves the modernization (remodeling) of Terminal 7, which includes the construction and operation of two additional floor levels above the northern portion of the Terminal 7 concourse. The modernization of the building will occur in an impervious area currently occupied by apron for use as Gates 70A and 71A. Once constructed, the remodeled building will have a similar drainage pattern and system as currently exists at Terminal 7. Therefore, implementation of the proposed project will not substantially change the amount of permeable surface areas, drainage patterns, or affect stormwater drainage systems. The impact is less than significant and no mitigation is required.

- g. Place housing within a 100-year flood plain 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 plain structures which will impede or redirect flood flows?

*g-h. No Impact.* The proposed project is located within the boundaries of the LAX Master Plan study area, and no 100-year floodplain areas are located within the LAX Master Plan boundaries.<sup>29</sup> Further, the proposed project does not involve the construction of housing. Therefore, no impacts resulting from the placement of housing or other structures within a 100-year floodplain will occur and no mitigation is required.

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?

*No Impact.* Please see Response No. IX.g-h. above. In addition, as delineated on the City of Los Angeles Inundation and Tsunami Hazard Areas map,<sup>30</sup> 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. Therefore, no impacts due to the exposure of people or structures to a risk of loss, injury, or death involving flooding as a result of the failure of a levee or dam will occur and no mitigation is required.

<sup>&</sup>lt;sup>29</sup> City of Los Angeles, LAWA, <u>Final Environmental Impact Report, Los Angeles International Airport Proposed Master Plan Improvements</u>, Section 4.13, April 2004.

City of Los Angeles Planning Department, <u>Safety Element of the City of Los Angeles General Plan, Exhibit G, Inundation & Tsunami Hazard Areas in the City of Los Angeles, March 1994.</u>

#### j. Inundation by seiche, tsunami, or mudflow?

*No Impact.* The project site is located over 2 miles east of the Pacific Ocean and is not delineated as a potential inundation or tsunami impacted area in the City of Los Angeles Inundation and Tsunami Hazard Areas map.<sup>31</sup> Mudflows are not a risk as the project site is located on, and is surrounded by, relatively level terrain and urban development. Therefore, no impacts resulting from inundation by seiche, tsunami, or mudflow are anticipated to occur and no mitigation is required.

#### X. LAND USE AND PLANNING. Would the project:

#### a. Physically divide an established community?

*No Impact.* The project site is located entirely within the boundaries of a developed airport in an urbanized area and modernization of existing Terminal 7 within the airport will not disrupt or divide the physical arrangement of an established community. Therefore, no impacts resulting from physically dividing an established community is anticipated and no mitigation is required.

b. Conflict with 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, coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?

*No Impact*. Land use designations and development regulations applicable to the project site are set forth in the LAX Plan<sup>32</sup> and LAX Specific Plan,<sup>33</sup> both approved by the Los Angeles City Council in December 2004. The project site is in an area designated in the LAX Plan as "Airport Airside." Within the LAX Specific Plan, the site is in an area designated as within the Airport Airside Sub-Area and zoned LAX – A Zone: Airport Airside Sub-Area." Section 9.B of the LAX Specific Plan delineates the permitted uses within the Airport Airside Sub-Area. Of the numerous uses listed, the following permitted uses are located in the proposed project area:

- Airline clubs, retail uses, and restaurants
- Establishments for the sale and service of alcoholic beverages for on-site and off-site consumption
- Incidental retail uses permanent or temporary retail uses, which may include kiosks and carts
- Passenger handling facilities, including but not limited to baggage handling and processing, passenger holdrooms, boarding gates, ticketing and passenger check-in functions
- Airline maintenance and support, including but not limited to storage, aircraft engine or airframe repair and testing, and aircraft maintenance shops and Air Cargo Facilities (these two apply to the construction staging areas located at the UAL maintenance and cargo operations area).

The proposed project will result in the modernization of the SSPC based on the evolving federal security (TSA mandated) requirements, relocation of existing uses, construction of structural supports, and with the exclusion of the proposed mechanical area, an approximate 7.96 percent change

City of Los Angeles Planning Department, <u>Safety Element of the City of Los Angeles General Plan, Exhibit G</u>, Inundation & Tsunami Hazard Areas in the City of Los Angeles, March 1994.

<sup>&</sup>lt;sup>32</sup> City of Los Angeles, LAWA, <u>LAX Plan</u>, September 29, 2004.

<sup>&</sup>lt;sup>33</sup> City of Los Angeles, LAWA, Los Angeles International Airport Specific Plan, September 29, 2004.

in square footage.<sup>34</sup> Therefore, the proposed project does not conflict with 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, coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect.

In addition, the LAX Master Plan assumed improvements at Terminal 7. Implementation of the proposed project will be consistent with the improvements assumed in the LAX Master Plan and consistent with the Plan's primary goals and objectives to ensure safe and efficient operations at LAX.

Therefore, implementation of the proposed project will be consistent with the existing permitted uses. No impact or conflict with applicable land use plan, policy or regulation is anticipated and no mitigation is required.

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

No Impact. The Dunes Specific Plan Area, a designated Los Angeles County Significant Ecological Area, is located approximately 2 miles to the west of the project site, opposite Pershing Drive. The proposed project will be located within an urbanized airport area within and adjacent to existing airport uses and will not affect the Dunes Specific Plan Area. There is no adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved habitat conservation plan or other natural community conservation plan that includes the project site. Therefore, no impact or conflict is anticipated with any habitat or natural community conservation plans and no mitigation is required.

#### XI. MINERAL RESOURCES. Would the project:

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

*No Impact.* The State Mining and Geology Board classifies mineral resource zones throughout the State. The project site is contained within a MRZ-3 zone, which represents areas with mineral deposits whose significance cannot be evaluated from available data.<sup>35</sup> The project site is within the boundaries of the airport 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 use. Therefore, no impact from the implementation of the proposed project will affect access to or the availability of valued mineral resources and no mitigation is required.

<sup>&</sup>lt;sup>34</sup> Concourse 8 does not function as a terminal because it does not have its own passenger processing functions such as ticketing, baggage claim nor a passenger security checkpoint functions, but relies on those passenger processing functions located in Terminal 7; therefore, the existing square footage associated with the project building area is assumed to include Terminal 7 and Concourse 8.

<sup>&</sup>lt;sup>35</sup> City of Los Angeles, LAWA, <u>Final Environmental Impact Report, Los Angeles International Airport Proposed Master Plan Improvements</u>, Section 4.17, April 2004.

## 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?

*No Impact*. The project site is not within an area delineated on the City of Los Angeles Oil Field & Oil Drilling Areas map in the City of Los Angeles General Plan Safety Element.<sup>36</sup> Furthermore, the project site is disturbed and in an area that is not available for mineral resource extraction due to the existing airport use. Therefore, no impact from the implementation of the proposed project will affect the availability of a locally-important mineral resource recovery site and no mitigation is required.

#### **XII. NOISE.** *Would the project result in:*

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

a-d. Less Than Significant Impact. The proposed project involves construction and operation of improvements to an existing terminal. The project site is within a public airport in an urban environment that operates 24 hours a day, seven days a week for 365 days a year, with many existing sources of noise including aviation noise and traffic noise. Construction of the proposed project, which will involve the use of various pieces of equipment, will result in a temporary increase in ambient noise levels immediately adjacent to the project site. However, based on the distance from the nearest residential area, which is approximately 0.8 mile to the south (in El Segundo), and the existing noise environment, it is not anticipated that noise generated from construction of the proposed project will generate noise in excess of the City's noise ordinance, nor will it result in a substantial temporary increase in ambient noise levels, nor will it expose persons to generation of noise levels in excess of standards or excessive groundborne vibration or noise.

With regard to roadway noise associated with construction traffic on area roads, traffic volumes on roads with good operating conditions (i.e., Level of Service of B or better) will have to increase at more than a three-fold rate to reach the City's threshold of significance of a 5 dBA increase, and will need to increase even more on roads with poor operating conditions (i.e., Level of Service C or worse). Given the limited scope of construction activities (a maximum additional 41 trips per day during peak of construction), only a minor amount of construction traffic will occur, and this will not result in a noise level increase that will exceed the threshold of significance.

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<sup>&</sup>lt;sup>36</sup> City of Los Angeles Planning Department, <u>Safety Element of the City of Los Angeles General Plan, Exhibit E, Oil Field & Oil Drilling Areas in the City of Los Angeles, May 1994.</u>

The 41 trips are based on the air quality model assumptions, which include: 29 worker trips, 12 vendor trips, and 5 haul truck trips.

Operation of the proposed project will not generate any additional noise, nor will it result in an increase in noise generating activities such as traffic, an increase in the number of daily flights arriving and departing from LAX, or the ambient growth in aviation activity at LAX that is projected to occur in the future.

Therefore, implementation of the proposed project will not: expose persons to or generation of noise in level in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies; expose people to or generation of excessive groundborne vibration or groundborne noise levels; create a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project, or; create a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project. The impact is less than significant and no mitigation is required.

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, will the project expose people residing or working in the project area to excessive noise levels?

*No Impact*. Implementation of the proposed project involves the modernization (remodeling) of the existing Terminal 7. Although there will be a minor and temporary increase in ambient noise levels during construction, operation of the proposed project will not increase passenger or aircraft operations; therefore, no substantial or permanent change in ambient noise levels is anticipated that will expose people residing or working in the project area to excessive noise levels and no mitigation is required.

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

*No Impact.* As described in Response No. XII.e. above, the project site is within a public airport and not located within the vicinity of a private airstrip. Therefore, no impact from implementation of the proposed project will exposure people in the vicinity of a private airstrip to excessive noise levels will occur 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)?

*No Impact*. The proposed project does not include residential development. The proposed improvements will not increase existing long-term employment, passenger capacity or aircraft parking capacity at LAX. With no increase in long-term employment or passenger capacity, and no new homes proposed, the proposed project will not induce substantial population growth. Furthermore, the project site is located within a developed airport, and no new roads or extensions of existing roads or other growth-accommodating infrastructure are proposed. Therefore, no impacts from implementation of the proposed project will directly or indirectly induce substantial population growth through extension of roads or other infrastructure and no mitigation is required.

- 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?

*b-c.* No Impact. There are no existing residential properties on the project site. Implementation of the proposed project will not displace housing. Therefore, no impacts from implementation of the proposed project on housing will occur 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, 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?

Less Than Significant Impact. The City of Los Angeles Fire Department provides fire protection services throughout the project site. Three LAFD fire stations are located at LAX (Fire Station Nos. 80, 51, and 95). Fire Station No. 80 is located within the project boundary at 6911 World Way West; Fire Station No. 51, located at 10435 South Sepulveda Boulevard, is less than 0.5 mile south of the project site; and Fire Station No. 95, located at 10010 International Road, is approximately 1 mile east of the project site. Construction of the proposed project will result in a temporary closure of Gates 70A and 71A at Terminal 7 and closure of certain portions of the UAL maintenance and cargo operations; however, closures to local airport circulation roads is not anticipated. Access to the project site during construction will be kept clear and unobstructed at all times in accordance with FAA, State Fire Marshal, and Los Angeles Fire Code regulations.

Fire service requirements are generally based on the size of the building and relationships to other structures and property lines. The project site is currently developed and the proposed project will expand the existing northern portion of the terminal concourse by two floors. The proposed project will comply with all applicable city, state, and federal codes and ordinances. As applicable, the materials used for the structure will be made of noncombustible materials and the fire safety systems will be in compliance with both the Fire Department and Los Angeles Building and Safety (LADBS) requirements. Implementation of the proposed project will not result in an increase in demand for fire protection services that may result in the need for new or altered fire protection services nor will it affect response times which could lead to a substantial adverse physical impact. The impact is less than significant and no mitigation is required.

#### **b.** Police protection?

No Impact. Both the Los Angeles World Airports Police Division (LAWA PD) and the City of Los Angeles Police Department LAX Detail (LAPD LAX Detail) provide police protection services to the project site. The LAWA PD station is located a few feet north of the Park One parking lot and the LAPD LAX Detail station is located within the CTA. Demand for on-airport police protection services is typically determined by increases in aircraft activity and employees. The proposed project will expand a portion of an existing terminal by two floors. The project is intended to enhance

City of Los Angeles, LAWA, <u>Final Environmental Impact Report, Los Angeles International Airport Proposed Master Plan Improvements</u>, Section 4.26.1, April 2004.

passenger service and satisfaction and not increase existing passenger capacity or aircraft parking capacity at LAX, or increase long-term employment such that indirect growth will result in need for additional police protection. Therefore, no impact on airport police protection services is expected with implementation of the proposed project and no mitigation is required.

#### c. Schools?

*No Impact*. The proposed project does not include residential development and will not increase existing passenger capacity and will not increase long-term employment such that indirect growth will result in enrollment increases that will adversely impact schools. Therefore, no impacts to, or need for, new school facilities will occur and no mitigation is required.

#### d. Parks?

*No Impact.* The proposed project does not include residential development and will not increase existing passenger capacity or increase long-term employment such that additional demand for parks will occur. Therefore, no impacts to, or need for, new parks will occur from implementation of the proposed project and no mitigation is required.

#### e. Other governmental services (including roads)?

*No Impact*. The proposed project will have no impacts on governmental services and no mitigation is required.

#### 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 will 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 development of recreational facilities nor does it include residential development that will increase demand for recreational facilities. In addition, the proposed project will not increase existing passenger capacity at LAX or increase long-term employment such that increased demand for neighborhood and regional parks or other recreational facilities will occur. Therefore, implementation of the proposed project will not result in substantial physical deterioration of existing area recreational facilities or require the construction or expansion of recreational facilities and no mitigation is required.

#### XVI. TRANSPORTATION/CIRCULATION. 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?

a-b. Less than Significant Impact. Construction of the proposed project will generate a minimal amount of traffic associated with workers traveling to and from the construction employee parking area, truck haul/delivery trips, and miscellaneous construction-related travel (a maximum daily total of 41 trips will occur during the peak of construction). These vehicle trips are assumed to access the construction staging area at UAL's maintenance/cargo operations from Century Boulevard via Avion Drive. During peak of construction, the estimated 41 trips per day (and throughout the day) will not be sufficient to result in noticeable traffic impacts on the local roadway system during the construction period. Construction of the proposed project will not result in lane closures and roadways within the landside and airside areas of the project area will be kept clear and unobstructed at all times in accordance with FAA, State Fire Marshal, and Los Angeles Fire Code regulations, and thereby will not create a significant impact. In addition, there are several LAX Master Plan (LAWA approved) commitments and mitigation measures that the proposed project will comply with that further reduce the potential for impacts. Following are those LAWA approved commitments and mitigation measures that are applicable to the proposed project and were assumed in the analysis herein:

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

Deliveries to the CTA terminal reconstruction projects will be limited to non-peak traffic hours whenever possible.

#### ST-9. Construction Deliveries.

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

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

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

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

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

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

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

#### 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). Every effort will be made for routes to avoid residential frontages. The designated routes on City of Los Angeles streets are subject to approval by LADOT's Bureau of Traffic Management and may include, but will not necessarily be limited to: Pershing Drive (Westchester Parkway to Imperial Highway); Florence Avenue (Aviation Boulevard to I-405); Manchester Boulevard (Aviation Boulevard to I-405); Aviation Boulevard (Manchester Avenue to Imperial Highway); Westchester Parkway/Arbor Vitae Street (Pershing Drive to I-405); Century Boulevard (Sepulveda Boulevard to I-405); Imperial Highway (Pershing Drive to I-405); La Cienega Boulevard (north of Imperial Highway); Airport Boulevard (Arbor Vitae Street to Century Boulevard); Sepulveda Boulevard (Westchester Parkway to Imperial Highway); I-405; and I-105.

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

Whenever feasible, construction vehicles shall be restricted to designated roadways or lanes of traffic on CTA roadways adjacent to the existing close-in parking, thus limiting the mix of construction vehicles and airport traffic.

#### MM-ST-2. Modify CTA Signage.

During construction, additional signage will be installed, as required, to separate construction traffic from non-construction traffic to the extent feasible.

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

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

As discussed in Response No. XIII.a. above, the proposed project will not increase existing passenger capacity or aircraft parking capacity at LAX, nor will it increase the number of employees traveling to LAX each day. The operation of the proposed project will not generate any increase in traffic.

Therefore, the impact is less than significant and no mitigation is required.

# 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?

Less Than Significant Impact. Construction of the proposed project involves the temporary closure of Gates 70A and 71A at Terminal 7. Temporary removal of these gates will result in additional flights being routed to gates at Concourse 8 and possibly Terminal 6; however, the rerouting of flights to various gates throughout the airport is a common occurrence and will not result in a

change in air traffic patterns or increase in airport operations. Therefore, the impact is less than significant and no mitigation is required.

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

*No Impact.* Construction equipment will be required to use local roadways; however, this is not anticipated to create a safety hazard. In addition, no lane closures are anticipated that will cause or increase hazards. Design of the project is such that it will not substantially increase hazards (regarding additional light and glare, refer to Response No. I.d. above) and the project will occur at an existing terminal, which is a compatible use. Therefore, implementation of the proposed project will not increase a safety hazard and no mitigation is required.

#### e. Result in inadequate emergency access?

Less Than Significant Impact. Construction of the proposed project will include construction staging adjacent to Terminal 7 at the area currently designated Gates 70A and 71A. Although construction of the proposed project will temporarily close Gates 70A and 71A, which are immediately adjacent to the northern portion of the Terminal 7 concourse, emergency access will be kept clear and unobstructed at all times during construction in accordance with FAA, State Fire Marshal, and Los Angeles Fire Code regulations. Therefore, the impact is less than significant and no mitigation is required.

## 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?

*No Impact*. Implementation of the proposed project is within the LAX boundary and will not conflict with, nor hinder performance of policies, plans, or programs regarding alternative forms of transportation. Therefore, no impact will occur and no mitigation is required.

#### **XVII. UTILITIES.** *Would the project:*

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

No Impact. Sanitary wastewater generated by activities at the project site is treated at the Hyperion Treatment Plant. The City of Los Angeles has an approved plan to accommodate future and cumulative wastewater treatment capacity and is implementing the components that comprise its plan through the monitoring of triggers (i.e., population growth, regulatory changes, and other policy decisions) as part of their implementation strategy. The proposed project will not increase existing employment or passenger capacity at LAX or otherwise affect wastewater generation. Therefore, no impact on wastewater treatment is anticipated with implementation of the proposed project and no mitigation is required.

# 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?

*No Impact.* The proposed project will not increase existing employment or passenger capacity at LAX or otherwise affect water use or wastewater generation. As such, implementation of the proposed project will not require or result in the construction of new water or wastewater treatment

facilities or expansion of existing facilities. Therefore, no impact to water or wastewater facilities will occur with implementation of the proposed project and no mitigation is required.

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

*No Impact*. The proposed project will not change the amount of permeable surface areas, drainage patterns, or affect stormwater drainage systems. Therefore, no impact on stormwater drainage facilities will occur with the implementation of the proposed project and no mitigation is required.

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

*No Impact.* The LADWP is the water purveyor for the project site. LADWP is responsible for supplying, treating, and distributing water within the City. According to LADWP, it has met the immediate needs of its customers and is well positioned to continue to do so in the future.<sup>39</sup> The proposed project will not increase existing employment or passenger capacity at LAX or otherwise affect water use. As such, no new or expanded water supply entitlements are needed. Therefore, no impact on water supply will occur with implementation of the proposed project and no mitigation is required.

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?

*No Impact.* As discussed in Response Nos. XVII.a. and b. above, the proposed project will not increase employment or passenger capacity at LAX or otherwise affect wastewater generation. Therefore, no impact to wastewater facilities will occur and no mitigation is required.

- 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.* Construction of the proposed project will result in excavation associated with the strengthening of building supports (i.e., installation of piles, placement of collars around existing foundation, and associated concrete slab work), which will generate approximately 2,500 cubic yards of materials that will need to be exported from the site. Additionally, modifications to the existing buildings, including interior renovations, will generate debris that will be exported to other sites off-airport. It is anticipated that all solid waste from the project site will be taken to the Sunshine Canyon Landfill. The Sunshine Canyon Landfill is a Class III landfill located at 14747 San Fernando Road in Sylmar, CA, approximately 82 miles from the project site. Sunshine Canyon Landfill is owned and operated by BFI, and has a maximum permitted throughput of 12,100 tons per day, with 5,500 tons per day allotted for City use and 6,600 for County use. As of July 31, 2007, this facility had a remaining capacity of 112,300,000 cubic yards, and currently has an estimated

<sup>&</sup>lt;sup>39</sup> City of Los Angeles Department of Water and Power, <u>Urban Water Management Plan</u>, 2010.

Sunshine Canyon Landfill website, 2010. Challenges. Available at: <a href="http://www.sunshinecanyonlandfill.com/home/Future Challenges.html">http://www.sunshinecanyonlandfill.com/home/Future Challenges.html</a>. Last accessed October 2012.

closure date of 2037. The waste types accepted at this facility include construction and demolition debris, green materials, industrial, inert, and mixed municipal.

The solid waste generated from construction of the proposed project will be negligible when compared to the total solid waste disposed of on a daily and annual basis and the current capacity available at the Sunshine Landfill. Operation of the proposed project will not increase employment or passenger capacity at LAX or otherwise affect solid waste generation. In addition, the proposed project will include compliance with LAWA approved LAX Master Plan Commitments SW-1 thru SW-3, below, which will ensure that solid waste impacts are less than significant. The applicable LAX Master Plan Commitments are as follows:

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.

California Integrated Waste Management Board (CIWMB)/CalRecycle. 2010. Active Landfills Profile for Sunshine Canyon Landfill (19-AA-0052). Available at: <a href="http://www.calrecycle.ca.gov/SWFacilities/Directory/19-AA-2000/Detail/">http://www.calrecycle.ca.gov/SWFacilities/Directory/19-AA-2000/Detail/</a>. Last accessed October 2012

Therefore, implementation of the proposed project will be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs and comply with federal, state, and local statutes and regulations related to solid waste. The impact is less than significant impact and no mitigation is required.

#### XVIII. MANDATORY FINDINGS OF SIGNIFICANCE.

a. Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of 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?

Less Than Significant Impact. The proposed project is located on a disturbed site within a developed airport. There are no plants or animal species listed on any state of federal lists for endangered, threatened or special status species or riparian/wetland areas, trees, or wildlife movement corridors at the project site. Therefore, the proposed project will not have an impact on biological resources.

There are no known cultural resources located on-site and the proposed project is located on a previously developed highly disturbed site. Further, it does not involve extensive excavation and thus will not result in destruction of archaeological or paleontological resources. However, the main construction staging area for the proposed project is located at UAL's maintenance and cargo operations, which is within the designated Intermediate Terminal Complex and is eligible for local and state designation for its association with events that have made a significant contribution to the broad patterns of California's history and cultural heritage. Currently, UAL operates maintenance and cargo operations from the area designated as the Intermediate Terminal Complex. Construction staging activities include equipment and materials storage, construction worker parking, and construction office space. The construction staging activities are consistent with the current activities that occur within this area and the construction activities will not impact or alter the Intermediate Terminal Complex buildings or their setting. In addition, the construction staging area in this area will be temporary (last the approximate 18- to 20-month construction time frame). Therefore, a substantial adverse change in significance of the Intermediate Terminal Complex will not occur. Operation of the proposed project will not affect the Intermediate Terminal Complex area.

Therefore, the impact is less than significant and no mitigation is required.

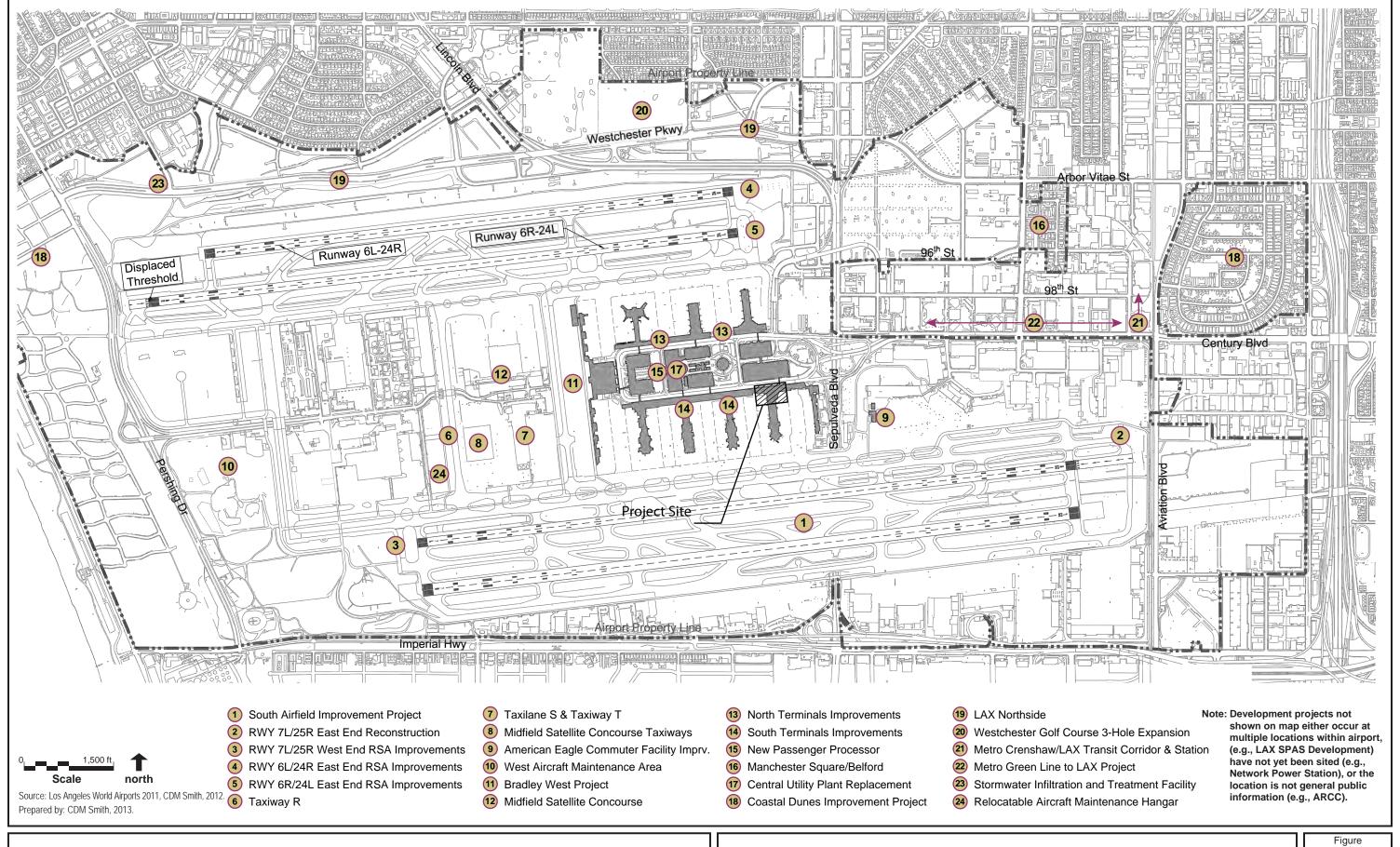
b. Does the project have impacts which are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of an individual project are considerable when viewed in connection with the effects of past projects, the effects of other current projects,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

Less Than Significant Impact. The environmental analysis in the sections above indicates that the proposed project will have a no impact on agricultural and forest resources, biological resources, land use and planning, population and housing, mineral resources, and recreation. In addition, the analysis above found that implementation of the proposed project will have less than significant impact on aesthetics, air quality, cultural resources, geology and soils, GHG, hazards and hazardous materials, hydrology and water quality, noise, public services, transportation/circulation, and utilities. By its very nature, climate change is a cumulative phenomenon and is not possible to link a single project to specific climatological changes; therefore the GHG emission analysis completed in Response No. VII., Greenhouse Gas Emissions, is a cumulative analysis.

To evaluate the proposed project's contribution to cumulative impacts, a list of applicable past, approved, and pending projects (known as "related projects") in the project vicinity were identified. Following is a list of the projects:

- 1. South Airfield Improvement Project
- 2. Runway 7L/25R East End Reconstruction
- 3. Runway 7L/25R West End Runway Safety Area (RSA) Improvements
- 4. Runway 6L/24R East End RSA Improvements
- 5. Runway 6R/24L East End RSA Improvements
- 6. Taxiway R
- 7. Taxilane S and Taxiway T
- 8. Midfield Satellite Concourse Taxiways
- 9. American Eagle Commuter Facility Improvements
- 10. West Aircraft Maintenance Area
- 11. Bradley West Project
- 12. Midfield Satellite Concourse
- 13. North Terminals Improvements
- 14. South Terminals Improvements
- 15. New Passenger Processor
- 16. Manchester Square/Belford
- 17. Coastal Dunes Improvements
- 18. Central Utility Plant Replacement
- 19. LAX Northside
- 20. Westchester Golf Course 3-Hole Expansion
- 21. Metro Crenshaw/LAX Transit Corridor and Station
- 22. Metro Green Line to LAX Project
- 23. City of Los Angeles Bureau of Sanitation Stormwater Infiltration and Treatment Facility
- 24. Relocatable Aircraft Maintenance Hanger

Attachment B – Explanation of Checklist Determination		
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LAX SPAS Development and Miscellaneous Terminal Improvements (such as ongoing maintenance activities/improvements within the CTA) are not on Figure 7 because they occur at multiple locations throughout the airport. Figure 7 illustrates the location of the above projects in relationship to the project site. The operation of the proposed project is terminal improvements that will not expand or increase passenger or aircraft use of the facility; therefore, the project will not contribute to a cumulatively considerable impact. It is anticipated (based on current project schedules) that construction of several of the related projects could overlap with the proposed project's construction, which is estimated to begin in 2013 and occur over continuous multiple phases through 2015. Potential cumulative impacts could occur during construction due to the proximity of the related projects to the project site and overlap in the construction period; therefore, the proposed project could contribute to cumulative impacts during construction. However, based on the nature and location of the proposed project (i.e., modernization of UAL's operations at LAX to meet the evolving federal security requirements) and the limited extent of the improvements (as detailed in each resource analysis above, construction-related impacts related to the proposed project were determined to be less than significant), the project's contribution to the potential for construction-related cumulative impacts is not cumulatively considerable.<sup>42</sup> Therefore, the impact is less than significant and no mitigation is required.

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

Less Than Significant Impact. As discussed in the analysis above, implementation of the proposed project will result in a less than significant impact related to air quality and geology and soils, and no impact associated with biological resources. Therefore, no environmental effect which could cause substantial adverse effects on human beings, either directly or indirectly is associated with the proposed project. The impact is less than significant and no mitigation is required.

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# APPENDIXA

# Air Quality Calculations

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# **UAL T-7 Improvements Emissions Summary**

**Table 1. Construction Emissions Summary - Criteria Pollutants** 

		Maximum I	Daily Emiss	ions (poun	ds per day)	
Year	ROG	NOx	CO	SO2	PM10	PM2.5
2013	6	48	29	0	19	3
2014	4	24	19	0	2	2
2015	48	25	21	0	2	2
Maximum	48	48	29	0	19	3
SCAQMD Construction Threshold	75	100	550	150	150	55
Significant Impact?	No	No	No	No	No	No

Note:

PM10 and PM2.5 emissions include watering for Rule 403 compliance.

**Table 2. Operational Emissions Summary - Criteria Pollutants** 

		Maximum I	Daily Emiss	sions (poun	ds per day)	
Source	ROG	NOx	CO	SO2	PM10	PM2.5
Architectural Coatings	0.48	0.00	0.00	0.00	0.00	0.00
Natural Gas Combustion	0.00	0.02	0.01	0.00	0.00	0.00
Total	0.48	0.02	0.01	0.00	0.00	0.00
SCAQMD Operation Threshold	55	55	550	150	150	55
Significant Impact?	No	No	No	No	No	No

**Table 3. Construction Emissions Summary - Greenhouse Gases** 

	Annual E	missions (ı	netric tons	per year)
Year	CO2	CH4	N2O	CO2e
2013	167	0	0	167
2014	377	0	0	378
2015	104	0	0	105
Total	648	0	0	649
Amortized Emissions	22	0	0	22

Note:

Project Lifetime = 30 years

**Table 4. Operational Emissions Summary - Greenhouse Gases** 

	Annual Emission											
Source	CO2	CH4	N2O	CO2e								
Electricity	342	0	0	343								
Natural Gas	3	0	0	3								
Total	346	0	0	347								
Total Operations + Construction	367	0	0	368								

Note:

Emissions assume that building is 15 percent more efficient than Title 24.

**Table 5. GHG Emissions Increase (Project Increment)** 

	Annual E	Annual Emissions (metric tons per year)									
Scenario	CO2	CH4	N2O	CO2e							
Proposed Project	367	0	0	368							
Existing Conditions	382	0	0	383							
Emissions Difference	-14	0	0	-14							

# UAL T-7 Improvements Existing Building Energy Consumption

**Table 6. Proposed Project Area** 

	Proposed	Existing Square			
	Square	Footage		TSA Exempt	Net Program
Facility	Footage	Replacement	Note	<b>Square Footage</b>	Area Increase
		13,025	From T-7		
		4,000	From T-7		
		6,000	From T-7		
		2,790	Elevator Lobby		
United Club Lounge*	29,000	25,815			3,185
Mechanical Room**	25,000	7,100		7,000	10,900
TSA Offices & Breakroom	4,900	2,700		2,200	-
Concourse Level SSCP Area	8,250			8,250	-
Apron Level Drip Line Area	8,250		·	8,250	-
Total	75,400	35,615		25,700	14,085

#### Notes:

#### **Electricity Emissions**

Electricity Intensity 18.33 kWh/sq. ft. Annual Electricity Usage 652.75 MWh/year

**Table 7. Electricity Emissions** 

	Intensity Factor	Emissions		CO2e Emissions
Pollutant	(lb/MWh)	(metric tons/year)	GWP	(metric tons/year)
CO2	1,238.52	366.71	1	366.71
CH4	0.029	0.01	21	0.18
N2O	0.011	0.00	310	1.01
Total	n/a	n/a	n/a	367.90

Note:

Intensity factors from CalEEMod (Version 2011.1.1) for Los Angeles Department of Water & Power.

#### Natural Gas Emissions

Natural Gas Intensity 7.63 cf/sq. ft.
Annual Natural Gas Usage 279.59 MMBtu/year

**Table 8. Natural Gas Emissions** 

	<b>Emission Factor</b>	Emissions		CO2e Emissions
Pollutant	(kg/MMBtu)	(metric tons/year)	GWP	(metric tons/year)
CO2	53.06	14.83	1	14.83
CH4	0.005	0.00	21	0.03
N2O	0.001	0.00	310	0.09
Total	n/a	n/a	n/a	14.95

Note:

CO2 emission factors from CCAR General Reporting Protocol, Appendix C, Table C.7.

CH4 and N2O emission factors from CCAR General Reporting Protocol, Appendix C, Table C.8.

<sup>\*</sup> Net program area increase minus enabling projects.

<sup>\*\*</sup> Mechanical room increase of 11,000 s.f. due to size and volume increase, and smoke evacuation system for TSA checkpoint.

#### Conversions

1,000 kWh/MWh 453.6 g/lb 1,000,000 g/metric ton

Note:

CalEEMod User's Guide states that emission factors for natural gas combustion are based on CCAR.

Natural gas emission factor source:

California Climate Action Registry. 2009. General Reporting Protocol, Version 3.1. Accessed on: October 18, 2012. Available from: http://www.climateregistry.org/resources/docs/protocols/grp/GRP\_3.1\_January2009.pdf.

CalEEMod Version: CalEEMod.2011.1.1 Date: 10/26/2012

#### **UAL T-7 Improvements**

#### Los Angeles-South Coast County, Annual

#### 1.0 Project Characteristics

#### 1.1 Land Usage

Land Uses	Size	Metric
Regional Shopping Center	75.4	1000sqft

#### 1.2 Other Project Characteristics

UrbanizationUrbanWind Speed (m/s)2.2Utility CompanyLos Angeles Department of Water & PowerClimate Zone11Precipitation Freq (Days)33

#### 1.3 User Entered Comments

Project Characteristics -

Land Use -

Construction Phase - Schedule estimated from project description

Trips and VMT - 82 miles to closest landfill; all workers and vendor trips rounded up to even numbers to account for two one-way trips per worker or vendor per day.

Demolition -

Grading - No fugitive dust emissions from site preparation would occur

Vehicle Trips - No increase in passengers

Consumer Products - No increase in passengers

Landscape Equipment - No increase in landscaped area

Energy Use - Electricity usage decreased to remove Mechanical Room and Apron Level Drip Line Area (no energy would be supplied to these areas)

Water And Wastewater - No increase in passengers

Solid Waste - No increase in passengers

Construction Off-road Equipment Mitigation - Watering required by SCAQMD Rule 403

Energy Mitigation - CALGreen building code recommends that green buildings be at least 15 percent more efficient than Title 24.

#### 2.0 Emissions Summary

#### 2.1 Overall Construction

#### **Unmitigated Construction**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year					ton	s/yr							МТ	/yr		
2013	0.23	1.54	1.04	0.00	0.30	0.09	0.40	0.01	0.09	0.10	0.00	166.67	166.67	0.02	0.00	167.05
2014	0.58	3.10	2.46	0.00	0.06	0.20	0.26	0.00	0.20	0.20	0.00	376.51	376.51	0.05	0.00	377.50
2015	1.02	0.80	0.67	0.00	0.02	0.05	0.07	0.00	0.05	0.05	0.00	104.32	104.32	0.01	0.00	104.57
Total	1.83	5.44	4.17	0.00	0.38	0.34	0.73	0.01	0.34	0.35	0.00	647.50	647.50	0.08	0.00	649.12

#### 2.1 Overall Construction

## **Mitigated Construction**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year					ton	s/yr							МТ	/yr		
2013	0.23	1.54	1.04	0.00	0.29	0.09	0.38	0.00	0.09	0.10	0.00	166.67	166.67	0.02	0.00	167.05
2014	0.58	3.10	2.46	0.00	0.06	0.20	0.26	0.00	0.20	0.20	0.00	376.51	376.51	0.05	0.00	377.50
2015	1.02	0.80	0.67	0.00	0.02	0.05	0.07	0.00	0.05	0.05	0.00	104.32	104.32	0.01	0.00	104.57
Total	1.83	5.44	4.17	0.00	0.37	0.34	0.71	0.00	0.34	0.35	0.00	647.50	647.50	0.08	0.00	649.12

# 2.2 Overall Operational

#### **Unmitigated Operational**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	Category tons/yr								MT/yr							
Area	0.09					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Energy	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	363.45	363.45	0.01	0.00	364.64
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Waste						0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Water						0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	363.45	363.45	0.01	0.00	364.64

# 2.2 Overall Operational

# **Mitigated Operational**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr					МТ	/yr				
Area	0.09					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Energy	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	345.63	345.63	0.01	0.00	346.76
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Waste						0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Water						0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	345.63	345.63	0.01	0.00	346.76

## 3.0 Construction Detail

## **3.1 Mitigation Measures Construction**

Water Exposed Area

#### 3.2 Demolition - 2013

#### **Unmitigated Construction On-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr				МТ	/yr					
Fugitive Dust					0.02	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road	0.10	0.73	0.45	0.00		0.04	0.04		0.04	0.04	0.00	68.00	68.00	0.01	0.00	68.17
Total	0.10	0.73	0.45	0.00	0.02	0.04	0.06	0.00	0.04	0.04	0.00	68.00	68.00	0.01	0.00	68.17

## **Unmitigated Construction Off-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Hauling	0.02	0.17	0.09	0.00	0.26	0.01	0.27	0.00	0.01	0.01	0.00	24.64	24.64	0.00	0.00	24.66
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.94	2.94	0.00	0.00	2.94
Total	0.02	0.17	0.11	0.00	0.26	0.01	0.27	0.00	0.01	0.01	0.00	27.58	27.58	0.00	0.00	27.60

#### 3.2 Demolition - 2013

#### **Mitigated Construction On-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr				МТ	/yr					
Fugitive Dust					0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road	0.10	0.73	0.45	0.00		0.04	0.04		0.04	0.04	0.00	68.00	68.00	0.01	0.00	68.17
Total	0.10	0.73	0.45	0.00	0.01	0.04	0.05	0.00	0.04	0.04	0.00	68.00	68.00	0.01	0.00	68.17

## **Mitigated Construction Off-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Hauling	0.02	0.17	0.09	0.00	0.26	0.01	0.27	0.00	0.01	0.01	0.00	24.64	24.64	0.00	0.00	24.66
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.94	2.94	0.00	0.00	2.94
Total	0.02	0.17	0.11	0.00	0.26	0.01	0.27	0.00	0.01	0.01	0.00	27.58	27.58	0.00	0.00	27.60

# 3.3 Site Preparation - 2013

#### **Unmitigated Construction On-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr				МТ	/yr					
Fugitive Dust					0.01	0.00	0.01	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road	0.01	0.06	0.04	0.00		0.00	0.00		0.00	0.00	0.00	5.90	5.90	0.00	0.00	5.91
Total	0.01	0.06	0.04	0.00	0.01	0.00	0.01	0.01	0.00	0.01	0.00	5.90	5.90	0.00	0.00	5.91

## **Unmitigated Construction Off-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.18	0.18	0.00	0.00	0.18
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.18	0.18	0.00	0.00	0.18

# 3.3 Site Preparation - 2013

#### **Mitigated Construction On-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr				МТ	/yr					
Fugitive Dust					0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road	0.01	0.06	0.04	0.00		0.00	0.00		0.00	0.00	0.00	5.90	5.90	0.00	0.00	5.91
Total	0.01	0.06	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.90	5.90	0.00	0.00	5.91

## **Mitigated Construction Off-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.18	0.18	0.00	0.00	0.18
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.18	0.18	0.00	0.00	0.18

#### **Unmitigated Construction On-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr				MT	/yr					
Off-Road	0.10	0.52	0.37	0.00		0.04	0.04		0.04	0.04	0.00	52.27	52.27	0.01	0.00	52.45
Total	0.10	0.52	0.37	0.00		0.04	0.04		0.04	0.04	0.00	52.27	52.27	0.01	0.00	52.45

#### **Unmitigated Construction Off-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.05	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.76	6.76	0.00	0.00	6.76
Worker	0.00	0.00	0.04	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	5.97	5.97	0.00	0.00	5.98
Total	0.00	0.05	0.07	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	12.73	12.73	0.00	0.00	12.74

## **Mitigated Construction On-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr				MT	/yr					
Off-Road	0.10	0.52	0.37	0.00		0.04	0.04		0.04	0.04	0.00	52.27	52.27	0.01	0.00	52.45
Total	0.10	0.52	0.37	0.00		0.04	0.04		0.04	0.04	0.00	52.27	52.27	0.01	0.00	52.45

#### **Mitigated Construction Off-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.05	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.76	6.76	0.00	0.00	6.76
Worker	0.00	0.00	0.04	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	5.97	5.97	0.00	0.00	5.98
Total	0.00	0.05	0.07	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	12.73	12.73	0.00	0.00	12.74

#### **Unmitigated Construction On-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Off-Road	0.54	2.84	2.08	0.00	_	0.19	0.19		0.19	0.19	0.00	303.18	303.18	0.04	0.00	304.10
Total	0.54	2.84	2.08	0.00		0.19	0.19		0.19	0.19	0.00	303.18	303.18	0.04	0.00	304.10

#### **Unmitigated Construction Off-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.02	0.24	0.17	0.00	0.01	0.01	0.02	0.00	0.01	0.01	0.00	39.28	39.28	0.00	0.00	39.30
Worker	0.02	0.02	0.22	0.00	0.04	0.00	0.04	0.00	0.00	0.00	0.00	34.06	34.06	0.00	0.00	34.10
Total	0.04	0.26	0.39	0.00	0.05	0.01	0.06	0.00	0.01	0.01	0.00	73.34	73.34	0.00	0.00	73.40

## **Mitigated Construction On-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Off-Road	0.54	2.84	2.08	0.00	_	0.19	0.19		0.19	0.19	0.00	303.18	303.18	0.04	0.00	304.10
Total	0.54	2.84	2.08	0.00		0.19	0.19		0.19	0.19	0.00	303.18	303.18	0.04	0.00	304.10

#### **Mitigated Construction Off-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.02	0.24	0.17	0.00	0.01	0.01	0.02	0.00	0.01	0.01	0.00	39.28	39.28	0.00	0.00	39.30
Worker	0.02	0.02	0.22	0.00	0.04	0.00	0.04	0.00	0.00	0.00	0.00	34.06	34.06	0.00	0.00	34.10
Total	0.04	0.26	0.39	0.00	0.05	0.01	0.06	0.00	0.01	0.01	0.00	73.34	73.34	0.00	0.00	73.40

#### **Unmitigated Construction On-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr					МТ	/yr				
Off-Road	0.13	0.68	0.53	0.00		0.04	0.04		0.04	0.04	0.00	78.99	78.99	0.01	0.00	79.21
Total	0.13	0.68	0.53	0.00		0.04	0.04		0.04	0.04	0.00	78.99	78.99	0.01	0.00	79.21

#### **Unmitigated Construction Off-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.01	0.06	0.04	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	10.26	10.26	0.00	0.00	10.26
Worker	0.00	0.00	0.05	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	8.70	8.70	0.00	0.00	8.71
Total	0.01	0.06	0.09	0.00	0.01	0.00	0.02	0.00	0.00	0.00	0.00	18.96	18.96	0.00	0.00	18.97

## **Mitigated Construction On-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Off-Road	0.13	0.68	0.53	0.00		0.04	0.04		0.04	0.04	0.00	78.99	78.99	0.01	0.00	79.21
Total	0.13	0.68	0.53	0.00		0.04	0.04		0.04	0.04	0.00	78.99	78.99	0.01	0.00	79.21

#### **Mitigated Construction Off-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.01	0.06	0.04	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	10.26	10.26	0.00	0.00	10.26
Worker	0.00	0.00	0.05	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	8.70	8.70	0.00	0.00	8.71
Total	0.01	0.06	0.09	0.00	0.01	0.00	0.02	0.00	0.00	0.00	0.00	18.96	18.96	0.00	0.00	18.97

# 3.5 Architectural Coating - 2015

#### **Unmitigated Construction On-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Archit. Coating	0.87					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road	0.01	0.05	0.04	0.00		0.00	0.00		0.00	0.00	0.00	5.10	5.10	0.00	0.00	5.11
Total	0.88	0.05	0.04	0.00		0.00	0.00		0.00	0.00	0.00	5.10	5.10	0.00	0.00	5.11

# **Unmitigated Construction Off-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.28	1.28	0.00	0.00	1.28
Total	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.28	1.28	0.00	0.00	1.28

# 3.5 Architectural Coating - 2015

#### **Mitigated Construction On-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Archit. Coating	0.87					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road	0.01	0.05	0.04	0.00		0.00	0.00		0.00	0.00	0.00	5.10	5.10	0.00	0.00	5.11
Total	0.88	0.05	0.04	0.00		0.00	0.00		0.00	0.00	0.00	5.10	5.10	0.00	0.00	5.11

#### **Mitigated Construction Off-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.28	1.28	0.00	0.00	1.28
Total	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.28	1.28	0.00	0.00	1.28

#### 4.0 Mobile Detail

## **4.1 Mitigation Measures Mobile**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Mitigated	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Unmitigated	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

# **4.2 Trip Summary Information**

	Aver	age Daily Trip Ra	ate	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Regional Shopping Center	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

# 4.3 Trip Type Information

		Miles			Trip %	
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW
Regional Shopping Center	8.90	13.30	7.40	16.30	64.70	19.00

# 5.0 Energy Detail

# **5.1 Mitigation Measures Energy**

Exceed Title 24

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Electricity Mitigated						0.00	0.00		0.00	0.00	0.00	342.21	342.21	0.01	0.00	343.32
Electricity Unmitigated						0.00	0.00		0.00	0.00	0.00	359.62	359.62	0.01	0.00	360.79
NaturalGas Mitigated	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	3.41	3.41	0.00	0.00	3.43
NaturalGas Unmitigated	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	3.82	3.82	0.00	0.00	3.85
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

# 5.2 Energy by Land Use - NaturalGas

### **Unmitigated**

	NaturalGas Use	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU					ton	s/yr							MT.	/yr		
Regional Shopping Center	71630	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	3.82	3.82	0.00	0.00	3.85
Total		0.00	0.00	0.00	0.00		0.00	0.00	·	0.00	0.00	0.00	3.82	3.82	0.00	0.00	3.85

# 5.2 Energy by Land Use - NaturalGas

## <u>Mitigated</u>

	NaturalGas Use	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU					ton	s/yr							MT	/yr		
Regional Shopping Center	63939.2	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	3.41	3.41	0.00	0.00	3.43
Total		0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	3.41	3.41	0.00	0.00	3.43

# 5.3 Energy by Land Use - Electricity

#### **Unmitigated**

	Electricity Use	ROG	NOx	СО	SO2	Total CO2	CH4	N2O	CO2e
Land Use	kWh		ton	s/yr			МТ	ſ/yr	
Regional Shopping Center	640146					359.62	0.01	0.00	360.79
Total						359.62	0.01	0.00	360.79

# 5.3 Energy by Land Use - Electricity

## <u>Mitigated</u>

	Electricity Use	ROG	NOx	СО	SO2	Total CO2	CH4	N2O	CO2e
Land Use	kWh		ton	s/yr			МТ	/yr	
Regional Shopping Center	609157					342.21	0.01	0.00	343.32
Total						342.21	0.01	0.00	343.32

## 6.0 Area Detail

# **6.1 Mitigation Measures Area**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Mitigated	0.09					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Unmitigated	0.09		,	,		0.00	0.00	, , , , , , , , , , , , , , , , , , ,	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

# 6.2 Area by SubCategory

## **Unmitigated**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory					ton	s/yr							МТ	/yr		
Architectural Coating	0.09					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	0.00					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Landscaping						0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.09					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

#### **Mitigated**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory					ton	s/yr							МТ	/yr		
Architectural Coating	0.09					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	0.00					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Landscaping						0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.09					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

# 7.0 Water Detail

# 7.1 Mitigation Measures Water

	ROG	NOx	СО	SO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr				MT/yr				
Mitigated					0.00	0.00	0.00	0.00	
Unmitigated					0.00	0.00	0.00	0.00	
Total	NA	NA	NA	NA	NA	NA	NA	NA	

## 7.2 Water by Land Use

#### **Unmitigated**

	Indoor/Outdoor Use	ROG	NOx	СО	SO2	Total CO2	CH4	N2O	CO2e	
Land Use	Mgal	tons/yr				MT/yr				
Regional Shopping Center	0/0		1	1		0.00	0.00	0.00	0.00	
Total						0.00	0.00	0.00	0.00	

# 7.2 Water by Land Use

## <u>Mitigated</u>

	Indoor/Outdoor Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e	
Land Use	Mgal	tons/yr				MT/yr				
Regional Shopping Center	0/0					0.00	0.00	0.00	0.00	
Total						0.00	0.00	0.00	0.00	

# 8.0 Waste Detail

# 8.1 Mitigation Measures Waste

# Category/Year

	ROG	NOx	СО	SO2	Total CO2	CH4	N2O	CO2e	
		ton	s/yr		MT/yr				
Mitigated					0.00	0.00	0.00	0.00	
Unmitigated					0.00	0.00	0.00	0.00	
Total	NA	NA	NA	NA	NA	NA	NA	NA	

## 8.2 Waste by Land Use

## **Unmitigated**

	Waste Disposed	ROG	NOx	СО	SO2	Total CO2	CH4	N2O	CO2e
Land Use	tons		ton	s/yr			МТ	/yr	
Regional Shopping Center	0					0.00	0.00	0.00	0.00
Total						0.00	0.00	0.00	0.00

## <u>Mitigated</u>

	Waste Disposed	ROG	NOx	СО	SO2	Total CO2	CH4	N2O	CO2e
Land Use	tons		ton	s/yr			МТ	-/yr	
Regional Shopping Center	0					0.00	0.00	0.00	0.00
Total						0.00	0.00	0.00	0.00

## 9.0 Vegetation

CalEEMod Version: CalEEMod.2011.1.1 Date: 10/26/2012

#### **UAL T-7 Improvements**

#### Los Angeles-South Coast County, Summer

#### 1.0 Project Characteristics

#### 1.1 Land Usage

Land Uses	Size	Metric
Regional Shopping Center	75.4	1000sqft

#### 1.2 Other Project Characteristics

 Urbanization
 Urban
 Wind Speed (m/s)
 2.2
 Utility Company
 Los Angeles Department of Water & Power

Climate Zone 11 Precipitation Freq (Days) 33

#### 1.3 User Entered Comments

Project Characteristics -

Land Use -

Construction Phase - Schedule estimated from project description

Trips and VMT - 82 miles to closest landfill; all workers and vendor trips rounded up to even numbers to account for two one-way trips per worker or vendor per day.

Demolition -

Grading - No fugitive dust emissions from site preparation would occur

Vehicle Trips - No increase in passengers

Consumer Products - No increase in passengers

Landscape Equipment - No increase in landscaped area

Energy Use - Electricity usage decreased to remove Mechanical Room and Apron Level Drip Line Area (no energy would be supplied to these areas)

Water And Wastewater - No increase in passengers

Solid Waste - No increase in passengers

Construction Off-road Equipment Mitigation - Watering required by SCAQMD Rule 403

Energy Mitigation - CALGreen building code recommends that green buildings be at least 15 percent more efficient than Title 24.

#### 2.0 Emissions Summary

#### 2.1 Overall Construction (Maximum Daily Emission)

#### **Unmitigated Construction**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year					lb/d	day							lb/c	lay		
2013	6.06	47.36	29.40	0.05	16.64	2.72	19.36	2.90	2.72	4.51	0.00	5,556.79	0.00	0.51	0.00	5,567.48
2014	4.47	23.73	18.84	0.03	0.48	1.53	2.02	0.02	1.53	1.56	0.00	3,197.72	0.00	0.40	0.00	3,206.08
2015	48.16	24.55	20.57	0.04	0.57	1.60	2.18	0.03	1.60	1.63	0.00	3,547.97	0.00	0.40	0.00	3,556.44
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

# 2.1 Overall Construction (Maximum Daily Emission)

## **Mitigated Construction**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year					lb/d	day							lb/c	day		
2013	6.06	47.36	29.40	0.05	16.08	2.72	18.80	1.13	2.72	2.78	0.00	5,556.79	0.00	0.51	0.00	5,567.48
2014	4.47	23.73	18.84	0.03	0.48	1.53	2.02	0.02	1.53	1.56	0.00	3,197.72	0.00	0.40	0.00	3,206.08
2015	48.16	24.55	20.57	0.04	0.57	1.60	2.18	0.03	1.60	1.63	0.00	3,547.97	0.00	0.40	0.00	3,556.44
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

## 2.2 Overall Operational

## **Unmitigated Operational**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Area	0.48	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00		0.00
Energy	0.00	0.02	0.02	0.00		0.00	0.00		0.00	0.00		23.09		0.00	0.00	23.23
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Total	0.48	0.02	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00		23.09		0.00	0.00	23.23

#### **Mitigated Operational**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Area	0.48	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00		0.00
Energy	0.00	0.02	0.01	0.00		0.00	0.00		0.00	0.00		20.61		0.00	0.00	20.73
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00	, , ,	0.00
Total	0.48	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00		20.61		0.00	0.00	20.73

## 3.0 Construction Detail

## **3.1 Mitigation Measures Construction**

Water Exposed Area

#### 3.2 Demolition - 2013

#### **Unmitigated Construction On-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Fugitive Dust					0.92	0.00	0.92	0.00	0.00	0.00		 				0.00
Off-Road	5.07	38.45	23.67	0.04		2.29	2.29		2.29	2.29		3,946.47	•	0.46		3,956.03
Total	5.07	38.45	23.67	0.04	0.92	2.29	3.21	0.00	2.29	2.29		3,946.47		0.46		3,956.03

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Hauling	0.90	8.82	4.64	0.01	15.50	0.42	15.93	0.05	0.42	0.47		1,430.44	! !	0.04		1,431.35
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	, , ,	0.00	,	0.00
Worker	0.09	0.09	1.09	0.00	0.21	0.01	0.22	0.01	0.01	0.02		179.88	, , ,	0.01	,	180.10
Total	0.99	8.91	5.73	0.01	15.71	0.43	16.15	0.06	0.43	0.49		1,610.32		0.05		1,611.45

#### 3.2 Demolition - 2013

### **Mitigated Construction On-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Fugitive Dust					0.36	0.00	0.36	0.00	0.00	0.00				1		0.00
Off-Road	5.07	38.45	23.67	0.04		2.29	2.29	, ,	2.29	2.29	0.00	3,946.47	• • • • • • • • • • • • • • • • • • •	0.46		3,956.03
Total	5.07	38.45	23.67	0.04	0.36	2.29	2.65	0.00	2.29	2.29	0.00	3,946.47		0.46	·	3,956.03

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Hauling	0.90	8.82	4.64	0.01	15.50	0.42	15.93	0.05	0.42	0.47		1,430.44		0.04		1,431.35
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	#	0.00		0.00
Worker	0.09	0.09	1.09	0.00	0.21	0.01	0.22	0.01	0.01	0.02		179.88	#	0.01		180.10
Total	0.99	8.91	5.73	0.01	15.71	0.43	16.15	0.06	0.43	0.49		1,610.32		0.05		1,611.45

# 3.3 Site Preparation - 2013

#### **Unmitigated Construction On-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Fugitive Dust					5.27	0.00	5.27	2.90	0.00	2.90		1			!	0.00
Off-Road	3.96	31.66	18.62	0.03		1.60	1.60		1.60	1.60		3,253.39		0.36	, ,	3,260.86
Total	3.96	31.66	18.62	0.03	5.27	1.60	6.87	2.90	1.60	4.50		3,253.39		0.36		3,260.86

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	•	0.00		0.00
Worker	0.05	0.05	0.62	0.00	0.12	0.00	0.13	0.00	0.00	0.01		102.79	•	0.01	,	102.92
Total	0.05	0.05	0.62	0.00	0.12	0.00	0.13	0.00	0.00	0.01		102.79		0.01		102.92

## 3.3 Site Preparation - 2013

#### **Mitigated Construction On-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Fugitive Dust					2.06	0.00	2.06	1.13	0.00	1.13					!	0.00
Off-Road	3.96	31.66	18.62	0.03		1.60	1.60		1.60	1.60	0.00	3,253.39	,	0.36	<b>,</b>	3,260.86
Total	3.96	31.66	18.62	0.03	2.06	1.60	3.66	1.13	1.60	2.73	0.00	3,253.39		0.36		3,260.86

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00	! !	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	•	0.00	• · · ·	0.00
Worker	0.05	0.05	0.62	0.00	0.12	0.00	0.13	0.00	0.00	0.01		102.79	<del>*</del>   	0.01	<del>;</del> · · ·	102.92
Total	0.05	0.05	0.62	0.00	0.12	0.00	0.13	0.00	0.00	0.01		102.79		0.01		102.92

## **Unmitigated Construction On-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day				lb/c	lay					
Off-Road	4.54	23.27	16.29	0.03		1.61	1.61		1.61	1.61		2,561.58		0.41		2,570.13
Total	4.54	23.27	16.29	0.03		1.61	1.61		1.61	1.61	·	2,561.58		0.41		2,570.13

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.20	2.03	1.32	0.00	0.11	0.07	0.19	0.01	0.07	0.08		332.10	•	0.01		332.31
Worker	0.16	0.16	1.87	0.00	0.37	0.01	0.38	0.01	0.01	0.03		308.36	•	0.02		308.75
Total	0.36	2.19	3.19	0.00	0.48	0.08	0.57	0.02	0.08	0.11		640.46		0.03		641.06

## **Mitigated Construction On-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day				lb/c	lay					
Off-Road	4.54	23.27	16.29	0.03		1.61	1.61		1.61	1.61	0.00	2,561.58	i .	0.41		2,570.13
Total	4.54	23.27	16.29	0.03		1.61	1.61		1.61	1.61	0.00	2,561.58		0.41		2,570.13

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.20	2.03	1.32	0.00	0.11	0.07	0.19	0.01	0.07	0.08		332.10	•	0.01		332.31
Worker	0.16	0.16	1.87	0.00	0.37	0.01	0.38	0.01	0.01	0.03		308.36	•	0.02		308.75
Total	0.36	2.19	3.19	0.00	0.48	0.08	0.57	0.02	0.08	0.11		640.46		0.03		641.06

## **Unmitigated Construction On-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day				lb/c	lay					
Off-Road	4.15	21.74	15.92	0.03		1.46	1.46		1.46	1.46		2,561.58		0.37		2,569.39
Total	4.15	21.74	15.92	0.03		1.46	1.46		1.46	1.46		2,561.58		0.37		2,569.39

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.18	1.85	1.19	0.00	0.11	0.07	0.18	0.01	0.07	0.07		332.76	•	0.01		332.95
Worker	0.15	0.15	1.72	0.00	0.37	0.01	0.38	0.01	0.01	0.03		303.38	•	0.02		303.74
Total	0.33	2.00	2.91	0.00	0.48	0.08	0.56	0.02	0.08	0.10		636.14		0.03		636.69

## **Mitigated Construction On-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day				lb/c	lay					
Off-Road	4.15	21.74	15.92	0.03		1.46	1.46		1.46	1.46	0.00	2,561.58		0.37		2,569.39
Total	4.15	21.74	15.92	0.03		1.46	1.46		1.46	1.46	0.00	2,561.58		0.37		2,569.39

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.18	1.85	1.19	0.00	0.11	0.07	0.18	0.01	0.07	0.07		332.76	•	0.01		332.95
Worker	0.15	0.15	1.72	0.00	0.37	0.01	0.38	0.01	0.01	0.03		303.38	•	0.02		303.74
Total	0.33	2.00	2.91	0.00	0.48	0.08	0.56	0.02	0.08	0.10		636.14		0.03		636.69

#### **Unmitigated Construction On-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day				lb/c	lay					
Off-Road	3.78	20.14	15.61	0.03		1.31	1.31		1.31	1.31		2,561.58		0.34		2,568.69
Total	3.78	20.14	15.61	0.03		1.31	1.31		1.31	1.31		2,561.58		0.34		2,568.69

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.16	1.68	1.08	0.00	0.11	0.06	0.17	0.01	0.06	0.07		333.58	•	0.01		333.75
Worker	0.14	0.13	1.59	0.00	0.37	0.01	0.38	0.01	0.01	0.03		297.29	•	0.02		297.63
Total	0.30	1.81	2.67	0.00	0.48	0.07	0.55	0.02	0.07	0.10		630.87		0.03		631.38

## **Mitigated Construction On-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Off-Road	3.78	20.14	15.61	0.03		1.31	1.31		1.31	1.31	0.00	2,561.58	i .	0.34		2,568.69
Total	3.78	20.14	15.61	0.03		1.31	1.31		1.31	1.31	0.00	2,561.58		0.34		2,568.69

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.16	1.68	1.08	0.00	0.11	0.06	0.17	0.01	0.06	0.07		333.58	•	0.01		333.75
Worker	0.14	0.13	1.59	0.00	0.37	0.01	0.38	0.01	0.01	0.03		297.29	•	0.02		297.63
Total	0.30	1.81	2.67	0.00	0.48	0.07	0.55	0.02	0.07	0.10		630.87		0.03		631.38

# 3.5 Architectural Coating - 2015

#### **Unmitigated Construction On-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Archit. Coating	43.65					0.00	0.00		0.00	0.00		1				0.00
Off-Road	0.41	2.57	1.90	0.00		0.22	0.22	,	0.22	0.22		281.19	,	0.04		281.96
Total	44.06	2.57	1.90	0.00		0.22	0.22		0.22	0.22		281.19		0.04		281.96

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	•	0.00		0.00
Worker	0.03	0.03	0.40	0.00	0.09	0.00	0.10	0.00	0.00	0.01		74.32	•	0.00		74.41
Total	0.03	0.03	0.40	0.00	0.09	0.00	0.10	0.00	0.00	0.01		74.32		0.00		74.41

## 3.5 Architectural Coating - 2015

#### **Mitigated Construction On-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
Archit. Coating	43.65					0.00	0.00		0.00	0.00		 	!	 	! !	0.00
Off-Road	0.41	2.57	1.90	0.00		0.22	0.22		0.22	0.22	0.00	281.19	, ,	0.04	<b>,</b>	281.96
Total	44.06	2.57	1.90	0.00		0.22	0.22		0.22	0.22	0.00	281.19		0.04		281.96

#### **Mitigated Construction Off-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Worker	0.03	0.03	0.40	0.00	0.09	0.00	0.10	0.00	0.00	0.01		74.32	•	0.00		74.41
Total	0.03	0.03	0.40	0.00	0.09	0.00	0.10	0.00	0.00	0.01		74.32		0.00		74.41

#### 4.0 Mobile Detail

## **4.1 Mitigation Measures Mobile**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Mitigated	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Unmitigated	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	,	0.00		0.00
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

## **4.2 Trip Summary Information**

	Aver	age Daily Trip Ra	ate	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Regional Shopping Center	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

## 4.3 Trip Type Information

		Miles			Trip %	
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW
Regional Shopping Center	8.90	13.30	7.40	16.30	64.70	19.00

# 5.0 Energy Detail

## **5.1 Mitigation Measures Energy**

Exceed Title 24

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
NaturalGas Mitigated	0.00	0.02	0.01	0.00		0.00	0.00		0.00	0.00		20.61		0.00	0.00	20.73
NaturalGas Unmitigated	0.00	0.02	0.02	0.00		0.00	0.00		0.00	0.00		23.09		0.00	0.00	23.23
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

# 5.2 Energy by Land Use - NaturalGas

#### **Unmitigated**

	NaturalGas Use	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU					lb/d	day							lb/d	lay		
Regional Shopping Center	196.247	0.00	0.02	0.02	0.00		0.00	0.00		0.00	0.00		23.09		0.00	0.00	23.23
Total		0.00	0.02	0.02	0.00		0.00	0.00		0.00	0.00		23.09		0.00	0.00	23.23

## 5.2 Energy by Land Use - NaturalGas

## <u>Mitigated</u>

	NaturalGas Use	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU					lb/d	day							lb/d	ay		
Regional Shopping Center	0.175176	0.00	0.02	0.01	0.00		0.00	0.00		0.00	0.00		20.61		0.00	0.00	20.73
Total		0.00	0.02	0.01	0.00		0.00	0.00		0.00	0.00		20.61		0.00	0.00	20.73

## 6.0 Area Detail

## **6.1 Mitigation Measures Area**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Mitigated	0.48	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00		0.00
Unmitigated	0.48	0.00	0.00	0.00		0.00	0.00	, ,	0.00	0.00		0.00	,	0.00		0.00
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

## 6.2 Area by SubCategory

## **Unmitigated**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory					lb/d	day							lb/c	lay		
Architectural Coating	0.48					0.00	0.00		0.00	0.00						0.00
Consumer Products	0.00					0.00	0.00		0.00	0.00						0.00
Landscaping	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00		0.00
Total	0.48	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00		0.00

#### **Mitigated**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory					lb/d	day							lb/c	lay		
Architectural Coating	0.48					0.00	0.00		0.00	0.00		  -  -			i i	0.00
Consumer Products	0.00					0.00	0.00		0.00	0.00						0.00
Landscaping	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00		0.00
Total	0.48	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00		0.00

## 7.0 Water Detail

7.1 Mitigation Measures Water		
8.0 Waste Detail		
8.1 Mitigation Measures Waste		

9.0 Vegetation

CalEEMod Version: CalEEMod.2011.1.1 Date: 10/26/2012

#### **UAL T-7 Improvements**

#### Los Angeles-South Coast County, Winter

#### 1.0 Project Characteristics

#### 1.1 Land Usage

Land Uses	Size	Metric
Regional Shopping Center	75.4	1000sqft

#### 1.2 Other Project Characteristics

 Urbanization
 Urban
 Wind Speed (m/s)
 2.2
 Utility Company
 Los Angeles Department of Water & Power

 Climate Zone
 11
 Precipitation Freq (Days)
 33

#### 1.3 User Entered Comments

Project Characteristics -

Land Use -

Construction Phase - Schedule estimated from project description

Trips and VMT - 82 miles to closest landfill; all workers and vendor trips rounded up to even numbers to account for two one-way trips per worker or vendor per day.

Demolition -

Grading - No fugitive dust emissions from site preparation would occur

Vehicle Trips - No increase in passengers

Consumer Products - No increase in passengers

Landscape Equipment - No increase in landscaped area

Energy Use - Electricity usage decreased to remove Mechanical Room and Apron Level Drip Line Area (no energy would be supplied to these areas)

Water And Wastewater - No increase in passengers

Solid Waste - No increase in passengers

Construction Off-road Equipment Mitigation - Watering required by SCAQMD Rule 403

Energy Mitigation - CALGreen building code recommends that green buildings be at least 15 percent more efficient than Title 24.

#### 2.0 Emissions Summary

#### 2.1 Overall Construction (Maximum Daily Emission)

#### **Unmitigated Construction**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year					lb/d	day							lb/c	lay		
2013	6.08	47.96	29.43	0.05	16.64	2.72	19.36	2.90	2.72	4.51	0.00	5,541.89	0.00	0.51	0.00	5,552.57
2014	4.49	23.84	18.91	0.03	0.48	1.54	2.02	0.02	1.54	1.56	0.00	3,172.98	0.00	0.40	0.00	3,181.33
2015	48.19	24.64	20.62	0.04	0.57	1.61	2.18	0.03	1.61	1.63	0.00	3,518.10	0.00	0.40	0.00	3,526.57
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

# 2.1 Overall Construction (Maximum Daily Emission)

## **Mitigated Construction**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year					lb/d	day							lb/c	lay		
2013	6.08	47.96	29.43	0.05	16.08	2.72	18.80	1.13	2.72	2.78	0.00	5,541.89	0.00	0.51	0.00	5,552.57
2014	4.49	23.84	18.91	0.03	0.48	1.54	2.02	0.02	1.54	1.56	0.00	3,172.98	0.00	0.40	0.00	3,181.33
2015	48.19	24.64	20.62	0.04	0.57	1.61	2.18	0.03	1.61	1.63	0.00	3,518.10	0.00	0.40	0.00	3,526.57
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

## 2.2 Overall Operational

## **Unmitigated Operational**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Area	0.48	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00		0.00
Energy	0.00	0.02	0.02	0.00		0.00	0.00		0.00	0.00		23.09		0.00	0.00	23.23
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Total	0.48	0.02	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00		23.09		0.00	0.00	23.23

#### **Mitigated Operational**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Area	0.48	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00		0.00
Energy	0.00	0.02	0.01	0.00		0.00	0.00		0.00	0.00		20.61		0.00	0.00	20.73
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00	, , ,	0.00
Total	0.48	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00		20.61		0.00	0.00	20.73

## 3.0 Construction Detail

## **3.1 Mitigation Measures Construction**

Water Exposed Area

#### 3.2 Demolition - 2013

#### **Unmitigated Construction On-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Fugitive Dust					0.92	0.00	0.92	0.00	0.00	0.00		 				0.00
Off-Road	5.07	38.45	23.67	0.04		2.29	2.29		2.29	2.29		3,946.47	•	0.46		3,956.03
Total	5.07	38.45	23.67	0.04	0.92	2.29	3.21	0.00	2.29	2.29		3,946.47		0.46		3,956.03

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Hauling	0.90	9.40	4.73	0.01	15.50	0.42	15.93	0.05	0.42	0.47		1,428.77		0.04		1,429.68
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	,	0.00		0.00
Worker	0.10	0.11	1.03	0.00	0.21	0.01	0.22	0.01	0.01	0.02		166.64	•	0.01		166.86
Total	1.00	9.51	5.76	0.01	15.71	0.43	16.15	0.06	0.43	0.49		1,595.41		0.05		1,596.54

#### 3.2 Demolition - 2013

### **Mitigated Construction On-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Fugitive Dust					0.36	0.00	0.36	0.00	0.00	0.00					!	0.00
Off-Road	5.07	38.45	23.67	0.04		2.29	2.29		2.29	2.29	0.00	3,946.47		0.46	, ,	3,956.03
Total	5.07	38.45	23.67	0.04	0.36	2.29	2.65	0.00	2.29	2.29	0.00	3,946.47		0.46		3,956.03

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
Hauling	0.90	9.40	4.73	0.01	15.50	0.42	15.93	0.05	0.42	0.47		1,428.77		0.04		1,429.68
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	,	0.00		0.00		0.00
Worker	0.10	0.11	1.03	0.00	0.21	0.01	0.22	0.01	0.01	0.02		166.64	• · · · · · · · · · · · · · ·	0.01		166.86
Total	1.00	9.51	5.76	0.01	15.71	0.43	16.15	0.06	0.43	0.49		1,595.41		0.05		1,596.54

# 3.3 Site Preparation - 2013

#### **Unmitigated Construction On-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Fugitive Dust					5.27	0.00	5.27	2.90	0.00	2.90					!	0.00
Off-Road	3.96	31.66	18.62	0.03		1.60	1.60		1.60	1.60		3,253.39	,	0.36	<b>,</b>	3,260.86
Total	3.96	31.66	18.62	0.03	5.27	1.60	6.87	2.90	1.60	4.50		3,253.39		0.36		3,260.86

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Worker	0.06	0.06	0.59	0.00	0.12	0.00	0.13	0.00	0.00	0.01		95.23	•	0.01		95.35
Total	0.06	0.06	0.59	0.00	0.12	0.00	0.13	0.00	0.00	0.01		95.23		0.01		95.35

## 3.3 Site Preparation - 2013

#### **Mitigated Construction On-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Fugitive Dust					2.06	0.00	2.06	1.13	0.00	1.13					!	0.00
Off-Road	3.96	31.66	18.62	0.03		1.60	1.60		1.60	1.60	0.00	3,253.39		0.36	, ,	3,260.86
Total	3.96	31.66	18.62	0.03	2.06	1.60	3.66	1.13	1.60	2.73	0.00	3,253.39		0.36		3,260.86

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Worker	0.06	0.06	0.59	0.00	0.12	0.00	0.13	0.00	0.00	0.01		95.23	•	0.01		95.35
Total	0.06	0.06	0.59	0.00	0.12	0.00	0.13	0.00	0.00	0.01		95.23		0.01		95.35

#### **Unmitigated Construction On-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Off-Road	4.54	23.27	16.29	0.03		1.61	1.61		1.61	1.61		2,561.58		0.41	1	2,570.13
Total	4.54	23.27	16.29	0.03		1.61	1.61		1.61	1.61		2,561.58		0.41		2,570.13

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.21	2.13	1.48	0.00	0.11	0.08	0.19	0.01	0.08	0.08		329.75	•	0.01		329.97
Worker	0.18	0.18	1.77	0.00	0.37	0.01	0.38	0.01	0.01	0.03		285.68	,	0.02		286.05
Total	0.39	2.31	3.25	0.00	0.48	0.09	0.57	0.02	0.09	0.11		615.43		0.03		616.02

## **Mitigated Construction On-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day				lb/c	lay					
Off-Road	4.54	23.27	16.29	0.03		1.61	1.61		1.61	1.61	0.00	2,561.58	i .	0.41		2,570.13
Total	4.54	23.27	16.29	0.03		1.61	1.61		1.61	1.61	0.00	2,561.58		0.41		2,570.13

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.21	2.13	1.48	0.00	0.11	0.08	0.19	0.01	0.08	0.08		329.75	•	0.01		329.97
Worker	0.18	0.18	1.77	0.00	0.37	0.01	0.38	0.01	0.01	0.03		285.68	•	0.02		286.05
Total	0.39	2.31	3.25	0.00	0.48	0.09	0.57	0.02	0.09	0.11		615.43		0.03		616.02

#### **Unmitigated Construction On-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Off-Road	4.15	21.74	15.92	0.03		1.46	1.46		1.46	1.46		2,561.58		0.37		2,569.39
Total	4.15	21.74	15.92	0.03		1.46	1.46		1.46	1.46		2,561.58		0.37		2,569.39

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.19	1.93	1.35	0.00	0.11	0.07	0.18	0.01	0.07	0.08		330.35	•	0.01		330.54
Worker	0.16	0.17	1.63	0.00	0.37	0.01	0.38	0.01	0.01	0.03		281.06	•	0.02		281.41
Total	0.35	2.10	2.98	0.00	0.48	0.08	0.56	0.02	0.08	0.11		611.41		0.03		611.95

## **Mitigated Construction On-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category		lb/day											lb/c	lay		
Off-Road	4.15	21.74	15.92	0.03		1.46	1.46		1.46	1.46	0.00	2,561.58		0.37		2,569.39
Total	4.15	21.74	15.92	0.03		1.46	1.46		1.46	1.46	0.00	2,561.58		0.37		2,569.39

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.19	1.93	1.35	0.00	0.11	0.07	0.18	0.01	0.07	0.08		330.35	•	0.01		330.54
Worker	0.16	0.17	1.63	0.00	0.37	0.01	0.38	0.01	0.01	0.03		281.06	•	0.02		281.41
Total	0.35	2.10	2.98	0.00	0.48	0.08	0.56	0.02	0.08	0.11		611.41		0.03		611.95

#### **Unmitigated Construction On-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category		lb/day											lb/c	lay		
Off-Road	3.78	20.14	15.61	0.03		1.31	1.31		1.31	1.31		2,561.58		0.34		2,568.69
Total	3.78	20.14	15.61	0.03		1.31	1.31		1.31	1.31		2,561.58		0.34		2,568.69

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.17	1.74	1.24	0.00	0.11	0.06	0.17	0.01	0.06	0.07		331.09	•	0.01		331.27
Worker	0.15	0.15	1.50	0.00	0.37	0.01	0.38	0.01	0.01	0.03		275.39	•	0.02		275.72
Total	0.32	1.89	2.74	0.00	0.48	0.07	0.55	0.02	0.07	0.10		606.48		0.03		606.99

#### **Mitigated Construction On-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category		lb/day											lb/c	lay		
Off-Road	3.78	20.14	15.61	0.03		1.31	1.31		1.31	1.31	0.00	2,561.58		0.34		2,568.69
Total	3.78	20.14	15.61	0.03		1.31	1.31		1.31	1.31	0.00	2,561.58		0.34		2,568.69

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.17	1.74	1.24	0.00	0.11	0.06	0.17	0.01	0.06	0.07		331.09		0.01		331.27
Worker	0.15	0.15	1.50	0.00	0.37	0.01	0.38	0.01	0.01	0.03		275.39	•	0.02		275.72
Total	0.32	1.89	2.74	0.00	0.48	0.07	0.55	0.02	0.07	0.10		606.48		0.03		606.99

## 3.5 Architectural Coating - 2015

#### **Unmitigated Construction On-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Archit. Coating	43.65					0.00	0.00		0.00	0.00						0.00
Off-Road	0.41	2.57	1.90	0.00		0.22	0.22		0.22	0.22		281.19	•	0.04	<b>+</b>	281.96
Total	44.06	2.57	1.90	0.00		0.22	0.22		0.22	0.22		281.19		0.04		281.96

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	•	0.00		0.00
Worker	0.04	0.04	0.37	0.00	0.09	0.00	0.10	0.00	0.00	0.01		68.85	•	0.00	,	68.93
Total	0.04	0.04	0.37	0.00	0.09	0.00	0.10	0.00	0.00	0.01		68.85		0.00		68.93

## 3.5 Architectural Coating - 2015

#### **Mitigated Construction On-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
Archit. Coating	43.65					0.00	0.00		0.00	0.00		 	!	 	! !	0.00
Off-Road	0.41	2.57	1.90	0.00		0.22	0.22		0.22	0.22	0.00	281.19	, ,	0.04	<b>,</b>	281.96
Total	44.06	2.57	1.90	0.00		0.22	0.22		0.22	0.22	0.00	281.19		0.04		281.96

#### **Mitigated Construction Off-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00	! !	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	•	0.00	• · · ·	0.00
Worker	0.04	0.04	0.37	0.00	0.09	0.00	0.10	0.00	0.00	0.01		68.85	<del>*</del>   	0.00	<del>;</del> · · ·	68.93
Total	0.04	0.04	0.37	0.00	0.09	0.00	0.10	0.00	0.00	0.01		68.85		0.00		68.93

#### 4.0 Mobile Detail

## **4.1 Mitigation Measures Mobile**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Mitigated	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Unmitigated	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	,	0.00		0.00
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

## **4.2 Trip Summary Information**

	Aver	age Daily Trip Ra	ate	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Regional Shopping Center	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

## 4.3 Trip Type Information

		Miles			Trip %	
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW
Regional Shopping Center	8.90	13.30	7.40	16.30	64.70	19.00

# 5.0 Energy Detail

## **5.1 Mitigation Measures Energy**

Exceed Title 24

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	egory lb/day lb/day															
NaturalGas Mitigated	0.00	0.02	0.01	0.00		0.00	0.00		0.00	0.00		20.61		0.00	0.00	20.73
NaturalGas Unmitigated	0.00	0.02	0.02	0.00		0.00	0.00		0.00	0.00		23.09		0.00	0.00	23.23
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

# 5.2 Energy by Land Use - NaturalGas

#### **Unmitigated**

	NaturalGas Use	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU					lb/d	lay							lb/d	ay		
Regional Shopping Center	196.247	0.00	0.02	0.02	0.00		0.00	0.00		0.00	0.00		23.09		0.00	0.00	23.23
Total		0.00	0.02	0.02	0.00	·	0.00	0.00		0.00	0.00		23.09		0.00	0.00	23.23

## 5.2 Energy by Land Use - NaturalGas

## <u>Mitigated</u>

	NaturalGas Use	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU					lb/d	day							lb/d	ay		
Regional Shopping Center	0.175176	0.00	0.02	0.01	0.00		0.00	0.00		0.00	0.00		20.61		0.00	0.00	20.73
Total		0.00	0.02	0.01	0.00		0.00	0.00		0.00	0.00		20.61		0.00	0.00	20.73

## 6.0 Area Detail

## **6.1 Mitigation Measures Area**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day					lb/day					
Mitigated	0.48	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00		0.00
Unmitigated	0.48	0.00	0.00	0.00		0.00	0.00	, ,	0.00	0.00		0.00	,	0.00		0.00
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

## 6.2 Area by SubCategory

## **Unmitigated**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	y lb/day								lb/day							
Architectural Coating	0.48					0.00	0.00		0.00	0.00						0.00
Consumer Products	0.00					0.00	0.00		0.00	0.00						0.00
Landscaping	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	,	0.00		0.00		0.00
Total	0.48	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00		0.00

#### **Mitigated**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	jory lb/day								lb/day							
Architectural Coating	0.48					0.00	0.00		0.00	0.00		  -  -				0.00
Consumer Products	0.00					0.00	0.00		0.00	0.00						0.00
Landscaping	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00		0.00
Total	0.48	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00		0.00

## 7.0 Water Detail

7.1 Mitigation Measures Water		
8.0 Waste Detail		
8.1 Mitigation Measures Waste		

9.0 Vegetation